Northern California Power Agency
651 Commerce Drive
Roseville, California 95678-6420

Initial Study and Mitigated Negative Declaration

NCPA Solar Project 1 – Lodi Sites

Photo Courtesy of SunPower Corporation

Prepared by:

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July 2019

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Acronyms and Abbreviations

AADT	annual average daily traffic
AAM	annual arithmetic mean
ADOE	Archaeological Determinations of Eligibility
AGM	annual geometric mean
AQMP	Air Quality Management Plan
ARB	Air Resources Board
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDFW	California Department of Fish and Wildlife
CARB	California Air Resources Board
Caltrans	California Department of Transportation
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	methane
CMP	congestion management program
CNDDB	California Natural Diversity Data Base
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CRWQCB, CVR	California Regional Water Quality Control Board, Central Valley Region
dB(A)	decibels on the A-scale
DEIR	Draft Environmental Impact Report

DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EA	Environmental Assessment
EIR	Environmental Impact Report
EMP	Energy Management Plan
EPA	U.S. Environmental Protection Agency
EPDC	expected peak day concentration
ESA	Endangered Species Act
g	acceleration due to gravity
GHG	greenhouse gases
GIS	Geographic Information System
gpm	gallons per minute
ISA	Integrated Science Assessment
GWP	global warming potential
HPD	Historic Property Directory
kW	kilowatts
KSD&A	K.S. Dunbar & Associates, Inc.
Ldn	day-night average sound level
Leq	noise equivalent
LUSTIS	Leaking Underground Storage Tank Information System
MBTA	Migratory Bird Treaty Act
mg	million gallons
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MT	metric tons
MW	megawatts
MWh	megawatt hours
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCPA	Northern California Power Agency

NDDB	Natural Diversity Data Base
NO	nitrogen oxide
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
O_3	ozone
OES	Office of Emergency Services
OHP	Office of Historic Preservation
Pb	lead
PM	particulate matter
PM_{10}	particulate matter (less than 10 microns in diameter)
$PM_{2.5}$	particulate matter (less than 2.5 microns in diameter)
ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
PV	photovoltaic
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases also called VOC (volatile organic compounds)
SAAQS	State Ambient Air Quality Standards
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO_2	sulfur dioxide
SO_x	oxides of sulfur
State Water Board	State Water Resources Control Board
SWIS	Solid Waste Information System
SWPPP	Storm Water Pollution Prevention Plan
TOG	total organic gases
USDA	U.S. Department of Agriculture

USF&WS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Service
$\mu g/m^3$	micrograms per cubic meter

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Executive Summary

Overview of the Proposed Project

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century Park East/West, Pixley Basin and Parking Garage sites. Those three sites are the subject of this Initial Study and Mitigated Negative Declaration (IS&MND).

The Century Park East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century Park West site is directly across the railroad tracks from the Century Park East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts=direct current (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}.

The parking garage is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure ES-1. Individual sites are shown on Figures ES-2, ES-3 and ES-4.

Site	Location		Developable Area (acres)	Estimated Capacity (MW_{dc})
	Latitude, Longitude	Section, Township, Range		
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	Sec 7, T 3 N, R 7 E, MDB&M	15.0	3.51
Lodi – Century Park East/West	38°06'26.66"N, 121°16'21.63"W	Sec 13, T 3 N, R 6 E, MDB&M	2.5	0.63
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	Sec 1, T 3 N, R 6 E, MDB&M	0.9	0.18

Figure ES-1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure ES-2 Century Park East/West Site

Figure ES-3 Pixley Basin Site

Figure ES-4 Parking Garage Site

Impacts and Mitigation Measures

Table ES-1 identifies each potential significant effect, Standard Construction Practices/Design Features, and proposed mitigation measures that would reduce or avoid that effect. Proposed mitigation measures are NCPA Staff's and its consultant's recommendations to reduce potential impacts associated with implementation of the proposed Project. Should NCPA's Commission adopt the Mitigation Monitoring and Reporting Program (Appendix F in the IS&MND) these mitigation measures would become mandatory and part of the Project.

Table ES-1
Impacts and Mitigation Measures

Environmental Factor:	**Air Quality**
Impact:	The total estimated emissions from installation of the solar equipment at all three Lodi sites simultaneously would not exceed the construction-related threshold limits for significance established by the San Joaquin Valley Air Pollution Control District. However, the ARB has designated the San Joaquin Valley Air Basin as non-attainment for the State ozone, PM_{10} and $PM_{2.5}$ standards. In addition, the U.S. Environmental Protection Agency has designated the San Joaquin Valley Air Basin as non-attainment for the federal ozone and $PM_{2.5}$ standards. Therefore, every effort should be made to minimize emissions within the San Joaquin Valley Air Basin. Consequently, to reduce the emissions as much as possible,
Standard Construction Practices/Design Features	NCPA will add the following best management practices in its contract documents for this project:
Mitigation Measures	The contractor shall: ❖ Utilize electricity from power poles instead of from temporary diesel or gasoline power generators, when feasible. ❖ Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the contractor shall use trucks that meet EPA 2007 model year NO_x emissions requirements. ❖ Require that all on-site construction equipment meet EPA Tier 3 or higher emissions standards according to the following: ➢ All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with *BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. ➢ A copy of each unit's certified tier specification, BACT documentation, and CARB or SJVAPCD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. ❖ Maintain construction equipment engines by keeping them properly tuned and maintained according to manufacturer's specifications. ❖ Use alternative fuels or clean and low-sulfur fuel for equipment. ❖ Idle trucks in accordance with the Airborne Toxic Control Measure (ACTM) to Limit Diesel Fueled Commercial Motor Vehicle Idling and other applicable laws. ❖ Spread soil binders on site, where appropriate, unpaved roads and staging areas. ❖ Water site and equipment as necessary to control dust. ❖ Sweep all streets at least once per day in accordance with SJVAPCD Rule 8041. ❖ Conduct operations in accordance with SJVAPCD Rule 8021 requirements. ❖ If necessary, wash off trucks leaving the site. ❖ Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
Impact After Mitigation:	Less than significant impact.

Mitigation Measures:	NCPA shall appoint a construction relations officer to act as a community liaison concerning on-site construction activities including resolution of issues related to PM_{10} generation. Additionally, best management practices shall be included in contract documents for this project.
Impact After Mitigation:	Less than significant impact.
Environmental Factor:	**Biological Resources**
Impact:	Potential impacts to nesting birds.
Standard Construction Practices/Design Features	NCPA will include the following mitigation measures in its contract documents for this project.
Mitigation Measures:	If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds shall be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet for raptors and special-status species) will be determined by the wildlife biologist, in coordination with the CDFW, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.
Impact After Mitigation:	Less than significant impact
Environmental Factor:	**Cultural Resources**
Potential Impact:	Possible inadvertent discoveries of cultural resources or human remains during excavation activities.
Standard Construction Practices/Design Features	Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols. In addition, NCPA will include the following mitigation measures in its contract documents for this project.
Mitigation Measures:	❖ In the unlikely event that potentially significant archaeological materials are encountered during construction activities, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery, access the significance of the archaeological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of cultural material that might be discovered during excavation shall be in accordance with applicable laws and regulations. ❖ All sacred items, should they be encountered within the Project sites, shall be avoided and preserved as the preferred mitigation, if feasible. All cultural materials that are collected during excavation and other earth disturbing activities on the Project sites, with the exception of sacred items, burial goods and human remains which will be addressed in any required Treatment Agreement, shall be tribally curated according to the current repository standards. The collections and associated records shall be transferred, including title, to the closet tribe to the Project site. ❖ In the event of an accidental discovery or recognition of any human remains, the County Coroner shall be notified and construction activities at the affected work site shall be halted. If the coroner determines the remains to be Native American: (1) the coroner shall contact the Native American Heritage Commission (NAHC) within 24-hours, and (2) the NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The treatment and disposition of human remains that might be discovered during excavation shall be in accordance with applicable laws and regulations.
Impact After Mitigation:	Less than significant impact
Environmental Factor	**Geology and Soils**
Potential Impact	Possible inadvertent discoveries of paleontological resources during excavation activities.

Standard Construction Practices/Design Features	NCPA will include the following mitigation measures in its contract documents for this project.
Mitigation Measures	❖ In the unlikely event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the project, all work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological material that might be discovered during excavation shall be in accordance with applicable laws and regulations.
Environmental Factor	**Hazards and Hazardous Materials**
Potential Impact	During construction, the contractor would utilize equipment that uses petroleum-based fuels and lubricants, which are subject to both leakage from engine blocks and containers, or spillage during refueling and lubrication operations
Standard Construction Practices/Design Features	NCPA's contract documents for this project will include the following: During project construction, the construction contractor shall implement the following measures to address the potential environmental constraints associated with the presence of hazardous materials at the project sites to the satisfaction of EMWD: ❖ The contractor shall prepare a Health and Safety Plan in compliance with the requirements of Chapter 6.95, Division 20 of the Health and Safety Code (§25500 – 25532). The plan shall include measures to be taken in the event of an accidental spill. ❖ The contractor shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains. In addition, the contractor shall store all reserve fuel supplies only within the confines of designated construction staging areas; refuel equipment only with the designated construction staging areas; and regularly inspect all construction equipment for leaks. ❖ The construction staging area shall be designed to contain contaminants such as oil, grease, and fuel products to ensure that they do not drain towards receiving waters or storm drain inlets.
Mitigation Measures	No additional mitigation is required.
Impact After Mitigation	Less than significant impact.
Environmental Factor	**Hydrology and Water Quality**
Potential Impact	During project construction, there is the potential for sediment-laden runoff to enter downstream drainages.
Standard Construction Practices/Design Features	All site grading and excavation activities associated with the construction of the Project facilities would be subject to the provisions of the National Pollutant Discharge Elimination System (NPDES) Construction Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities [NPDES No. CAS000002 (State Water Resources Control Board Order No. 2009-0009-DWQ)]. Compliance with the provisions of that Order would require NCPA to obtain coverage before the onset of construction activities. Construction activities would comply with the conditions of these permits that include preparation of storm water pollution prevention plans (SWPPP), implementation of BMP's, and monitoring to insure impacts to water quality are minimized. As part of this process, multiple BMP's should be implemented to provide effective erosion and sediment control. These BMP's should be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMP's to be implemented may include, but not be limited to, the following: ✓ Temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover shall be employed for disturbed areas. ✓ Storm drain inlets on the site and in downstream offsite areas shall be protected from sediment with the use of BMP's acceptable to NCPA, local jurisdictions and the California Regional Water Quality Control Board, Central Valley Region. ✓ Dirt and debris shall be swept from paved streets in the construction zone on a regular basis, particularly before predicted rainfall events. ✓ No disturbed surfaces shall be left without erosion control measures in place. NCPA, or its Construction Contractor, shall file a Notice of Intent with the Regional Board and require the preparation of a pollution prevention plan prior to commencement of construction. NCPA shall routinely inspect the construction site to verify that the BMP's specified in the pollution prevention plan are properly installed and

	maintained. NCPA shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance. The SWPPP will also identify the method of final stabilization of the site to ensure no post-construction erosion and impacts to water quality will occur. The Notice of Termination (NOT) and release of the Project from the provisions of the Construction General Permit coverage will be granted by the California Regional Water Quality Control Board, Central Valley Region once it is satisfied that no impacts to water quality will occur.
Mitigation Measures	No additional mitigation is required.
Impact After Mitigation	Less than significant impact.

Areas of Controversy

There are no areas of controversy associated with the NCPA Solar Project 1 – Lodi Sites Project.

Issues to be Resolved

There are no issues to be resolved associated with the NCPA Solar Project 1 – Lodi Sites Project.

Document Availability and Contact Personnel

The Initial Study and Mitigated Negative Declaration is available for review at the following locations:

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

Lodi Electric Utility
1331 S Ham Lane
Lodi, California 95242

and can be downloaded at:

https://www.ncpa.com

All comments regarding the Project or environmental documents should be mailed or emailed to:

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July 2019

1 Introduction

1.1 Introduction

The following Initial Study addresses the environmental impacts associated with the NCPA Solar 1 Project – Lodi Century Park East/West, Pixley Basin and Parking Garage sites (Project) being implemented by the Northern California Power Agency (NCPA) (Figure 1.1-1). This Initial Study has been prepared in accordance with the *California Environmental Quality Act of 1970,* as amended, (CEQA), the *State CEQA Guidelines,* and NCPA's *Local Guidelines for Implementing the California Environmental Quality Act*, as amended. NCPA is the Lead Agency and the City of Lodi is a Responsible Agency for the purposes of CEQA for this project.

1.2 Project Summary

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by NCPA as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. The City of Lodi selected three potential sites for further analysis as shown below:

Site	Location		Developable Area (acres)	Estimated Capacity (MW_{dc})
	Latitude, Longitude	Section, Township, Range		
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	Sec 7, T 3 N, R 7 E, MDB&M	15.0	3.62
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Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	Sec 1, T 3 N, R 6 E, MDB&M	0.9	0.18

The Century Park East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century Park West site is directly across the railroad tracks from the Century Park East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 2.5 acres in size which would accommodate a project size of 0.63 megawatts (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.62 MW_{dc}.

The parking garage is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

1.3 California Environmental Quality Act Compliance

The California Environmental Quality Act (California Public Resources Code §21000 et seq.: "CEQA"), requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and eliminated. Therefore, to fulfill the purpose and intent of CEQA, NCPA, as the lead agency, has caused this Initial Study/Mitigated Negative Declaration (IS/MND) to be prepared to address the potentially significant adverse environmental impacts associated with implementation of the Project.

1.3.1 Purposes of an Initial Study

The purposes of an Initial Study, as outlined in §15063(c) of the State CEQA Guidelines, are:

1) *Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration;*

2) *Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration;*

3) *Assist the preparation of an EIR, if one is required, by:*

   a. *Focusing the EIR on the effects determined to be significant,*
   b. *Identifying the effects determined not to be significant,*
   c. *Explaining the reasons for determining that potentially significant effects would not be significant, and*
   d. *Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.*

4) *Facilitate environmental assessment early in the design of a project;*

5) *Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment;*

6) *Eliminate unnecessary EIR's; and*

7) *Determine whether a previously prepared EIR could be used with the project.*

1.3.2 Contents of an Initial Study

The contents of an Initial Study are defined in §15063(d) of the CEQA Guidelines as follows:

1) *A description of the project including the location of the project;*

2) *An identification of the environmental setting;*

3) *An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries. The brief explanation may be either through a narrative or a reference to another information source such as an attached map,*

photographs, or an earlier EIR or negative declaration. A reference to another document should include, where appropriate, a citation to the page or pages where the information is found;

4) *A discussion of ways to mitigate the significant effects identified, if any;*

5) *An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;*

6) *The name of the person or persons who prepared or participated in the Initial Study.*

1.3.3 Intended Uses of the Initial Study

The Initial Study will be presented to NCPA's Commission for its use in implementing the California Environmental Quality Act (CEQA). The basic purposes of CEQA as outlined in §15002(a) of the CEQA Guidelines are to:

1) *Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.*

2) *Identify the ways that environmental damage can be avoided or significantly reduced.*

3) *Prevent significant avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.*

4) *Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.*

As pointed out above, one purpose of an Initial Study is:

> Provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration.

1.3.4 Lead Agency Decision-Making Process

The Lead Agency (i.e., NCPA) would base its decision on the Project on the findings contained within this Initial Study plus the professional knowledge and judgment of its staff and consultants. During the review process, mitigation measures contained in this document should be evaluated with respect to their effectiveness in reducing impacts to a level of insignificance. Public input, including responsible and trustee agencies, should also be requested and evaluated during the review process.

The approval process for the proposed Project will begin with NCPA's Commission making a decision to prepare a Negative Declaration or an Environmental Impact Report for the Project. Should NCPA decide to prepare a Negative Declaration, based on this Initial Study, it would also determine whether or not it would approve of the Project in accordance with §15074 of the State CEQA Guidelines. Should NCPA decide to prepare an Environmental Impact Report for the Project, it would also have to make findings in accordance with §15091 of the State CEQA Guidelines and to certify the Final Environmental Impact Report in accordance with §15090 of the CEQA Guidelines.

1.3.5 Approvals for which this Initial Study will be Used

The following agencies would also utilize this document in their decision-making process regarding the Proposed Project:

California Regional Water Quality Control Board, Central Valley Region

General Permit for Storm Water Discharges Associated with Construction Activity

City of Lodi

Project Approval

2 Project Background and Description

2.1 Introduction

The Northern California Power Agency (NCPA), a California Joint Action Agency, was established in 1968 by a consortium of locally owned electric utilities to make joint investments in energy resources that would ensure an affordable, reliable and clean supply of electricity for customers in its member communities. Today those members include the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, Shasta Lake, and Ukiah as well as the Bay Area Rapid Transit District, Port of Oakland, Plumas-Sierra Rural Electric Cooperative, and Tahoe Donner Public Utility District.

Over the past four decades, NCPA has constructed and today operates and maintains a fleet of power plants that is among the cleanest in the nation and that provides reliable and affordable electricity to more than 600,000 Californians. NCPA made major investments in renewable energy in the early 1980s when it developed two geothermal power plants and financed and built a 259 MW hydroelectric facility. Thirty years later those resources continue to generate reliable, emission-free electricity for its member communities.

NCPA's 775-megawatt portfolio of power plants is approximately 50% greenhouse gas emission free. Its mix of geothermal, hydroelectric and natural gas resources is well positioned to help its members achieve California's goal of a 50% Renewable Portfolio Standard (RPS) by 2030. NCPA member utilities also have invested heavily in the most environmentally friendly form of electricity – the megawatts that are not used. The Agency members have collectively spent more than $100 million on energy efficiency since 2006 reducing demand for electricity by more than 350 gigawatt hours during that time.

NCPA's commitment to the environment reflects its status as a not-for-profit public entity whose policies and values are set not by investors but by locally elected or appointed officials who serve as the energy regulators in the cities, towns and districts that are members of the Agency.

2.2 Project Background

Now NCPA intends to implement the NCPA Solar Project 1. The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Four of the member agencies have decided to participate in this project. They are the Cities of Healdsburg, Lodi, and Redding as well as the Plumas-Sierra Rural Electric Cooperative. Six potential sites have been selected for further analysis as shown below:

Site	Location	Developable Area (acres)	Estimated Capacity (MW_{dc})
Healdsburg – Wastewater Plant	38°35'00.03N, 122°51'45.37"W	8.13	3.62
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	15.0	3.51
Lodi – Century Park East/West	38°06'26.66"N, 121°16'21.63"W	2.5	0.63
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	0.9	0.18
Plumas Sierra – Chilcoot	39°47'56.66"N, 120°09'49.99"W	28.2	6.11
Redding – Airport	40°29'41.73"N, 122°16'46.41"W	58	12.61

Due to the timing of implementation and the great distance between the member agencies, it was determined that the most logical approach to satisfying the requirements of CEQA for this project was to issue separate CEQA documents for each member agencies projects. Therefore, this document focuses on the three projects proposed by the City of Lodi.

2.3 Project Description

As shown above, The City of Lodi selected three potential sites for further analysis. The locations of these sites are shown on Figure 2.3-1.

Figure 2.3-1 Proposed Photovoltaic Sites in the City of Lodi

2.3.1 Century Park East/West

The Century Park East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century Park West site is directly across the railroad tracks from the Century Park East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts-direct current (MW_{dc}). An aerial photograph of these sites is shown on Figure 2.3-2.

Figure 2.3-2 Century Park East/West Site

Design parameters for this site are shown in Table 2.3-1.

Table 2.3-1
Century Park East/West Design Parameters

Parameter	Content	
	Century Park Esst	Century Park West
Project Buildable Area	1.5 acres	2.9 acres
Approximate Photovoltaic Project Area	0.8 acres	1.7 acres
Estimated Project Capacity	0.225 MW_{dc}	0.402 MW_{dc}
Point of Interconnection Voltage	12.0 kV	12.0 V
Setback from Northern Project Boundary	10 feet	10 feet
Setback from Southern Project Boundary	20 feet	20 feet
Fence to Array Buffer	7 feet	7 feet
Security and Fencing	Construct Chain Link Fence	Construct Chain Link Fence
Module Size	Minimum 360 watts	Minimum 360 watts
Racking System	Fixed Tilt	Fixed Tilt
Inverters	String Inverters	String Inverters

Source: Burns & McDonnell, 2/08/2019

A typical fixed tilt solar array is shown on Figure 2.3.3.

Figure 2.3-3 Typical Fixed Tilt Solar Array

Century Park East and Century Park West would contain standalone equipment as each site would have a point of interconnection (POI) as shown on Figure 2.3-4. The solar developer would install a concrete pad to accommodate the electrical equipment at each site. The solar developer would also install new inverter(s), step-up transformer to 12.0 kV, and primary switchgear equipment including relays and protection compliant with the City requirements. The developer will also install a custody transfer meter to track the Project's output and transmit the data to the City. The meter would meet the requirements to develop Renewable Energy Credits and would be owned/maintained by the solar developer. The solar developer would also provide a junction box within the Project boundary and a conduit in an underground trench from the junction box to the POI. The solar developer would perform all interconnection work up to the distribution system. The City would terminate the conductors at the city-owned 12.0 kV electrical system. The trench and installed conduit would be owned by the City.

Figure 2.3-4 Century Park East and Century Park West Points of Interconnection

2.3.2 Pixley Basin

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}. It will be necessary to grade this site to develop the 15 acres.

An aerial photograph of this site is shown on Figure 2.3-5.

Figure 2.3-5 Pixley Basin Site

Design parameters for this site are shown in Table 2.3-2.

Table 2.3-2
Pixley Basin Design Parameters

Parameter	Pixley Basin
Project Buildable Area	36 acres
Approximate Photovoltaic Project Area	15 acres
Estimated Project Capacity	3.51 MW_{dc}
Point of Interconnection Voltage	12.0 kV
Setback from Northern Project Boundary	10 feet
Setback from Southern Project Boundary	20 feet
Fence to Array Buffer	7 feet
Security and Fencing	Chain Link Fence
Module Size	Canadian Solar CS6U-340P
Racking System	Horizontal Single Axis Tracker 10° tilt, 180° azimuth; 60° tracker limitation
Inverters	Solectria Renewables SGI 500XTM

Source: Burns & McDonnell, 10/05/2018

As shown on Figure 2.3-6, the POI for this site is directly south of the site on Auto Center Drive. In its October 5, 2018 letter report, Burns & McDonnell concluded that the existing electrical infrastructure should be able to support the full output of the Project without requiring any significant upgrades.

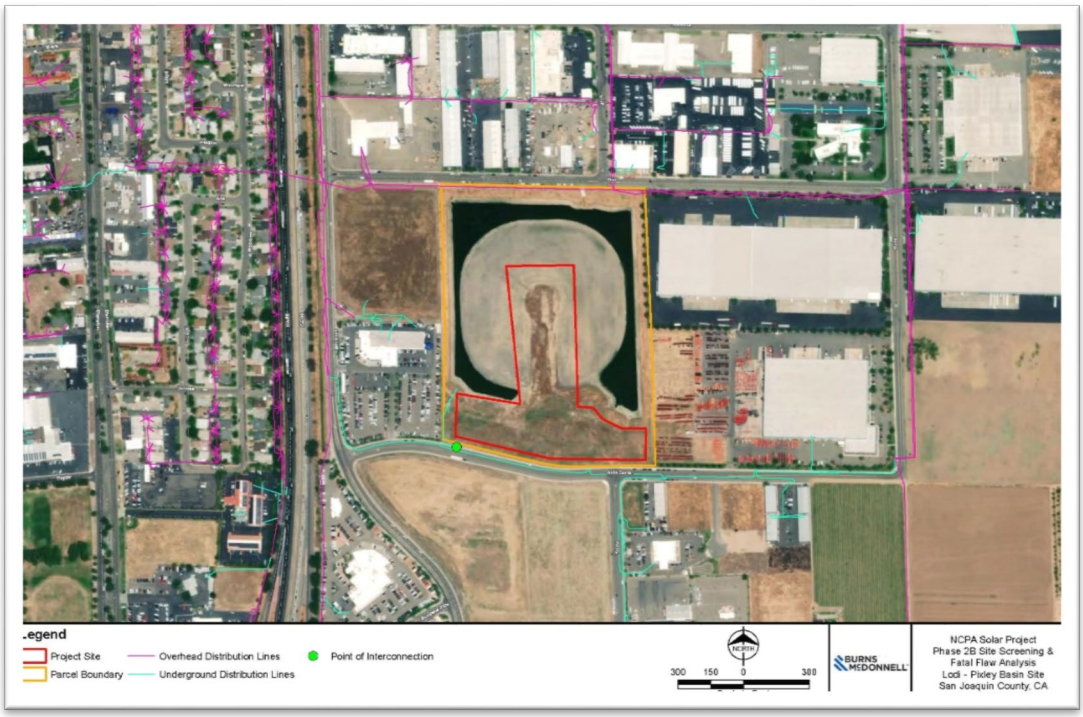

Figure 2.3-6 Pixley Basin Point of Interconnection

In order to develop this site to its full potential, it will be necessary to do a considerable amount of earthwork within the basin to enlarge the pad for the solar arrays from 13.5 acres to 15.0 acres. This would be accomplished while meeting the following objectives and design constraints of the stormwater basin:

- Maintain the 5,572,692 cubic feet of stormwater storage capacity.
- Maintain the design maximum water elevation of 47.0 feet.
- Excavate the basin floor to the minimum floor elevation of 33.0 feet.

As shown on Figure 2.3-7, it will be necessary to cut approximately 88,750 cubic yards of earthen materials and fill approximately 118,150 cubic yards of earthen materials. Therefore, it would be necessary to import approximately 29,400 cubic yards of material to the site to balance the cut and fill.

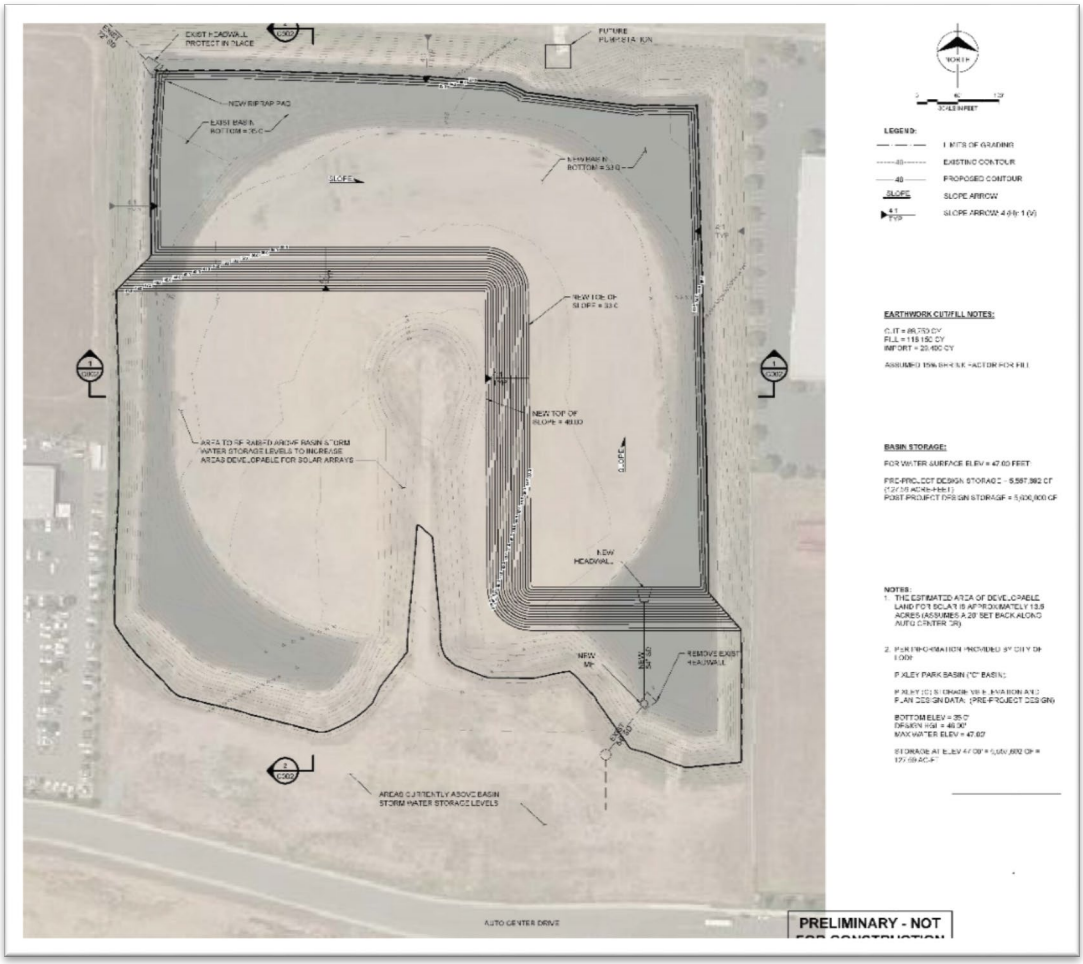

Figure 2.3-7 Proposed Earthwork at Pixley Basin

2.3.3 Parking Garage

The parking garage solar photovoltaic site is located on the third-floor rooftop of a City-owned parking garage. The site is bound by E. Elm Street on the north, Union Pacific Railroad tracks on the east, E. Pine Street on the south and N. Sacramento Street on the west in a mixed commercial and industrial area. This site contains a project area of 0.2 acres which would accommodate a project size of 0.185 MW_{dc}. An aerial photograph of this site is shown on Figure 2.3-8.

Figure 2.3-8 Parking Garage

Design parameters for this site are shown in Table 2.3-3.

Table 2.3-3
Parking Garage Design Parameters

Parameter	Parking Structure
Project Buildable Area	0.9 acres
Approximate Photovoltaic Project Area	0.2 acres
Estimated Project Capacity	0.185 MW_{dc}
Point of Interconnection Voltage	12.0 kV
Project Boundaries	Racking structure must fully cover the upper level of the parking structure
Security and Fencing	N/A
Module Size	Minimum 350 W
Racking System	Horizontal Single Axis Tracker Rooftop
Inverters	String Inverters

Source: Burns & McDonnell, 3/06/2019

A typical horizontal single axis tracker rooftop installation is provided on Figure 2.3-9 *(Burns & McDonnell 3/06/2019).*

Figure 2.3-9 Typical HSAT Installation on Rooftop

The Point of Interconnection for this facility is shown as the green dot on Figure 2.3-10.

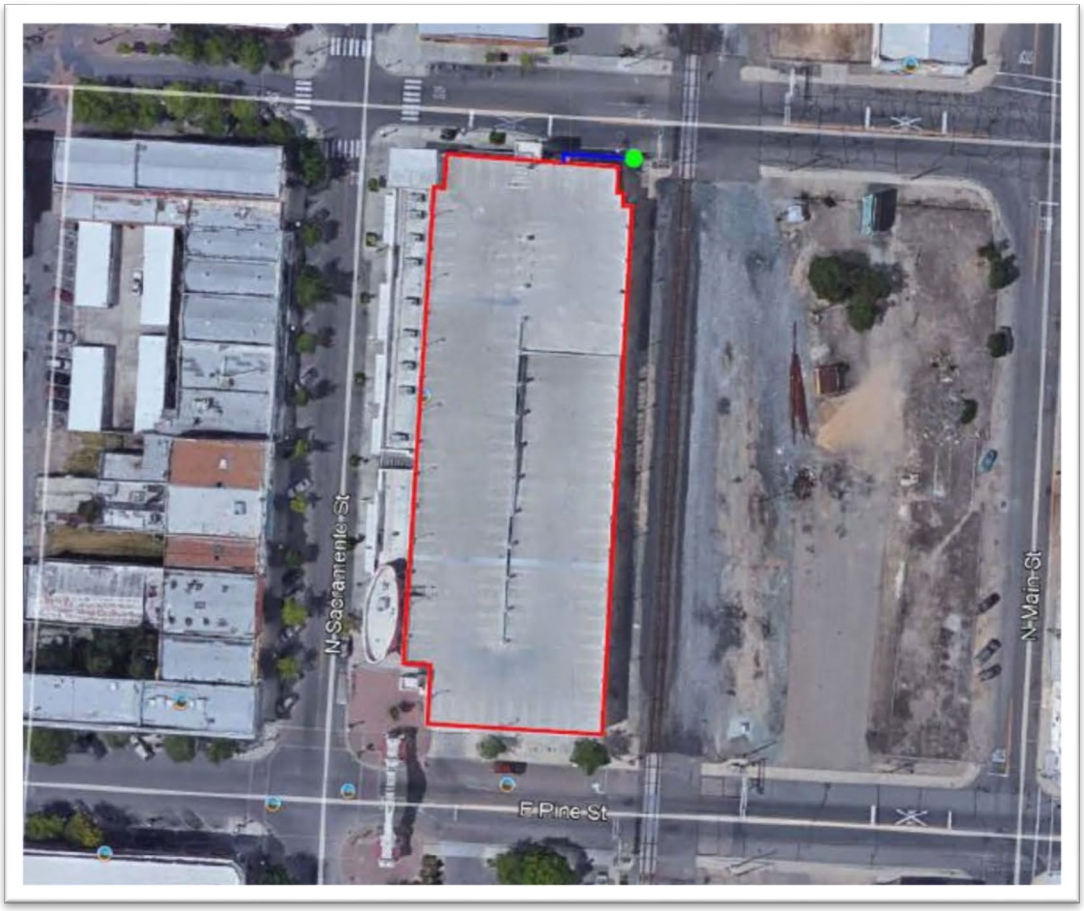

Figure 2.3-10 Point of Interconnection at Parking Structure

3 Environmental Checklist, Analysis and Mitigation Measures

3.1 Introduction

1.	Project Title:	**NCPA Solar Project 1 – Lodi Sites**
2.	Lead Agency Name and Address:	Northern California Power Agency 651 Commerce Drive Roseville, California 95678-6420
3.	Contact Person, Phone Number and Email:	Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE K.S. Dunbar & Associates, Inc. Environmental Engineering 45375 Vista Del Mar Temecula, California 92590-4314 (951) 699-2082 ksdpe67@gmail.com
4.	Project Location:	Within the City of Lodi, San Joaquin County Century Park Site: 38º06'26.66"N, -121º16'21.63"W Pixley Basin Site: 38º0718.06"N, -121º15'12.14"N Parking Garage Site: 38º08'05.25"N, -121º16'18.58"W
5.	Project Sponsor's Name and Address:	Northern California Power Agency 651 Commerce Drive Roseville, California 95678 Lodi Electric Utility 1331 South Ham Lane Lodi, California 92542
6.	General Plan Designations:	Century Park Site: Open Space and Low Density Residential Pixley Basin Site: Public/Quasi Public Parking Garage Site: Public/Quasi Public
7.	Zoning:	Century Park Site: Industrial and Planned Development Pixley Basin Site: Public/Quasi Public Parking Garage Site: Public/Quasi Public
8.	Project Description (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):	NCPA intends to install solar photovoltaic generation systems within the City of Lodi. The installed capacity at the Century Park East/West sites would be 0.63 megawatts-direct current (MW_{dc}), at the Pixley Basin site it would be 3.51 MW_{dc} and at the Parking Gragee it would be 0.18 MW_{dc}.
9.	Surrounding Land Uses and Setting:	Mixture of industrial, commercial and residential uses.

10. Other Public Agencies whose Approval is Required (e.g., permits, financing approval, or participation agreement):	California Regional Water Quality Control Board, Central Valley Region City of Lodi
11. Have California Native American Tribes traditionally and culturally affiliated with the project area requested information pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?	Yes.

3.2 Environmental Factors Potentially Affected

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

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

3.3 Determination

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 in 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 legal 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.

Ron Yuen
Director of Engineering, Generation Services

Date

3.4 Chapter Organization

This section describes how this chapter of the Draft Initial Study and Mitigated Negative Declaration is organized. In this analysis, potential reasonably foreseeable impacts are evaluated with respect to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire. Additionally, mandatory findings of significance regarding short-term, long-term, and cumulative impacts are evaluated. Each topic area begins with a listing of the factors identified by the State CEQA Guidelines for analysis, followed by a discussion of the environmental setting, the analysis for each factor, and an overall conclusion.

3.4.1 Environmental Setting

Throughout this document and according to the State CEQA Guidelines, the environmental setting is intended to mean the environmental conditions as they exist at the time the environmental analysis is commenced. The environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to gain an understanding of the significant effects of the proposed Project and its alternatives.

3.4.2 Discussion and Mitigation Measures

The Initial Study includes an analysis of direct and reasonably foreseeable physical changes in the environment from the proposed Project and feasible mitigation measures that would reduce such impacts to a less than significant level. Thresholds of significance for each potential impact are provided as appropriate.

A "significant effect on the environment" is defined in the State CEQA Guidelines Section 15382 as a "substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. A social or economic change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."

"Environment" is defined in the State CEQA Guidelines Section 15360 as "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

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).

The following requirements for evaluating environmental impacts are cited directly from the State CEQA Guidelines Appendix G.

1) All answers must take into 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.

2) 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 incorporated, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

3) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies when 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.

4) 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. [§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 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.

5) 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.

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

7) 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.

8) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measures identified, if any, to reduce the impact to less than significance.

3.5 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? 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 that would adversely affect day or nighttime views in the area?	☐	☐	◙	☐

3.5.1 Environmental Setting

The City of Lodi is a distinctive Central Valley community located along the Mokelumne River, adjacent to the Sacramento-San Joaquin Delta. Lodi has a compact form, with visible history and a human scale. The urban form is further defined by the contrast to the surrounding agricultural land, which compliments the urban form and provides a special identity as well as a visual and function to the City's outer edge. Rural and agricultural lands surrounding Lodi are an important visual resource. (*Lodi, November 2009).*

The Century Park East and West sites are located on a City easement that was previously reserved for connecting East Century Boulevard and West Century Boulevard to make the street contiguous. The Century Park East site is bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad tracks to the west. The Century Parl West site is bordered to the north, south and west sides by residences and to the east by the Union Pacific railroad tracks. Photographs of these two sites are shown on Figures 3.5-1 and 3.5-2.

Figure 3.5-1 Century Park East Site Looking West from the end of E. Century Boulevard

Figure 3.5-2 Century Park West Site Looking East from the end of W. Century Boulevard

The Pixley Basin site consists of approximately 27 acres within an undeveloped park that currently serves as a storm water and flood control basin. The site is surrounded by commercial and industrial development. Residential areas do exist approximately one-quarter mile to the west; however, Highway 99 separates the commercial/industrial areas from the residential areas. The site is not within the viewshed of the residences. A photograph of the site looking north from Auto Center Parkway is shown on Figure 3.5-3.

Figure 3.5-3 Pixley Basin Site Looking North from Auto Center Drive

The Parking Garage site is in downtown Lodi on the rooftop of the World of Wonders Science Museum. As shown on Figure 3.5-4, this site is immediately adjacent to the Lodi Arch which is an historic structure listed on the National Register of Historic Places.

Figure 3.5-4 Parking Garage Adjacent to Lodi Arch

3.5.2 Discussion and Mitigation Measures

Aesthetics a. *Would the project have a substantial adverse effect on a scenic vista?*

Answer: No Impact.

Discussion:

As shown in the above photographs, there are no scenic vistas associated with any of the proposed solar photovoltaic sites. Therefore, there would be no adverse effects on a scenic vista caused by implementation of the Project. Consequently, no further analysis or mitigation is required.

Aesthetics b. *Would the project* substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Answer: No Impact.

Discussion:

There are no State scenic highways within the Project area. Therefore, no further analysis or mitigation is required.

Aesthetics c. Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Answer: No Impact.

Discussion:

According to the City of Lodi's General Plan Map, the Century Park East site is designated open space and the Century Park West site is designated low density residential. The other two sites (i.e., Pixley Basin and Parking Garage) are designated as public/quasi-public). Installation of solar facilities is a permitted use in these designations. Therefore, there would be no conflicts with applicable zoning and therefore no further analysis or mitigation is required.

Aesthetics d. *Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

Answer: Less than Significant Impact.

Discussion:

According to the June 2014 Meister Consultants Group Solar and Glare Fact Sheet prepared for the U.S. Department of Energy, a common misconception about solar photovoltaic (PV) panels is that they intently cause or create "too much" glare, posing a nuisance to neighbors and a safety risk for pilots. While in certain situations the glass surfaces of solar PV systems can produce a glint (a momentarily flash of bright light) and glare (a reflection of bright light for a longer duration), light adsorption, rather than reflection is central to the function of a solar PV panel – to absorb solar radiation and convert it to electricity. Solar PV panels are constructed of dark-colored (usually blue or black) materials and are covered with anti-reflective coatings. Modern PV panels reflect as little as two percent of incoming sunlight, about the same as water and less than soil or even wood shingles.

Based on the above discussion, the potential for substantial glare from the solar PV panels would be considered less than significant and therefore no further analysis or mitigation is required.

3.5.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

3.6 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation Model (1997) 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, 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 511104(g))?	☐	☐	☐	◙
d. Result in the loss of forest land or conversion of forest land to non-forest uses.	☐	☐	☐	◙
e. Involve other changes in the existing environment that, 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?	☐	☐	☐	◙

3.6.1 Environmental Setting

As previously stated, the Century Park East and West sites are both vacant land that was acquired by the City of Lodi to allow the completion of Century Boulevard. The Pixley Basin site is utilized as a storm water and flood control basin and the Parking Garage site is the roof of an existing building. Therefore, no agricultural lands or forest lands occur at any of the sites.

3.6.2 Discussion and Mitigation Measures

Agriculture and Forestry Resources. a. *Would the project 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?*

Answer: No Impact.

Discussion:

As stated above, there are no Farmlands at the Project sites. Therefore, there would be no impacts and no further analysis or mitigation is required.

Agriculture and Forestry Resources. b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

Answer: No Impact.

Discussion:

None of the sites are zoned for agricultural use or are under a Williamson Act contract. Therefore, there would be no impacts and no further analysis or mitigation is required.

Agriculture and Forestry Resources. c. *Would the project 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))?*

Answer: No Impact.

Discussion:

None of the sites are zoned for forest land or timber land use. Therefore, there would be no impacts and no further analysis or mitigation is required.

Agriculture and Forestry Resources. d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

Answer: No Impact.

Discussion:

There is no forest land within the Project area. Therefore, there would be no impacts and no further analysis or mitigation is required.

Agriculture and Forestry Resources. e. *Would the project 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?*

Answer: No Impact.

Discussion:

There is no farmland or forest land at the Project sites. Therefore, there would be no impacts and no further analysis or mitigation is required.

3.6.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

3.7 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. *Would the Project:*				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	◙
b. Result in cumulatively considerable net increase of any criteria pollutant 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 or dust) adversely affecting a substantial number of people?	☐	☐	◙	☐

3.7.1 Environmental Setting

Ambient air quality is affected by both the rate and location of pollutant emissions and by meteorological conditions that influence the local and regional dispersal of pollutants. Atmospheric conditions such as wind speed and direction and air temperature gradients combined with local topography provide the link between air pollutant emissions and air quality.

The proposed Project is within the San Joaquin Valley Air Basin which includes all of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings and Tulare Counties as well as the northern portion of Kern County.

Planning for the attainment and maintenance of both federal and State air quality standards in the Project area is the responsibility of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

The California Air Resources Board (ARB) provides ambient air quality data for most air basins in the State. A summary of the data available for the nearest monitoring station to the Project area (i.e., Stockton - Hazleton Street) is provided in Tables 3.7-1 through 3.7-4.

Table 3.7-1
Ozone Trends Summary: Stockton - Hazelton Street
National Standards

	Days > Standard			1-hr Observations				8-hr Observations				
	8-hr			EENED[1]				0.070 Std.		0.075 Std.		
Year	0.070	0.075	0.08	Max.	1-Yr	3-Yr	D.V.[2]	Max.	D.V.[2]	Max.	D.V.[2]	Coverage
2017	2	1	0	*0.085*	*0*	*0*	*0.090*	0.079	0.066	0.079	0.066	84
2016	2	2	0	*0.102*	*0*	*0*	*0.090*	0.078	0.068	0.078	0.068	94
2015	2	1	0	*0.094*	*0*	*0*	*0.089*	0.078	0.068	0.078	0.068	99
2014	4	1	0	*0.090*	*0*	*0*	*0.087*	0.077	0.069	0.077	0.069	97
2013	0	0	0	*0.080*	*0*	*0*	*0.086*	0.067	0.067	0.067	0.067	81
2012	5	2	0	*0.097*	*0*	*0*	*0.092*	0.083	0.069	0.083	0.069	99
2011	0	0	0	*0.089*	*0*	*0*	*0.095*	0.068	0.068	0.068	0.068	99
2010	3	2	1	*0.120*	*0*	*0*	*0.105*	0.095	0.072	0.095	0.072	100
2009	3	2	1	*0.116*	*0*	*0*	*0.095*	0.096	0.074	0.096	0.074	96
2008	6	4	1	*0.105*	*0*	*0*	*0.102*	0.090	0.078	0.090	0.078	98

Notes: All concentrations expressed in parts per million.

The national 1-hour ozone standard was revoked in June 2005. Statistics related to the revoked standard are shown in *italics* or ***italics***.

National exceedances shown in **orange**.

An exceedance is not necessarily a violation.

Daily maximum 8-hour averages associated with the National 0.070 ppm standard exclude those 8-hour averages that have first hours between midnight and 6:00 am, Pacific Standard Time.

Daily maximum 8-hour averages associated with the National 0.070 ppm standard include only those 8-hour averages from days that have sufficient data for the day to be considered valid.

Daily maximum 8-hour averages associated with the National 0.075 ppm standard may come from days that don't have sufficient data for the day to be considered valid, provided the daily maximum 8-hour average itself includes sufficient data to be considered valid.

[1] EENED = Estimated Expected Number of Exceedance Days

[2] D.V. = National Design Value

* There was insufficient (or no) data available to determine the value.

Source: arb.ca.gov, 02/10/2019

Table 3.7-2
Ozone Trends Summary: Stockton - Hazelton Street
State Standards

Year	Days > Standard		1-Hour Observations			8-Hour Averages			Year
	1-Hour	8-Hour	Max.	EPDC[1]	D.V.[2]	Max.	EPDC[1]	D.V.[2]	Coverage
2017	0	2	0.085	0.0855	0.09	0.080	0.0772	0.077	80
2016	2	2	0.102	0.0913	0.09	0.079	0.0775	0.077	94
2015	0	3	0.094	0.0894	0.09	0.079	0.0782	0.078	97
2014	0	5	0.090	0.0905	0.09	0.078	0.0772	0.075	97
2013	0	0	0.080	0.0872	0.09	0.067	0.0771	0.075	82
2012	1	6	0.097	0.0914	0.09	0.083	0.0797	0.080	98
2011	0	0	0.089	0.0932	0.09	0.068	0.0813	0.081	98
2010	2	3	0.120	0.0991	0.10	0.095	0.0852	0.082	100
2009	2	4	0.116	0.0970	0.10	0.096	0.0855	0.082	95
2008	2	7	0.105	0.1052	0.11	0.091	0.0924	0.082	98

Notes: All concentrations expressed in parts per million.
National exceedances shown in **green**.
An exceedance is not necessarily a violation.
[1] EPDC = Expected Peak Day Concentration
[2] D.V. = State Designation Value
*There was insufficient (or no) data available to determine the value.

Source: arb.ca.gov, 02/10/2019

Table 3.7-3
PM_{10} Trends Summary: Stockton - Hazelton Street

Year	Est. Days > Std.		Annual Average		3-yr Average		High 24-hr Average		Year Coverage
	Nat'l	State	*Nat'l*	State	*Nat'l*	State	Nat'l	State	
2017	0.0	42.9	*28.2*	28.8	*27*	29	89.9	92.6	97
2016	0.0	30.6	*26.0*	26.5	*26*	28	65.9	66.5	96
2015	0.0	24.5	*27.4*	28.0	*28*	32	54.1	55.3	100
2014	0.0	18.0	*24.1*	24.5	*26*	32	90.0	94.0	100
2013	0.0	58.2	*31.3*	32.0	*26*	32	90.1	95.5	99
2012	0.0	17.9	*22.4*	22.8	*22*	24	69.4	70.0	100
2011	0.0	24.4	*23.3*	24.1	*22*	24	66.1	70.1	99
2010	0.0	6.1	*19.4*	19.9	*24*	31	54.3	55.4	100
2009	0.0	18.2	*23.0*	23.6	*27*	31	58.7	58.8	100
2008	0.0	48.6	*29.9*	31.1	*30*	33	104.5	105.0	93
Ambient Standard			--	20			150	50	

Notes: All concentrations expressed in micrograms per cubic meter (µg/m^3).
All values listed above represent midnight-to-midnight 24-hour averages and may be related to an exceptional event.
The national annual average PM_{10} standard was revoked in December 2006 and is no longer in effect. Statistics related to the revoked standard are shown in *italics* or **italics**.
State exceedances shown in **green**. National exceedances shown in **orange**.
An exceedance is not necessarily a violation.
Statistics may include data that are related to an exceptional event.
State and national statistics may differ for the following reasons:
State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods.
State statistics for 2002 and later are based on *local* conditions.
National statistics are based on *standard conditions.*
State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.
*There was insufficient (or no) data available to determine the value.

Source: arb.ca.gov, 02/10/2019

Table 3.7-4
$PM_{2.5}$ Trends Summary: Stockton – Hazelton Street

Year	Est. Days > Nat'l '06 Std.	Annual Average Nat'l	Annual Average State	Nat'l Ann. Std. D.V.[1]	State Ann. Std D.V.[2]	Nat'l '06 Std. 98th Percentile	Nat'l '06 24-Hr Std. D.V.[1]	High 24-Hour Average Nat'l	High 24-Hour Average State	Year Coverage
2017	16.9	12.1	*	12.2	12	44.2	39	53.7	53.7	94
2016	4.0	11.8	*	12.2	12	32.4	39	43.7	43.7	100
2015	12.2	12.8	12.3	14.2	12	39.1	47	58.8	58.8	98
2014	16.0	12.1	12.2	14.0	12	44.5	45	56.8	56.8	100
2013	27.6	17.7	*	13.8	14	56.3	45	66.5	66.5	96
2012	6.0	12.4	12.4	11.5	14	33.9	36	60.4	60.4	100
2011	11.0	11.3	14.0	11.2	14	44.8	38	60.0	65.5	100
2010	5.3	10.9	*	12.2	14	29.7	44	41.0	44.6	98
2009	15.9	11.3	13.4	12.9	14	40.4	50	48.4	56.0	91
2008	27.7	14.4	14.4	13.5	14	61.6	51	81.2	91.0	97

Notes: All concentrations expressed in micrograms per cubic meter.
State exceedances shown in **green**. National exceedances shown in **orange**. An exceedance is not necessarily a violation.
State and national statistics may differ for the following reasons:
State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods.
State and national statistics may therefore be based on different samplers.
State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.
[1] D.V. = National Design Value
[2] D.V. = State Designation Value
* There was insufficient (or no) data available to determine the value.

Source: arb.ca.gov, 02/10/2019

The ARB has designated the San Joaquin Valley Air Basin as non-attainment for the State ozone, PM_{10} and $PM_{2.5}$ standards. In addition, the U.S. Environmental Protection Agency has designated the San Joaquin Valley Air Basin as non-attainment for the federal ozone and $PM_{2.5}$ standards.

3.7.2 Discussion and Mitigation Measures

Air Quality. a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Answer: No Impact.

Discussion:

The SJVAPCD has established thresholds of significance for criteria pollutant emissions which are based on District New Source Review (NSR) offset requirements for stationary sources. Stationary sources in the District are subject to some of the toughest regulatory requirements in the nation. Emission reductions achieved through implementation of District offset requirements are a major component of the District's air quality plans. Thus, projects with emissions below the threshold significance for criteria pollutants would be determined to not conflict or obstruct implementation of the District's air quality plan (SJVAPCD, March 19, 2015). Those threshold criteria are shown in Table 3.7-5.

Table 3.7-5
SJVAPCD Air Quality Thresholds of Significance

Pollutant/Precursor	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Activities and Activities
	Emissions (tons per year)	*Emissions (tons per year)*	*Emissions (tons per year)*
Carbon Monoxide (CO)	100	100	100
Oxides of Nitrogen (NO_x)	10	10	10
Reactive Organic Gases (ROG)	10	10	10
Oxides of Sulfur (SO_x)	27	27	27
Respirable Particulate Matter (PM_{10})	15	15	15
Fine Particulate Matter ($PM_{2.5}$)	15	15	15
Toxic Air Contaminants (TACs)			
Carcinogens	Maximally Exposed Individual risk equals or exceeds 20 in one million.		
Non-Carcinogens	Acute: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual		
	Chronic: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual		

As shown under "b." below, the projected emissions would be below the threshold significance for criteria pollutants and, therefore, the project would be determined to not conflict or obstruct implementation of the District's air quality plan.

Air Quality. b. *Would the project result in cumulatively considerable net increase of any criteria pollutant under an applicable federal or state ambient air quality standard)?*

Answer: Less than Significant Impact.

Discussion:

As stated above in Section 3.7.1, the ARB has designated the San Joaquin Valley Air Basin as non-attainment for the State ozone, PM_{10} and $PM_{2.5}$ standards. In addition, the U.S. Environmental Protection Agency has designated the San Joaquin Valley Air Basin as non-attainment for the federal ozone and $PM_{2.5}$ standards.

Criteria Pollutants

It is anticipated that NCPA would install solar equipment at three sites in the City of Lodi. A typical construction equipment list for this activity at each site follows:

Equipment	Number	Horsepower	Load Factor[1]	Hours per Day
Compressor	1	106	0.48	4
Crane	1	399	0.43	4
Drill Rig	1	291	0.75	6
Sweeper	1	250	0.68	2
Tractor/Backhoe/Loader	1	108	0.55	4
Trencher	1	63	0.75	4
Utility Trucks	1	479	0.57	2
Water Truck	1	189	0.50	2

Notes:
[1] Percentage of the engines' maximum horsepower rating that the equipment actually operates.

These additional assumptions are also utilized in the air quality analyses for installation of the solar equipment:

- The disturbed area is estimated at 3.0 acres at the Century Park East/West site, 15 acres at the Pixley Basin site and zero at the Parking Garage as equipment would be installed on an existing roof.
- There would be two heavy-duty trucks delivering supplies to the site. Mileage for each truck is assumed at 100 miles per day.
- There would be approximately 2 pickup trucks traveling to and from the site by inspectors. Mileage for each pickup would be approximately 100 miles per day.
- Approximately 10 construction workers would be involved at the site on the peak day of activities. Mileage for worker commuters would be approximately 50 per day.

- Construction activities would occur for about 90 days during equipment installation and 30 days during pad construction at the Pixley Basin site.
- It would be necessary to import 29,400 cubic yards of earthen material to the Pixley Basin site to balance the cut and fill.
- Approximately 10 trucks would be utilized to import the fill. Each truck would travel approximately 200 miles per day.

K.S. Dunbar & Associates, Inc., developed an Excel Spreadsheet model, based on the California Air Resources Board's 2011 OFFROAD emission factors, that calculates estimated emissions from construction activities. That model was used to estimate construction related emissions from off-road heavy construction equipment. Based on construction occurring in 2019, the model generated estimated construction emissions as shown in Table 3.7-6 (detailed model results are contained in Appendix C)[1].

Table 3.7-6
Estimated Emissions from Off-Road Heavy Construction Equipment
Solar Equipment Installation

	Pollutant (tons per year)[a]							
	ROG	CO	NO_x	SO_x	PM_{10}	$PM_{2.5}$	CO_2	CH_4
Solar Equipment Installation	0.17	1.17	1.53	0.00	0.01	0.01	300	0.09
Threshold Limits[b]	10	100	10	27	15	15	N/A	N/A

[a] Use of particulate traps reduces PM_{10} and $PM_{2.5}$ by 85% and oxidation catalysts reduces NO_x by 15%.
[b] Construction-related threshold limits developed by SJVAPCD to determine significance.

As can be seen by the data in Table 3.7-6, emissions from heavy construction equipment during solar equipment installation would not exceed SJVAPCD's construction-related threshold limits.

There would also be 2 heavy-duty trucks transporting equipment to the site as well as two pickup trucks utilized by inspectors at the job site. Based on the assumption that each heavy-duty truck and each pickup travel 100 miles per day, exhaust emissions would be as shown in Table 3.7-7.

Table 3.7-7
Estimated Emissions from On-Road Vehicles
Solar Equipment Installation

Equipment	Pollutant (tons per year)							
	ROG	CO	NOx	SOx	PM10	PM2.5	CO2	CH4
On-Road Trucks	0.01	0.05	0.13	0.00	0.01	0.01	38	0.00
Pickups	0.01	0.05	0.01	0.00	0.00	0.00	10	0.00
Totals	0.02	0.10	0.14	0.00	0.01	0.01	48	0.00

Vehicles owned by construction workers would be an additional source of air pollutants. An estimate of emissions based on 10 worker vehicles per day of which 100 percent are pickup trucks (gross vehicle weight of 8,500 pounds or less) with an average round trip of 50 miles is presented in Table 3.7-8.

Table 3.7-8
Construction Worker Commute Vehicle Emissions
Solar Equipment Installation

Pollutant (tons per year)							
ROG	CO	NO_x	SO_x	PM_{10}	$PM_{2.5}$	CO_2	CH_4
0.01	0.11	0.01	0.00	0.00	0.00	25	0.00

Earthmoving activities would create fugitive dust emissions. It is estimated that fugitive dust emissions from construction activities on disturbed soil approximate 5 pounds per acre per day (PM_{10}) with no mitigation. However, the application of water as required

[1] Should the construction period be delayed, the emissions from heavy construction equipment would be less due to technology improvements and phasing out of older equipment. Therefore, the emissions shown are considered the worst-case scenario.

would reduce the emissions by 61 percent *(SCAQMD, October 2016)*. As stated above, it is anticipated that approximately 3.0 acres would be disturbed each day at the Century Park East/West site and 15 acres would be disturbed at the Pixley Basin site each day. Therefore, the resulting PM_{10} emissions would be estimated at 5.85 and 29.25 pounds per day, respectively. SCAQMD also estimates that the $PM_{2.5}$ emissions in fugitive dust are equal to 21 percent of the PM_{10} emissions in fugitive dust *(SCAQMD, October 2006)*. Therefore, the $PM_{2.5}$ emissions would equal 1.23 and 6.14 pounds per day, respectively.

At the Pixley Basin site it would also be necessary to do some earthwork to create a pad for the solar equipment. Based on a construction period of 30 days, emissions from off-road heavy-duty equipment would be as shown in Table 3.7-9. Full model results are included in Appendix B.

Table 3.7-9
Estimated Emissions from Grading Activities at Pixley Basin

	Pollutant (tons per year)[a]							
	ROG	CO	NO_x	SO_x	PM_{10}	$PM_{2.5}$	CO_2	CH_4
Heavy Construction Equipment	0.22	1.47	2.60	0.00	0.02	0.01	403	0.13
Fugitive Dust	0.00	0.00	0.00	0.00	0.39	0.08	0.00	0.00
Haul Trucks	0.01	0.04	0.34	0.00	0.00	0.00	105	0.00
Totals	0.23	1.51	2.94	0.00	0.41	0.09	508	0.13
Threshold Limits[b]	10	100	10	27	15	15	N/A	N/A

[a] Use of particulate traps reduces PM_{10} and $PM_{2.5}$ by 85% and oxidation catalysts reduces NO_x by 15%.
[b] Construction-related threshold limits developed by SJVAPCD to determine significance.

The total estimated from the installation of the solar equipment at the three Lodi sites are shown in Table 3.7-10

Table 3.7-10
Total Estimated Construction Emissions[a]
Solar Equipment Installation

Source	Pollutant (tons per year)							
	ROG	CO	NO_x	SO_x	PM_{10}	$PM_{2.5}$	CO_2	CH_4
Century East/West								
Construction Equipment	0.17	1.17	1.53	0.00	0.01	0.01	300	0.09
On-Road Vehicles	0.02	0.10	0.14	0.00	0.01	0.01	48	0.00
Worker Commutes	0.01	0.11	0.01	0.00	0.00	0.00	25	0.00
Fugitive Dust	0.00	0.00	0.00	0.00	0.26	0.06	0	0.00
Subtotal	0.20	1.38	1.68	0.00	0.28	0.08	373	0.09
Pixley Basin								
Construction Equipment	0.17	1.17	1.53	0.00	0.01	0.01	300	0.09
On-Road Vehicles	0.02	0.10	0.14	0.00	0.01	0.01	48	0.00
Worker Commutes	0.01	0.11	0.01	0.00	0.00	0.00	25	0.00
Fugitive Dust	0.00	0.00	0.00	0.00	0.73	0.15	0	0.00
Pad Construction	0.23	1.51	2.94	0.00	0.41	0.09	508	0.13
Subtotal	0.43	2.89	4.62	0.00	1.16	0.26	881	0.22
Parking Structure								
Construction Equipment	0.17	1.17	1.53	0.00	0.01	0.01	300	0.09
On-Road Vehicles	0.02	0.10	0.14	0.00	0.01	0.01	48	0.00
Worker Commutes	0.01	0.11	0.01	0.00	0.00	0.00	25	0.00
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
Subtotal	0.20	1.38	1.68	0.00	0.02	0.02	373	0.09
Total Construction Emissions	**0.83**	**5.65**	**7.98**	**0.00**	**1.46**	**0.36**	**1,627**	**0.40**
Threshold Limits[b]	10	100	10	27	15	15	N/A	N/A

[a] Use of particulate traps reduces PM_{10} and $PM_{2.5}$ by 85% and oxidation catalysts reduces NO_x by 15%.
[b] Construction-related threshold limits developed by SJVAPCD to determine significance.

As shown in Table 3.7-10, the total estimated emissions from installation of the solar equipment at all three Lodi sites simultaneously would not exceed the construction-related threshold limits for significance. However, the ARB has designated the

San Joaquin Valley Air Basin as non-attainment for the State ozone, PM_{10} and $PM_{2.5}$ standards. In addition, the U.S. Environmental Protection Agency has designated the San Joaquin Valley Air Basin as non-attainment for the federal ozone and $PM_{2.5}$ standards. Therefore, every effort should be made to minimize emissions within the San Joaquin Valley Air Basin. Consequently, to reduce the emissions as much as possible, NCPA will:

- Appoint a construction relations officer to act as a community liaison concerning on-site construction activities including resolution of issues related to PM_{10} generation.

- In addition, NCPA will add the following best management practices in its contract documents for this project:

  The contractor shall:

  - Utilize electricity from power poles instead of from temporary diesel or gasoline power generators, when feasible.

  - Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the contractor shall use trucks that meet EPA 2007 model year NO_x emissions requirements.

  - Require that all on-site construction equipment meet EPA Tier 3 or higher emissions standards according to the following:

    - ✓ All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

    - ✓ A copy of each unit's certified tier specification, BACT documentation, and CARB or SJVAPCD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

  - Maintain construction equipment engines by keeping them properly tuned and maintained according to manufacturer's specifications.

  - Use alternative fuels or clean and low-sulfur fuel for equipment.

  - Idle trucks in accordance with the Airborne Toxic Control Measure (ACTM) to Limit Diesel Fueled Commercial Motor Vehicle Idling and other applicable laws.

  - Spread soil binders on site, where appropriate, unpaved roads and staging areas.

  - Water site and equipment as necessary to control dust.

  - Sweep all streets at least once per day in accordance with SJVAPCD Rule 8041.

  - Conduct operations in accordance with SJVAPCD Rule 8021 requirements.

  - If necessary, wash off trucks leaving the site.

  - Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114.

Operation and maintenance personnel might make two or three trips per week to the Project site. Consequently, there would be essentially no emissions associated with vehicle travel to and from the site during operation and maintenance of the new facilities. Operation of the actual facilities would produce essentially no emissions.

Toxic Air Contaminants (TACs)

The combustion of diesel fuel produces diesel particulate matter as a byproduct. Diesel particulate matter has been identified by the California Air Resources Board (ARB) as a toxic air contaminant (TAC). While TACs can have long-term and/or short-term effects, diesel TAC has been shown by the ARB to have little or no short-term impact.

The ARB determined that the chronic impact of diesel particulate matter was of more concern than the acute impact in the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines *(ARB 2000)*. In that document, ARB noted that "Our analysis shows that the potential cancer risk from inhalation is the critical path when comparing cancer and non-cancer risk. In other words, a cancer risk of 10 cases per million from the inhalation of diesel particulate matter (PM) will result from diesel PM concentrations that are much less than the diesel PM or TAC concentrations that would result in chronic or acute non-cancer hazard index values of 1 or greater." Consequently, any analysis of diesel TAC should focus on the long-term, chronic cancer risk posed by diesel emissions. Chronic cancer risk is normally measured by assessing what the risk to an exposed individual from a source of TACs would be if the exposure occurred over 70 years. Diesel emissions related to construction of the proposed Project would only occur for less than a one-year period. Therefore, the impact would be considered less than significant and no further analysis is required.

Air Quality. c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Answer: No Impact.

Discussion:

As shown above, all emissions from construction of the project would be less than significant based on threshold limits established by the SJVAPCD. Therefore, implementation of the project would not expose sensitive receptors to substantial pollutant concentrations. Consequently, no further analysis or mitigation is required.

Air Quality. d. *Would the project result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?*

Answer: Less than Significant Impact.

Discussion:

As shown above in Table 3.7-10, the fugitive dust emissions would be less than significant based on threshold criteria established by the SJVAPCD. In addition, implementation of the Project would not result in the generation of odors. Consequently, no further analysis or mitigation is required.

3.7.3 Conclusions

No significant impacts were identified; therefore, no further analysis or mitigation is required.

3.8 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 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, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	◙
c. Have a substantial adverse effect on state or federally protected (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?	☐	☐	☐	◙

3.8.1 Environmental Setting

K.S. Dunbar & Associates, Inc., retained ELMT Consulting (ELMT) to conduct a habitat and jurisdictional assessment for the three sites in the City of Lodi, San Joaquin County, California. The field work associated with the habitat and jurisdictional assessment was conducted by biologist Travis J. McGill on March 27, 2019 to document baseline conditions and assess the potential for special-status[2] plant and wildlife species to occur within the Century Park, Parking Garage and Pixley Basin Project sites that could pose a constraint to implementation of the proposed Project. Special attention was given to the suitability of the Project sites to support special-status plant and wildlife species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), and other electronic databases as potentially occurring in the general vicinity of the Project sites. EMLT's full report is contained in Appendix C and is the source of the following discussion.

Existing Site Conditions

Century Park

The Century Park East site is located on a City easement and is comprised of approximately 3.1 acres. The site is bordered by an industrial park to the north, recreational fields (Salas Park) to the south, residences to the east and the Union Pacific railroad to

[2] As used in this report, "special-status" refers to plant and wildlife species that are federally and State listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

the west. The Century Park West site is situated immediately across the railroad tracks from the Century Park East site and is bordered by residential developments to the north, south, and west, and the Union Pacific Railroad to the east.

The Century Park sites are relatively flat at an approximate elevation of 50 feet above mean sea level with no areas of significant topographic relief. Based on the NRCS USDA Web Soil Survey, the Century Park sites are underlain by the following soil unit: Tokay-Urban land complex (0 to 2 percent slopes. Refer to Exhibit 7, *Century Park Soils*, in Attachment A in ELMT's report in Appendix C. Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural activities, and development).

Parking Garage

The Parking Garage site is located on the third-floor rooftop of an existing parking garage for the World of Wonders Science Museum in downtown Lodi, west of the Union Pacific railroad. Due to the fact that the Parking Garage site is located on the rooftop of an existing parking garage, no soils occur onsite because the site is completely developed. The Project site is located within a heavily developed area in the City of Lodi in an area surrounded by land commercial and industrial land uses. The Project site is bordered by commercial developments to the north, south, and west, and the Union Pacific Railroad to the east.

Pixley Basin

The Pixley Basin site is comprised of approximately 27 acres and is located on an undeveloped park (Pixley Park) that serves as a stormwater retention and flood control basin. The Pixley Basin site is surrounded by industrial and commercial uses. Residential areas exist approximately 0.25 miles west of the site, however Highway 99 separates the commercial areas from the residential areas.

The proposed Project footprint for the Pixley Basin site is located at an approximate elevation of 58 feet above mean sea level. The Pixley Basin Project site is relatively flat with no areas of significant topographic relief, except for the areas that have been dug out to create the water retention basin. Based on the NRCS USDA Web Soil Survey, the Pixley Basin site is underlain by the following soil units: Tokay fine sandy loam (0 to 2 percent slopes), and Tokay-Urban land complex (0 to 2 percent slopes. Refer to Exhibit 6, *Pixley Basin Soils*, in Attachment A in ELMT's report in Appendix C. Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural activities, grading activities, development of the retention basin, and surrounding development).

Vegetation

Due to existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the Project sites. The Project sites primarily consist of either vacant, undeveloped, or developed lands that have been subject to a variety of anthropogenic disturbances. Disturbances have eliminated the natural plant communities that once occurred within the boundaries of the Project sites. Refer to Attachment B in ELMT's report in Appendix C, *Site Photographs*, for representative site photographs. No native plant communities will be impacted from implementation of the proposed Projects.

Century Park

The Century Park sites contain land cover types that would be classified as disturbed and developed. Refer to Exhibit 9, Century Park Vegetation in Attachment A in ELMT's report in Appendix C. Early successional and non-native weedy plant species comprise the western half of the Century Park East site, while the eastern portion of the Century Park East site is developed, with asphalt, loose gravel, and dirt stockpiles. The Century Park West site is comprised of an existing recreational park and does not support any native plant species. Plant species observed onsite include telegraph weed (*Heterotheca grandiflora*), filaree (*Erodium sp.*), winter vetch (*Vicia villosa*), cheeseweed *(Malva parviflora)*, Russian thistle *(Salsola tragus)*, short-podded mustard *(Hirschfeldia incana)*, sow thistle *(Sonchus* sp.*)*, wild radish *(Raphanus raphanistrum)*, milk thistle *(Silybum maranum)*, cocklebur *(Xanthium strumarium)*, pineapple weed *(Matricaria discoidea)*, coyote melon *(Cucurbita palmata)*, yellow sweet clover *(Mililotus officinalis)*, and horseweed *(Erigeron canadensis)*.

Parking Garage

The Parking Garage site supports a land cover type that would be classified as developed. Developed areas generally encompass paved, impervious surfaces. The entire Parking Garage is paved with concrete and no plant species were observed onsite.

Pixley Basin

The Project site primarily supports a land cover type that would be classified as disturbed. Refer to Exhibit 8, *Pixley Basin Vegetation* in Attachment A in ELMT's report in Appendix C. Early successional and non-native weedy plant species compose a majority of the Project site as a result of the weed abatement activities, surrounding development, and construction of the water retention basin. Plant species observed on-site include telegraph weed, filaree, winter vetch, bicolor lupine (*Lupinus bicolor*), ripgut (*Bromus diandrus*), fiddleneck (*Amsinckia sp.*), and mouse barley (*Hordeum murinum*).

Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed or are expected to occur within the Project sites. The discussion is to be used a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The Project sites provide limited habitat for wildlife species except those adapted to a high degree of anthropogenic disturbances and development.

Fish

No fish were observed in the Pixley Basin Project site during the field investigation. The water retention basin only supports water for portions of the year and does not provide a perennial water source or connect to a natural water feature that would provide suitable habitat for fish species. The only fish species that have the potential to occur in the Pixley Basin Project site are fish that are exotic or introduced such as mosquitofish (*Gambusia affinis*) and bluegill (*Lepomis macrochirus*). No special-status fish species are expected to occur within the Pixley Basin Project site.

No hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the Parking Garage or Century Park Project sites. No fish are expected to occur and are presumed absent from the Parking Garage or Century Park Project sites.

Amphibians

No amphibians were observed within the Pixley Basin Project site during the field investigation. The water retention basin only supports water for portions of the year and does not provide a perennial water source or connect to a natural water feature that would provide long term habitat for amphibian species. The only amphibian species that have the potential to occur in the Pixley Basin Project site are tree frog (*Pseudacris regilla*). No special-status amphibian species are expected to occur within the Pixley Basin Project site.

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the Parking Garage or Century Park Project sites. No amphibians are expected to occur and are presumed absent from the Parking Garage or Century Park Project sites.

Reptiles

During the field investigation, no reptilian species were observed on the Project sites. Common reptilian species adapted to a high degree of anthropogenic disturbances that have the potential to occur on the Project sites include western side-blotched lizard (*Uta stansburiana elegans*), and alligator lizard (*Elgaria multicarinata*). Due to the high level of anthropogenic disturbances on-site, and surrounding development, no special-status reptilian species are expected to occur within Project sites.

Birds

The Project sites provide foraging habitat for bird species adapted to a high degree of human disturbance. In particular, the Pixley Basin site provides suitable nesting opportunities for geese and ducks, and birds that nest on the open ground, such as killdeer (*Charadrius vociferus*). Bird species detected during the field investigation included lesser goldfinch (*Spinus psaltria*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), European starling (*Sturnus vulgaris*), house finch (*Haemorhouse mexicanus*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), killdeer, California scrub-jay (*Aphelocoma californica*), Nuttal's woodpecker (*Picoides nuttalii*), barn swallow (*Hirundo rustica*), Canada goose (*Branta canadensis*), ruddy duck (*Oxyura jamaicensis*), black-necked stilt (*Himantopus mexicanus*), American coot (*Fulica americana*), bufflehead (*Bucephala albeola*), and western meadowlark (*Sturnella neglecta*).

Mammals

During the field investigation, cottontail (*Sylvilagus audubonii*) was the only mammalian species observed on the Project sites. Common mammalian species adapted to a high degree of anthropogenic disturbances that have the potential to occur within the Project sites include California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*).

Nesting Birds

During the field investigation, two active Canada goose nests was observed within the Pixley Basin Project footprint. The Project sites provide suitable nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. Most of the nesting habitat associated with the Parking Garage and Century Park Sites are associated with the ornamental trees adjacent to the Project sites. Additionally, the Pixley Basin site provides suitable nesting opportunities for geese and ducks, and birds that nest on the open ground, such as killdeer.

Prior to site development, a pre-construction nesting bird clearance survey should be conducted to ensure no impacts to nesting birds will occur.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The proposed Projects will be confined to existing disturbed and/or developed areas that are surrounded by development, which has removed natural plant communities from the surrounding areas. The Project sites are isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the Project sites to any identified wildlife corridors or linkages. As a result, implementation of the proposed Projects will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

Jurisdictional Areas

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to

streambed and bank under Fish and Game Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The Pixley Basin site supports a stormwater retention and flood control basin that was excavated wholly in the uplands between 2006 and 2014. It does not have a surface hydrologic connection to any downstream waters of the United States or waters of the State. Further, the Pixley Basin does not support riparian vegetation, and therefore would not fall under the jurisdictional authority of the Corps, Regional Board, or CDFW. Therefore, project related activities within the Pixley Basin will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

It should be noted that the vacant property west of the northwestern portion of the Pixley Basin property has been mapped as having two freshwater emergent wetland habitats by the NWI. This area, outside of the Pixley Basin Project footprint supports disturbed, vacant land that is subject to routine disking activities. As a result, no existing freshwater wetland habitats were observed in the area mapped by the NWI.

The Parking Garage and Century Park Project sites do not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or CDFW. Therefore, Project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

Special-Status Biological Resources

The CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Lodi North, Lodi South, Lockeford, and Waterloo USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the Project sites to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified six (6) special-status plant species, thirty-five (35) special-status wildlife species, and two (2) special-status plant communities as having potential to occur within the Lodi North, Lodi South, Lockeford, and Waterloo USGS 7.5-minute quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the Project sites based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project sites are presented in *Table C-1: Potentially Occurring Special-Status Biological Resources*, provided in Attachment C in ELMT's report in Appendix C.

Special-Status Plants

According to the CNDDB and CNPS, six (6) special-status plant species have been recorded in the Lodi North, Lodi South, Lockeford, and Waterloo quadrangles (refer to Attachment C). No special-status plant species were observed onsite during the habitat assessment. The Project sites consist of vacant, undeveloped land, or developed land that has been subject to a variety of anthropogenic disturbances. These disturbances have eliminated the natural plant communities that once occurred on the Project sites, which has removed suitable habitat for special-status plant species known to occur in the general vicinity of the Project sites. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the Project sites do not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent from the Project sites. No focused surveys are recommended.

Special-Status Wildlife

According to the CNDDB, thirty-five (35) special-status wildlife species have been reported in the Lodi North, Lodi South, Lockeford, and Waterloo quadrangles (refer to Attachment C in Appendix C). No special-status wildlife species were observed onsite during the habitat assessment. The Project sites consist of vacant, undeveloped land, or developed land that has been subject to a variety of anthropogenic disturbances. These disturbances have eliminated the natural plant communities that once occurred on-site which have greatly reduced potential foraging opportunities for wildlife species.

Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed Project sites, in particular the Pixley Basin site, have a moderate to high potential to support great egret (*Ardea alba*), and great blue heron (*Ardea herodias*). Both of these species are not federally, or state listed. All remaining special-status wildlife species were determined to have a low potential to occur or are presumed to be absent from the Project sites due to the fact that the Project sites have been heavily disturbed from onsite disturbances and surrounding development.

In order to ensure impacts to the aforementioned species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey should be conducted prior to ground disturbance. With implementation of mitigation through the pre-construction clearance survey, impacts to the aforementioned species will be less than significant.

Special-Status Plant Communities

According to the CNDDB, two (2) special-status plant community has been reported in the Lodi North, Lodi South, Lockeford, and Waterloo USGS 7.5-minute quadrangles: Northern Hardpan Vernal Pool, and Valley Oak Woodland. Based on the results of the field investigation, no special-status plant communities were observed on the Project sites.

Critical Habitat

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The Project sites are not located within federally designated Critical Habitat. Refer to Exhibit 10, *Critical Habitat* in Attachment A in Appendix C. The nearest designated Critical Habitat is located approximately 1 mile north of the Parking Garage site within the Mokelumne River for steelhead (*Oncorhynchus mykiss*), and approximately 4 miles west of the City of Lodi for delta smelt (*Hypomesus transpacificus*).Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the proposed Project.

3.8.2 Discussion and Mitigation Measures

Biological Resources. a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

As stated above, the literature search identified six (6) special-status plant species, thirty-five (35) special-status wildlife species, and two (2) special-status plant communities as having potential to occur within the Lodi North, Lodi South, Lockeford, and Waterloo USGS 7.5-minute quadrangles. However, none of these were observed on-site during the habitat assessment and none are expected to occur on the Project sites due to the lack of suitable habitat.

Also as stated above, during the field investigation, two active Canada goose nests was observed within the Pixley Basin Project footprint. The Project sites provide suitable nesting habitat for year-round and seasonal avian residents, as well as migrating

songbirds that could occur in the area. Most of the nesting habitat associated with the Parking Garage and Century Park Sites are associated with the ornamental trees adjacent to the Project sites. Additionally, the Pixley Basin site provides suitable nesting opportunities for geese and ducks, and birds that nest on the open ground, such as killdeer. A pre-construction nesting bird clearance survey shoul be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

Therefore, NCPA will include the following in its contract documents for this Project:

- If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds shall be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet for raptors and special-status species) will be determined by the wildlife biologist, in coordination with the CDFW, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Implementation of the above mitigation measure will ensure that the impacts to nesting birds are less than significant.

Biological Resources. b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Answer: No Impact.

Discussion:

As stated above, the Pixley Basin site supports a stormwater retention and flood control basin that was excavated wholly in the uplands between 2006 and 2014. It does not have a surface hydrologic connection to any downstream waters of the United States or waters of the State. Further, the Pixley Basin does not support riparian vegetation, and therefore would not fall under the jurisdictional authority of the Corps, Regional Board, or CDFW. Therefore, project related activities within the Pixley Basin will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

It should be noted that the vacant property west of the northwestern portion of the Pixley Basin property has been mapped as having two freshwater emergent wetland habitats by the NWI. This area, outside of the Pixley Basin Project footprint supports disturbed, vacant land that is subject to routine disking activities. As a result, no existing freshwater wetland habitats were observed in the area mapped by the NWI.

The Parking Garage and Century Park Project sites do not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or CDFW. Therefore, Project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required. Therefore, no further analysis or mitigation is required.

Biological Resources. c. *Would the project 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?*

Answer: No Impact

Discussion:

As discussed under *Biological Resources. b.* above, there are no federally protected wetlands on any of the Project sites. Therefore, no further analysis or mitigation is required. Therefore, no further analysis or mitigation is required.

Biological Resources. d. *Would the project 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?*

Answer: No Impact.

Discussion:

The proposed Projects will be confined to existing disturbed and/or developed areas that are surrounded by development, which has removed natural plant communities from the surrounding areas. The Project sites are isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the Project sites to any identified wildlife corridors or linkages. As a result, implementation of the proposed Projects will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area. Therefore, no further analysis or mitigation is required.

Biological Resources. e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Answer: No Impact.

Discussion:

There are no local polices or ordinances protecting biological resources that would be applicable to the Project. Therefore, no further analysis or mitigation is required.

Biological Resources. f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?*

Answer: No Impact.

Discussion:

The proposed Project sites were reviewed against the San Joaquin Multiple Species Conservation Plan and Open Space Plan (SJMSCP) to determine if the sites are located within any SJMSCP designated Preserves, core habitat areas, or wildlife movement corridors. A preliminary review of the SJMSCP determined that the Project sites are located within the Central Zone of the SJMSCP, which encompasses the lands surrounding each of the County's seven incorporated cities (including the City of Lodi). The Central Zone is composed primarily of agricultural lands on the floor of the Central Valley including those that are bisected by riparian corridors including the Mokelumne River, the Calaveras River, the Stanislaus River, Old River and the San Joaquin River. The Project sites are not located within and SJMSCP designated Preserves, core habitat areas, or wildlife movement corridors. Therefore, no further analysis or mitigation is required.

3.8.3 Conclusion

Implementation of the above mitigation measures will insure that all impacts to biological resources are reduced to a level of less than significant.

3.9 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	◙
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	◙	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	◙	☐	☐

3.9.1 Environmental Setting

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct Phase I cultural resources studies for the NCPA Solar Project 1 – Lodi Sites (i.e., Century Park East/West, Pixley Basin and Parking Garage. The Phase 1 studies include a cultural resources records search, Sacred Lands File search and Native American scoping, a pedestrian survey of the project site, and preparation of a technical report in compliance with the cultural resources requirements of CEQA. Complete copies of Anza's three reports are included in Appendix D of this report.

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the project sites. Anza recommends a finding of ***no impact to historical resources*** under CEQA. No further cultural resources study is recommended; however, standard mitigation measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project-related ground disturbing activities.

3.9.2 Discussion and Mitigation Measures

Cultural Resources. a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Answer: No Impact.

Discussion:

Century Park East/West

The Central California Information Center records search identified three cultural resources previously recorded within a 0.5-mile radius of the Project site (Table 2 in Anza's report in Appendix D). One of the resources (P-39-000002) is an unrecorded segment of the historic period Southern Pacific San Joaquin Valley Mainline – now the Union Pacific Railroad – which is adjacent and between the Century East and West Project site loci. The other two resources are historic period buildings at least 0.25 mile from the Project site.

Pixley Basin

No historical resources have been recorded within one-half mile of the Project site.

Parking Garage

NCPA intends to place PV solar panels atop a rack system above the roof of a modern three-story parking garage. The parking garage is at the former location of the Southern Pacific Passenger Depot. One NRHP-listed resource – the Mission Arch or Lodi Arch (P-39-000491) – is located adjacent to the south of the project site spanning East Pine Avenue. The modern parking garage was constructed adjacent to the Mission Arch and is taller than the arch. It is unlikely the solar panels would be visible to viewers of the arch from street level, and even if visible, their placement atop a modern parking structure would not further reduce the

integrity of setting for the Mission Arch. Based on this analysis, installation of the proposed project atop the parking garage would not create a direct or indirect impact to the Mission Arch (P-39-000491).

Therefore, there would be impacts to historical resources due to implementation of the Project. Consequently, no further analysis or mitigation is required.

Cultural Resources. b. *Would the project cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Although there were no archaeological sites discovered on the Project sites, there is always the possibility of an inadvertent discovery of an unknown site during excavation. Therefore, NCPA will:

- Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.

- In addition, NCPA will include the following mitigation measures in its contract documents for this project.

  - ✓ In the unlikely event that potentially significant archaeological materials are encountered during construction activities, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery, access the significance of the archaeological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of cultural material that might be discovered during excavation shall be in accordance with applicable laws and regulations.

  - All sacred items, should they be encountered within the Project sites, shall be avoided and preserved as the preferred mitigation, if feasible. All cultural materials that are collected during excavation and other earth disturbing activities on the Project sites, with the exception of sacred items, burial goods and human remains which will be addressed in any required Treatment Agreement, shall be tribally curated according to the current repository standards. The collections and associated records shall be transferred, including title, to the closet tribe to the Project site.

Cultural Resources. d. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

No human remains were discovered on-site. However, there is always the potential to inadvertently discover human remains during excavation. Therefore, NCPA will include the following in its standard contract documents for this Project.

- In the event of an accidental discovery or recognition of any human remains, the County Coroner shall be notified and construction activities at the affected work site shall be halted. If the coroner determines the remains to be Native American: (1) the coroner shall contact the Native American Heritage Commission (NAHC) within 24-hours, and (2) the NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The treatment and disposition of human remains that might be discovered during excavation shall be in accordance with applicable laws and regulations.

3.9.3 Conclusion

Implementation of the above mitigation measures would insure that any impact to cultural resources would be reduced to a level of less than significant.

3.10 Energy

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 or obstruct a state of local plan for renewable energy or energy efficiency?	☐	☐	☐	◙

3.10.1 Environmental Setting

The City of Lodi's Electric Utility provides the residents of Lodi with reliable electric service at competitive prices. It has been a member of the Northern California Power Agency for over 30 years.

3.10.2 Discussion and Mitigation Measures

Energy. a. *Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Answer: No Impact.

Discussion:

During construction, it would be necessary to use diesel-powered equipment to grade the Pixley Basin site and to install the actual equipment at all sites. This would not be considered a wasteful, inefficient or unnecessary consumption of energy resources.

It is proposed to install solar photovoltaic electric generation systems at three sites within the City of Lodi. The installed capacity of these systems would be 0.63 MW_{dc} at Century Park, 3.51 MW_{dc} at Pixley Basin and 0.18 MW_{dc} at the Parking Garage. It is anticipated that these three systems would generate a total of approximately 3,200 MWhr per year. This generation of electrical energy would far outweigh the minor amount of resources used to construct the facilities.

Therefore, there would be no impacts to energy caused by implementation of the Project. Consequently, there would be no further analysis or mitigation required.

Energy. b. Would the project conflict or obstruct a state of local plan for renewable energy or energy efficiency?

Answer: No Impact.

Discussion:

The addition of approximately 4.3 MW_{dc} of renewable energy generation would assist NCPA and the City of Lodi in meeting its goals of a 50 percent Renewable Portfolio Standard (RPS) by 2030. Therefore, implementation of the Project would not conflict or obstruct implementation of that plan. Consequently, no further analysis or mitigation is required.

3.10.3 Conclusion

No adverse impacts were identified; therefore, no further analysis or mitigation is required.

3.11 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Division of Mines and Geology Special Publication 42.	☐	☐	◙	☐
i. Strong seismic ground shaking?	☐	☐	◙	☐
ii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	◙
iii. 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), creating substantial risks to life or property?	☐	☐	☐	◙
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	◙
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	◙	☐	☐

3.11.1 Environmental Setting

Geologic Setting

The Central Valley is filled with a thick sequence of sediments eroded from the Sierra Nevada range to the east. The sediments are so thick on the western edge of the Sacramento Valley that the rocks underlying the sediments have not been penetrated by borings. Sixty thousand feet or more of these sediments, known as the Great Valley Sequence, may have been deposited in this region from about 60 million years ago. Most of the sediments deposited in the area were deposited on land rather than in the sea. Prior to that time, the sediments were mostly marine. The continental deposits include increasing amounts of sediments derived from Sierra Nevada bedrock and volcanic activity in the Sierras toward the end of the Tertiary period. Middle to late Tertiary sediments form the principal groundwater aquifers of the Central Valley. In this region, these sediments are estimated to be about 3,000 feet thick. During the last 1.6 million years, (the Quaternary period), large amounts of lake and marsh deposits have accumulated in parts of the Central Valley. The most recent deposits in the region are flood plain deposits, consisting of clay, silt and some sand. *(Lodi, November 2009).*

Seismicity

The Project area is located 65 miles east of the San Francisco Bay Area and lies within Seismic Risk Zone 3. The Project area may be affected by regionally occurring earthquakes; however, impacts resulting from such an event are not likely to be severe. Figure 3.11-1 (Figure 8-4 in Lodi General Plan) identifies active and potentially active faults in and around the Lodi area.

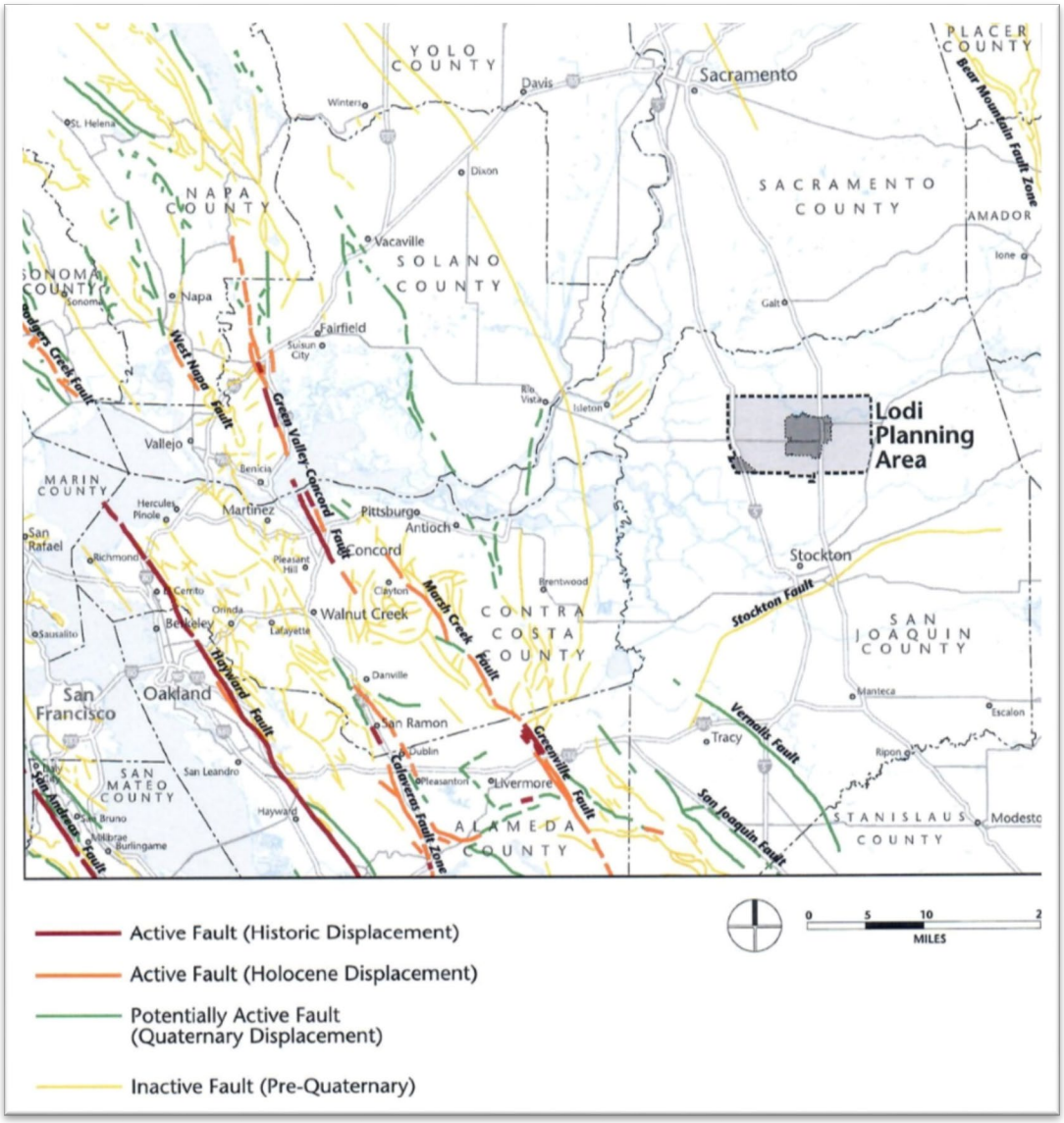

Figure 3.11-1 Regional Faults

As shown on Figure 3.11-1, the nearest active fault to the Project area is the Greenville Fault which is located approximately 34 miles to the south. The Maximum Moment Magnitude on the Greenville Fault is estimated to be 6.9. Other faults close to the Project area exhibiting historic displacement (activity within the last 200 years) are the Concord-Green Valley and Hayward Faults located approximately 45 miles west-northwest and 56 miles west of the Project area, respectively. Portions of the Calaveras Fault zone have also been rated as being active within the last 200 years; those portions are located approximately 46 miles southwest of the Project area. The nearest Quaternary fault (2 million years ago to present) to the Project area showing activity within the past 1.6 million years is the San Joaquin Fault located approximately 24 miles southwest of the Project area. The nearest mapped fault tract, the Stockton Fault, is not considered an active fault. *(Lodi, April 2010).*

Soils

According to the U.S. Department of Agriculture's National Conservation Service's Web Soils Survey for San Joaquin County, soils at the Century Park East/West site are composed of Tokay-Urban land complex with 0 to 2% slopes. Soils at the Pixley Basin site

are composed of Tokay-Urban land complex with 0 to 2% slopes and Tokay fine sandy loam with 0 to 2% slopes. Soils at the Parking Garage site are classified as Urban land.

3.11.2 Discussion and Mitigation Measures

Geology and Soils. a. i. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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 Division of Mines and Geology Special Publication 42.*

Answer: No impact.

Discussion:

The Alquist-Priolo Earthquake Fault Zoning Act identifies special study zones for areas where existing known faults are located. The main purpose of the Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act also required the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. The Proposed Project site is not shown on any State of California Special Studies Zones Quadrangles. Therefore, no further analysis or mitigation is required.

Geology and Soils. a. ii. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

Answer: Less than Significant.

Discussion:

The potential for strong seismic ground shaking in the Project area is similar to that in surrounding areas. Because the Proposed Project consists of facilities that are not intended for human habitation, the Proposed Project will not expose people or critical structures to adverse effects resulting from seismic-related ground failure, including liquefaction. In addition, the Proposed Project facilities are specifically designed to withstand seismic conditions anticipated to occur at the Proposed Project sites. Seismic conditions expected to occur in the Proposed Project area can be mitigated by special design using reasonable construction and/or maintenance practices common to the San Joaquin County area. Any potential impacts would be considered less than significant and further analysis or mitigation is required.

Geology and Soils. a. iii. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Answer: Less than Significant.

Discussion:

According to the City of Lodi's Safety Element, the risk of surface rupture is considered low. In addition, the probability of soil liquefaction taking place in the Project area is considered to be low to moderate due to the substantial distance from the active Hayward and Calaveras Fault zones and the type of ground shaking expected from those faults. Any potential impacts would be considered less than significant and no further analysis or mitigation is required.

Geology and Soils. a. 4. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

Answer: No Impact.

Discussion:

The Project area is primarily flat and thus the risk of unstable soils or landslides is considered relatively low. Therefore, no further analysis or mitigation is required.

Geology and Soils. b. *Would the project result in substantial soil erosion or the loss of topsoil?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

The Tokay soil types in the Project area have a moderate potential for wind erosion. Up to 15 acres of these soils could be exposed during the grading required at the Pixley Basin site. However, strict adherence to NCPA's best management practices for air quality control would insure that these potential impacts were less than significant.

Geology and Soils. c. *Would the project 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?*

Answer: No Impact.

Discussion:

As stated above, the Project area is not located on a geologic unit or soil that would become unstable. Therefore, no further analysis or mitigation is required.

Geology and Soils. d. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

Answer: No Impact.

Discussion:

Expansive soils are largely composed of clay which expand in volume when water is absorbed and shrink when dried. The soils at the Project sites are fine sandy loams which are not susceptible to expansion and shrinking. Therefore, there would be no impacts and no further analysis or mitigation is required.

Geology and Soils. e. *Would the project have soils incapble of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

Answer: No Impact.

Discussion:

The Project does not include the use of septic tanks or alternative wastewater disposal systems. Therefore, there are no impacts associated with the use of septic tanks or alternative wastewater disposal systems and no mitigation is required.

Geology and Soils. f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

There is always the possibility of an inadvertent discovery of paleontological resources during construction. However, NCPA's construction documents for the Project will include the following best management practices:

- In the unlikely event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the project, all work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological material that might be discovered during excavation shall be in accordance with applicable laws and regulations.

3.11.3 Conclusion

Strict adherence to NCPA's best management practices outlined above would insure that no significant impacts to geology and soils would occur; therefore, no further analysis or additional mitigation is required.

3.12 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?	☐	☐	◙	☐
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	◙

3.12.1 Environmental Setting

Under Assembly Bill 32 (AB 32) greenhouse gases (GHGs) are defined as carbon dioxide 9CO_2), methane (CH_4), nitrous oxide (NO_2), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6),

GWP is a measure of how much a given mass of greenhouse gas is estimated to contribute to global warming. It is a relative scale that compares the gas in question to the same mass of carbon dioxide (whose GWP by definition is 1). A GWP is calculated over a specific time interval and the value of this must be stated whenever a GWP is quoted or else the value is meaningless. A substance's GWP depends on the time span over which the potential is calculated. A gas which is quickly removed from the atmosphere may initially have a large effect but for longer time periods as it has been removed becomes less important. For the purposes of a CEQA analysis, especially an analysis of operating emissions, the maximum GWP is typically used, regardless of the actual atmospheric lifetime. This approach simplifies the analysis and provides a very conservative analysis, especially for the fluorinated gases. The GWP of the six Kyoto GHGs is shown in Table 3.12-1 [U.S. EPA (www.epa.gov)].

Table 3.12-1
Global Warming Potential of Kyoto GHGs

Gas	Atmospheric Lifetime	GWP
Carbon Dioxide (CO_2)	50 – 200	1
Methane (CH_4)	12 ± 3	21
Nitrous Oxide (NO_2)	120	310
HFC-23 (Hydrofluorocarbons)	264	11,700
HFC-32	5.6	650
HFC-125	32.6	2,800
HFC-134a	14.6	1,300
HFC-143a	48.3	3,800
HFC-152a	1.5	140
HFC-227ea	36.5	2,900
HFC-236fa	209	6,300
HFC-4310mee	17.1	1,300
CF_4 (Perfluorocarbons)	50,000	6,500
C_2F_6	10,000	9,200
C_4F_{10}	2,600	7,000
C_6F_{14}	3,200	7,400
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: U.S. EPA (www.epa.gov)

According to the California Air Resources Board's *California Greenhouse Gas Emission for 2000 to 2016 Trends of Emissions and Other Indicators,* California uses the annual statewide greenhouse gas (GHG) emission inventory to track progress toward meeting statewide GHG targets. The inventory for 2016 shows that California's GHG emissions continue to decrease, a trend observed since 2007. In 2016, emissions from routine GHG emitting activities statewide were 429 million

metric tons of CO_2 equivalent ($MMTCO_2e$), 12 $MMTCO_2e$ lower than 2015 levels. This puts total emissions just below the 2020 target of 431 million metric tons. Emissions vary from year-to-year depending on the weather and other factors, but California will continue to implement its greenhouse gas reductions program to ensure the state remains on track to meet its climate targets in 2020 and beyond. These reductions come while California's economy grows and continues to generate jobs. Compared to 2015, California's GDP grew 3% while the carbon intensity of its economy declined by 6%.

- The largest reductions came from the electricity sector which continues to see decreases as a result of the state's climate policies, which led to growth in wind generation and solar power, including growth in both rooftop and large solar array generation.
- The abundant precipitation in 2016 provided higher hydropower to the state.
- The industrial sector shows a slight decrease in emissions in the past two years.
- The transportation sector remains the largest source of GHG emissions in the state and saw a 2% increase in emissions in 2016.
- Emissions from the remaining sectors are relatively constant in recent years, although emissions from high Global Warming Potential (GWP) gases also continued to increase as they replace Ozone Depleting Substances (ODS) banned under the 1987 Montreal Protocol.

3.12.2 Discussion and Mitigation Measures

Greenhouse Gas Emissions. a. *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?*

Answer: No Impact.

Discussion:

As shown in the Air Quality section, construction of the Project would generate exhaust emissions, including GHGs. from the construction equipment and on-road vehicles. The carbon dioxide equivalent of those emissions (CO_2 and CH_4) are estimated at 1,480 metric tons during 2019. The SJVAPCD has not established threshold limits for GHGs. However, the South Coast Air Quality Management District (SCAQMD) has suggested a threshold limit of 10,000 metric tons per year. Based on SCAQMD's threshold limit, emissions of GHGs during construction of the project would be less than significant. Therefore, no further analysis or mitigation is required.

Operation of the project has the potential to lower GHG emissions as the production of solar power does not produce GHGs as opposed to fossil fuel or gas-fired generation facilities.

Greenhouse Gas Emissions. b. *Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emission of greenhouse gases?*

Answer: No Impact.

Discussion:

As previously stated in the Energy section, the addition of approximately 4.4 MW_{dc} of renewable energy generation would assist NCPA and the City of Lodi in meeting its goals of a 50 percent Renewable Portfolio Standard (RPS) by 2030. Therefore, implementation of the Project would not conflict or obstruct implementation of that plan. Consequently, no further analysis or mitigation is required.

3.12.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

3.13 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 upset 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 that 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, and if so, 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?	☐	☐	☐	◙

3.13.1 Environmental Setting

Hazards

Seismic and Geologic Hazards

Seismic and geologic hazards were discussed in Section 3.11.

Fire

The Project sites are not within a high fire hazard area or within a fire responsibility area.

Flooding

Both the Century Park East/West and Pixley Basin sites are within the 500-year flood plain. Based on Burns & McDonnell's report, it appears that the risk of flooding at the Century Park East/West site is low. Burns & McDonnell made this same observation at the Pixley Basin site; however, it is designed to be a storm water detention and flood control basin. The Parking Garage site is on a roof and not subject to flooding.

Hazardous Materials

Several standard environmental record services are available to determine the potential for recognized environmental conditions in an area. Those databases are briefly described in the following paragraphs.

Superfund Enterprise Management System (SEMS)

In 2014, the Superfund Program implemented a new information system, the Superfund Enterprise Management System (SEMS). SEMS integrates multiple legacy systems (e.g., CERCLIS, ICTS, SDMS) into a comprehensive tracking and reporting tool, providing data on the inventory of active and archived hazardous waste sites evaluated by the Superfund program. It contains sites that are either proposed to be, or are on, the National Priority List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. SEMS also includes information from the California Department of Toxic Substances Control's Envirostor database. The SEMS search did not reveal any sites in the City of Lodi.

Envirostor

Envirostor is a database maintained and primarily used by the California Department of Toxic Substances Control (DTSC) to determine the location of all hazardous waste sites. The Envirostor search revealed an ongoing hazardous waste cleanup program in the City of Lodi. The Lodi Central Plume Area (LCPA) Site is located within the Lodi Area of Contamination (LAC) which occupies approximately 600 acres centered on the intersection of School Street and Lodi Avenue in the City of Lodi. Contaminated groundwater was identified by the City in 1989 when it detected tetrachloroethene (PCE) and trichloroethene (TCE) at concentrations above the California Maximum Contaminant Levels (MCLs) in two of the City's municipal water supply wells. The groundwater contamination is thought to have been due to on-site releases and wastewater discharges to the sanitary sewer system from up to 43 locations throughout the City. DTSC's current Lodi Groundwater Project (Envirostor Project ID 39990001) began in May of 1997 when it executed the Comprehensive Agreement with the City of Lodi for investigation and abatement of the volatile organic compound (VOC) contamination. Through the Agreement, DTSC allowed the City of begin pursuing judicial action against Potentially Responsible Parties to fully characterize and remediate the site. The California Regional Water Quality Control Board, Central Valley Region became the Lead Agency for the site during May 2005.

Geotracker

Geotracker is the State Water Resources Control Board's data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense Site Cleanup Program) as well as permitted facilities such as operating USTs and land disposal sites. The Lodi Central Plume Area site is also listed in the Geotracker database.

Leaking Underground Storage Tank Information System (LUSTIS)

The State Water Resources Control Board (State Water Board) administers the Leaking Underground Storage Tank Information System (LUSTIS). The LUSTIS database includes all reported leaks from underground storage tanks. The LUSTIS database is now reported in the Geotracker results.

Site Mitigation Program Property Database (formerly CalSites)

The California Environmental Protection Agency's Department of Toxic Substances Control (DTSC) administers the CalSites program. Information in the CalSites database is preliminary in nature; therefore, most sites listed in the database need additional work to determine if contamination exists. There are no sites in the CalSites database within the Project area.

Hazardous Waste and Substances Sites List (Cortese)

California's Government Code §65962.5 requires the California Department of Toxic Substances Control to develop, at least annually, an updated list of Hazardous Waste and Substances Sites. This list, known as the Cortese List, is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local agencies are required to provide additional hazardous materials release information for

the Cortese List. The Cortese List is to be submitted to the Secretary of the California Environmental Protection Agency. There are no sites on the Cortese List within the Project area.

Solid Waste Information System (SWIS)

The Solid Waste Information System (SWIS) is a database provided by the California Department of Resources Recycling and Recovery (CalRecycle) which consists of both open as well as closed and inactive solid waste disposal facilities and transfer stations. There are no active sites in the SWIS database within the Project area.

3.13.2 Discussion and Mitigation Measures

Hazards and Hazardous Materials. a. *Would the project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Implementation of the proposed Project would not create any significant hazards as a result of the routine transport, use, storage, or disposal of hazardous materials. However, construction would include the temporary use and transport of fuels, lubricating fluids, solvents and other hazardous materials. The contractor would be required to adhere to the requirements of a *Health and Safety Plan* that it would develop for the Project pursuant to Chapter 6.95, Division 20 of the Health and Safety Code (§§ 25500—25532) as shown in the following mitigation measures.

During project construction, the construction contractor shall implement the following measures to address the potential environmental constraints associated with the presence of hazardous materials associated construction of the Project to the satisfaction of NCPA:

- The contractor shall prepare a Health and Safety Plan in compliance with the requirements of Chapter 6.95, Division 20 of the Health and Safety Code (§25500 – 25532). The plan shall include measures to be taken in the event of an accidental spill.

- The contractor shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains. In addition, the contractor shall store all reserve fuel supplies only within the confines of designated construction staging areas; refuel equipment only with the designated construction staging areas; and regularly inspect all construction equipment for leaks.

- The construction staging area shall be designed to contain contaminants such as oil, grease, and fuel products to ensure that they do not drain towards receiving waters or storm drain inlets.

Hazards and Hazardous Materials. b. *Would the project create a significant hazard to the public or the environment through reasonably upset accident conditions involving the release of hazardous materials into the environment?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Construction equipment used to construct the Project facilities would have the potential to release oils, grease, solvents and other finishing products through accidental spills. However, adherence to the above mitigation measures would result in less-than-significant impacts. Therefore, no further analysis or additional mitigation is required.

Hazards and Hazardous Materials. c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Answer: No Impact.

Discussion:

There are no known schools, existing or proposed, within one-quarter mile of the Project sites. Therefore, no further analysis or mitigation is required.

Hazards and Hazardous Materials. d. *Would the project be located on a site that 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?*

Answer: No Impact.

Discussion:

Several standard environmental record services are available to determine the potential for recognized environmental conditions in an area. Those databases include:

- Superfund Enterprise Management System (SEMS)
- Envirostor
- Geotracker
- Site Mitigation Program Property Database (formerly CalSites)
- Hazardous Waste and Substances Sites List (Cortese)
- Solid Waste Information System (SWIS)

These databases were searched for the presence of hazardous materials sites within the Project area. According to those databases, there is one active cleanup site in the Project area. However, as explained above this is a groundwater cleanup project and would have no effect on the Project. Therefore, no further analysis or mitigation is required.

Hazards and Hazardous Materials. e. *Would the project be 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, and if so, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

Answer: No Impact.

Discussion:

The Project sites are not within an airport land use plan or within two miles of a public airport or public use airport. Therefore, there would be no impacts and no further analysis or mitigation is required.

Hazards and Hazardous Materials. f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Answer: No Impact.

Discussion:

Implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan as it would not be constructed within public rights-of-way. Therefore, there would be no impacts and no further analysis or mitigation is required.

Hazards and Hazardous Materials. h. *Would the project expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?*

Answer: No Impact.

Discussion:

The Project area is not within a high fire hazard area or a fire responsibility area. Therefore, there would be no impacts and no further analysis or mitigation is required.

3.13.3 Conclusion

Implementation of the above mitigation measures will ensure that the impacts associated with hazards and hazardous materials are reduced to a less than significant level and no further environmental review or mitigation is required.

3.14 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 the project may impede sustainable ground 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 off-site;	☐	☐	☐	◙
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?	☐	☐	☐	◙

3.14.1 Environmental Setting

The Project area lies within the San Joaquin River Basin which covers 15,860 square miles and includes the entire area drained by the San Joaquin River. The principal streams in the Basin are the San Joaquin River and its larger tributaries: the Cosumnes, Mokelumne, Calaveras, Stanislaus, Merced, Chowchilla, and Fresno Rivers. Major reservoirs and lakes include Pardee, New Hogan, Millerton, McClure, Don Pedro and New Melones.

The San Joaquin River Watershed falls under the jurisdiction of the California Regional Water Quality Control Board, Central Valley Region. The Regional Board has established beneficial uses and water quality objectives for the San Joaquin River in its Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin.

3.14.2 Discussion and Mitigation Measures

Hydrology and Water Quality. a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Answer: Less than Significant with Mitigation Incorporated..

Discussion:

Generally, during site grading and excavation activities, bare soil would be exposed to wind and water erosion. If precautions are not taken to contain sediments, construction activities could produce sediment laden storm runoff. In addition to increased erosion potential, hazardous materials associated with construction equipment could adversely affect water quality if spilled or stored improperly. (See Section 3.13.2 for a full discussion and mitigation measures associated with hazardous materials.) Implementation of the following mitigation measures would insure that all impacts to water quality were less than significant.

- All site grading and excavation activities associated with the construction of the Project facilities would be subject to the provisions of the National Pollutant Discharge Elimination System (NPDES) Construction Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities [NPDES No. CAS000002 (State Water Resources Control Board Order No. 2009-0009-DWQ)]. Compliance with the provisions of that Order would require NCPA to obtain coverage before the onset of construction activities. Construction activities would comply with the conditions of these permits that include preparation of storm water pollution prevention plans (SWPPP), implementation of BMP's, and monitoring to insure impacts to water quality are minimized. As part of this process, multiple BMP's should be implemented to provide effective erosion and sediment control. These BMP's should be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMP's to be implemented may include, but not be limited to, the following:

  - ✓ Temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover shall be employed for disturbed areas.

  - ✓ Storm drain inlets on the site and in downstream offsite areas shall be protected from sediment with the use of BMP's acceptable to NCPA, local jurisdictions and the California Regional Water Quality Control Board, Central Valley Region.

  - ✓ Dirt and debris shall be swept from paved streets in the construction zone on a regular basis, particularly before predicted rainfall events.

  - ✓ No disturbed surfaces shall be left without erosion control measures in place. NCPA, or its Construction Contractor, shall file a Notice of Intent with the Regional Board and require the preparation of a pollution prevention plan prior to commencement of construction. NCPA shall routinely inspect the construction site to verify that the BMP's specified in the pollution prevention plan are properly installed and maintained. NCPA shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance.

- The SWPPP will also identify the method of final stabilization of the site to ensure no post-construction erosion and impacts to water quality will occur. The Notice of Termination (NOT) and release of the Project from the provisions of the Construction General Permit coverage will be granted by the California Regional Water Quality Control Board, Central Valley Region once it is satisfied that no impacts to water quality will occur.

Hydrology and Water Quality. b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable ground management of the basin?*

Answer: No Impact.

Discussion:

The proposed project includes the installation of solar photovoltaic facilities at three sites and does not include any facilities to extract groundwater. It will not result in the use of groundwater and thus will not substantially deplete groundwater supplies or interfere with groundwater recharge. Therefore, no further analysis or mitigation is required.

Hydrology and Water Quality. c.i. *Would the project 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 result in substantial erosion or siltation on- or off-site?*

Answer: No Impact.

Discussion:

The Century Park East/West site is essentially level and will require only a minimum amount of grading. The panels will be installed on penetrating piers that would have a negligible effect on runoff from the site. Grading will be required at the Pixley Basin site; however, the finished contours will insure that the Basin maintains the same volume of storage before and after grading. The panels would also be installed on penetrating piers. At the parking garage, the panels would be installed on the roof of the building.

Therefore, no impacts to the existing drainage pattern of any of the sites would occur. Consequently, no further analysis or mitigation is required.

Hydrology and Water Quality. c.ii. *Would the project 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 result in flooding on- or off-site?*

Answer: No Impact.

Discussion:

As discussed above, no impacts to the existing drainage pattern of any of the sites would occur. Consequently, no further analysis or mitigation is required.

Hydrology and Water Quality. c.iii. *Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?*

Answer: No Impact.

Discussion:

As discussed above, no impacts to the existing drainage pattern of any of the sites would occur. Consequently, no further analysis or mitigation is required.

Hydrology and Water Quality. c.iv. *Would the project impede or redirect flood flows?*

Answer: No Impact.

Discussion:

As discussed above, no impacts to the existing drainage pattern of any of the sites would occur. Consequently, no further analysis or mitigation is required.

Hydrology and Water Quality. d. *Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Answer: No Impact.

Discussion:

The Century Park East/West site and the Pixley Basin site are within the 500-year flood hazard zone. However, based on field observations by Burns & McDonnell, it appears that the risk of flooding is very low. In addition, the actual panels would be installed on piers above the flood hazard elevation. Therefore, there would be no impacts and no further analysis or mitigation is required.

Hydrology and Water Quality. e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Answer: No Impact.

Discussion:

As shown above, the Project would have no effect on water quality and therefore would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Consequently, no further analysis or mitigation is required.

3.14.3 Conclusion

Implementation of the above mitigation measures would insure that the impacts to water quality would be less than significant.

3.15 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	◙

3.15.1 Environmental Setting

All three sites are with the City of Lodi. According to the City's General Plan, the eastern portion of the Century Park site is designated as open space and the western portion is designated as low-density residential. Both the Pixley Basin site and the Parking Garage site are designated as public/quasi-public. Solar installations are permitted uses in these land use areas.

3.15.2 Discussion and Mitigation Measures

Land Use and Planning. a. *Would the project physically divide an established community?*

Answer: No Impact.

Discussion:

The Century Park East/West site was acquired by the City of Lodi to allow the completion of Century Boulevard. The other two sites are already public use sites (i.e., storm water and flood control basin and parking garage. Therefore, the installation of solar arrays at these sites would not physically divide an established community. Consequently, no further analysis or mitigation is required.

Land Use and Planning. b. *Would the project 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?*

Answer: No Impact.

Discussion:

As stated above, solar installations are permitted uses in the designated land uses. Therefore, no further analysis or mitigation is required.

3.15.3 Conclusions

No significant effects were identified; therefore, no further analysis or mitigation is required.

3.16 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known 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?	☐	☐	☐	◙

3.16.1 Environmental Setting

According to the City of Lodi's Land Use Map, there are no mineral resources sites within the Project area.

3.16.2 Discussion and Mitigation Measures

Mineral Resources. a. *Would the project result in the loss of availability of a known resource that would be of value to the region and the residents of the state?*

Answer: No Impact.

Discussion:

There are no known mineral resources in the Project area that would be of value to the region and the residents of the State. Therefore, there would be no impacts anticipated and no mitigation is required.

Mineral Resources. b. *Would the project 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?*

Answer: No Impact.

Discussion:

There are no locally-important mineral resource recovery sites delineated on the applicable local general plans, specific plan or other land use plan in the Project area. Therefore, there would be no impacts anticipated and no mitigation is required.

3.16.3 Conclusion

No impacts are anticipated; therefore, no further analysis or mitigation is required.

3.17 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 groundbourne vibration or groundbourne noise levels?	☐	☐	☐	◙

3.17.1 Environmental Setting

The ambient noise level of a region is the total noise generated within the specific environment and is usually composed of sounds emanating from natural and manmade sources. Noise levels monitored in a region tend to have wide spatial and temporal variation due to the great diversity of contributing sources. This is especially true for the greater project area with its blend of rural land uses adjacent to a mix of residential and agricultural uses.

Characterization of the Project area noise levels is difficult due to the lack of actual field measurements. Very little noise measurement data are available for the Project area in general. However, typical noise levels for areas like the Project area are in the range of 45 to 55 dB(A).

Generally, the noise levels in the Project area are affected by natural and manmade sources. However, the sound levels are more strongly influenced by human rather than natural sound sources. Within the Project area, the major sources of noise include vehicular traffic, including trains, and aircraft flyovers.

3.17.2 Discussion and Mitigation Measures

Noise. a. *Would the project result in 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?*

Answer: No Impact.

Discussion:

Section 9.24.030 C of the Lodi Municipal Code states:

> *It is unlawful for any person, firm or corporation to cause, permit or generate any noise or sound as described herein between the hours of ten p.m. and seven a.m. which exceeds the ambient noise level at the property line of any residential property (or, if a condominium or apartment house within any adjoining apartment) as determined at the time of such reading by more than five decibels. This section shall be applicable whether such noise or sound is of a commercial or noncommercial nature.*

Construction would not occur during the hours of ten p.m. to seven a.m.; therefore, the above would not apply to the proposed Project. Consequently, no further analysis or mitigation is required.

Mineral Resources. b. *Would the project result in generation of excessive groundbourne vibration or groundbourne noise levels?*

Answer: No Impact.

Discussion:

Construction activities associated with the Project could result in some minor amount of ground vibration. The California Department of Transportation (Caltrans) has developed a vibration manual. According to that manual, the use of large bulldozers, vibratory rollers, and loaded trucks during grading activities could produce vibration. Depending on the level of vibration, the vibration could cause annoyance or damage structures within the project vicinity. Caltrans has developed a screening tool to determine if vibration from construction equipment is substantial enough to impact surrounding uses. Those thresholds are presented in Tables 3.17-1 and 3.17-2.

Table 3.17-1
Vibration Damage Potential Threshold Criteria

Structural Integrety	Maximum PPV (in/sec)	
	Transient	Continuous
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50

Table 3.17-2
Vibration Annoyance Potential Threshold Criteria

Human Response	Maximum PPV (in/sec)	
	Transient	Continuous
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40

Construction equipment, such as vibratory rollers and bulldozers, are repetitive sources of vibration; therefore, the continuous threshold should be used in the vibration analysis for this project. The nearest residences to any of the the project sites is approximately 500 feet from the Century Park East/West site. As shown in Table 3.17-3, the ground vibration from construction equipment would not be perceptible.

Table 3.17-3
Construction Vibration Impacts

Small Bulldozer	0.003	500	0.00014
Loaded Truck	0.076	500	0.00355

3.17.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.18 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	◙

3.18.1 Environmental Setting

The 2010 Census indicated a population of 63,158 and a housing stock of 23,557 units in the City of Lodi *(www.usa.com, 02/21/2019).*

3.18.2 Discussion and Mitigation Measures

Population and Housing. a. *Would the project 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)?*

Answer*: No Impact.*

Discussion:

The Project includes the installation of solar photovoltaic systems at three sites in the City of Lodi. It does not include construction of homes, businesses or other infrastructure that would induce unplanned population growth. Therefore, no further analysis or mitigation is required.

Population and Housing. b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Answer: No Impact.

Discussion:

The Project facilities would be constructed on City-controlled land that does not include housing and therefore would not displace people or housing. Consequently, no further analysis or mitigation is required.

3.18.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.19 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
1. Fire Protection?	☐	☐	☐	◙
2. Police Protection?	☐	☐	☐	◙
3. Schools?	☐	☐	☐	◙
4. Parks?	☐	☐	☐	◙
5. Other Public Facilities?	☐	☐	☐	◙

3.19.1 Environmental Setting

Several entities provide public services to residents in the Project area. They include:

- Police Protection: City of Lodi Police Department
San Joaquin County Sheriff's Department
- Fire Protection: City of Lodi Fire Department
- Schools: Lodi Unified School District

3.19.2 Discussion and Mitigation Measures

Public Services. a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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* ***fire protection services****?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in the need for additional fire protection services because the Project involves a negligible expansion of operations for which fire protection services would be required. Therefore, there would be no impacts anticipated and no mitigation is required.

Public Services. a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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* ***police protection services****?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in the need for additional police protection services because the Project involves a negligible expansion of operations for which police services would be required. Additional police protection services (e.g., equipment, sworn officers) would not be required. Therefore, there would be no impacts anticipated and no mitigation is required.

Public Services. a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 schools****?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in a need for additional schools because the Project does not include the development of residential uses for which school services would be required. Therefore, there would be no impacts anticipated and no mitigation is required.

Public Services. a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 parks****?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in a need for additional park facilities because the Project does not include the development of uses for which public parks would be required. Therefore, there would be no impacts anticipated and no mitigation is required.

Public Services. a.5. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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* ***other public services****?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in a need for expansions to other public services. Therefore, there would be no impacts anticipated and no mitigation is required.

3.19.3 Conclusion

There were no significant impacts identified; therefore, no further analysis or mitigation is required.

3.20 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. 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. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	◙

3.20.1 Environmental Setting

There are several parks, golf courses and water-oriented recreational facilities in the greater project area.

3.20.2 Discussion and Mitigation Measures

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?*

Answer: No Impact.

Discussion:

The proposed Project would not increase the use or demand for park or recreational facilities because the Project does not include the development of uses that would place demands on these facilities, such as residential dwellings or office employment. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

Recreation. b. *Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

Answer: No Impact.

Discussion:

The Project does not include recreational facilities. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

3.20.3 Conclusion

No significant impacts were identified; therefore, no further analysis or mitigation is required.

3.21 Transportation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths?	☐	☐	☐	◙
b. For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?	☐	☐	☐	◙
c. For a transportation project, would the project conflict with CEQA Guidelines section 15064.3, subdivision (b)(3)?	☐	☐	☐	◙
d. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	◙
e. Result in inadequate emergency access?	☐	☐	☐	◙

3.23.1 Environmental Setting

Regional access to the Project sites is via Interstate 5 and Highways 99 and 12.

The California Department of Transportation's (Caltrans) latest traffic counts (2017) for these highways near the Project area are shown in Table 3.23-1.

Table 3.23-1
Selected Traffic Counts by Caltrans
(2017)

	Peak Hour	Peak Month	AADT[1]	Peak Hour	Peak Month	AADT[1]
Highway 5						
Junction Highway 12	6,700	80,000	63,000	4,250	65,000	58,100
Highway 12						
Junction Highway 5	2,000	17,000	16,400	1,600	16,700	15,000
South Ham	3,450	25,000	23,600	,450	27,000	23,100
Central Avenue	2,250	25,000	19,900	1,900	23,000	18,700
Junction Highway 99	2,450	26,500	24,000	1,100	12,500	10,100
Highway 99						
South Lodi	6,500	85,000	79,000	7,200	74,000	71,000
Junction Highway 12 West	4,850	79,000	75,000	6,100	78,000	76,000
Junction Highway 12 East	6,100	78,000	76,000	5,100	79,000	75,000
Turner Road	5,100	79,000	75,000	6,100	81,000	67,000

[1] AADT = Average Annual Daily Traffic
Source: Caltrans 2019, www.dot.ca.gov (2/22/2019)

The City of Lodi also collects traffic data for streets within the City. The latest average daily traffic volumes for streets near the Project sites were for 2017. Those are: Century Boulevard near Church Street, 5,170; Pine Street near Sacramento, 5,360; Sacramento near Pine Street, 2,240; and Beckham near Auto Center Drive, 7,920.

3.23.2 Discussion and Mitigation Measures

Transportation. a. *Would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths?*

Answer: No Impact.

Discussion:

The Project consists of solar photovoltaic installation at three sites within the City of Lodi. The Century Park East/West site is on public lands acquired by the City of Lodi for the completion of Century Boulevard. However, the City later determined that this was not a priority. The Parking Garage site is on the roof of an existing parking garage and the Pixley Basin site is within a storm water and flood control basin. Therefore, the Project would not conflict with a plan, ordinance or policy addressing the circulation system. Consequently, no further analysis or mitigation is required.

Transportation. b. *For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?*

Answer: No Impact.

Discussion:

The project is not a land use project; therefore, this potential impact category would not apply to the project. Consequently, there would be no impacts anticipated and no further analysis or mitigation is required.

Transportation. c. *For a transportation project, would the project conflict with CEQA Guidelines section 15064.3, subdivision (b)(3)??*

Answer: No Impact.

Discussion:

The project is not a transportation project; therefore, this potential impact category would not apply to the project. Consequently, there would be no impacts anticipated and no further analysis or mitigation is required.

Transportation. d. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Answer: No Impact.

Discussion:

Implementation of the Project would not substantially increase other hazards due to a geometric design feature or incompatible uses. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

Transportation. e. *Would the project result in inadequate emergency access?*

Answer: No Impact.

Discussion:

Implementation of the Project would not result in inadequate emergency access. Therefore, there would be no impacts anticipated and no further analysis or mitigation is required.

3.23.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.24 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:				
1) Listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code §5020.1(k), or	☐	☐	☐	◙
2) A resource determined by a 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 §5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.	☐	☐	☐	◙

3.24.1 Environmental Setting

AB 52 Consultation

On March 12, 2019, K.S. Dunbar & Associates, Inc., sent AB 52 Notifications to the following (copies of all correspondence are contained in Appendix E):

Rhonda Morningstar Pipe, Chairperson
Buena Vista Rancheria of Me-Wuk Indians
1418 20th Street
Sacramento, California 95871

Silvia Burley, Chairperson
California Valley Miwok Tribe
4620 Shippee Lane
Stockton, California 95212

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of CA
2140 Shattuck Avenue, #602
Berkeley, California 94704

Sara Dutschke Setshwaelo, Chairperson
Ione Band of Mi-Wok Indians
Post Office Box 699
Plymouth, California 95699

Katherine Erolinda Perez, Chairperson
North Valley Yokut Tribe
Post Office Box 717
Linden, California 95236

Gene Whitehouse, Chairman
United Auburn Indian Community
10720 Indian Hill Road
Auburn, California 95603

Antonio Ruiz, Cultural Resources Officer
Wilton Rancheria
9728 Kent Street
Elk Grove, California 95684

Northern Valley Yokut

On April 2, 2019, Katherine Perez, Nototomne Cultural Preservation, Northern Valley Yokut, responded by email to Keith Dunbar. In that email, Ms. Perez stated:

The tribe has reviewed the information. The tribe is requesting that the NCPA request a record search from the Native American Heritage Commission and the information center as the area of the proposed project is in an area of sensitivity.

Response:

On February 26, 2019, K.S. Dunbar & Associates, Inc., did request the Native American Heritage Commission to perform a search of its Sacred Lands file. Subsequently, on March 11, 2019, Katy Sanchez, Associate Environmental Planner, responded in an email to Keith S. Dunbar in which she stated:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands file (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

During the preparation of its cultural resources assessment for the Project, Anza Resource Consultants performed a records search at the Central California Information Center at the Department of Anthropology, California State University, Stanislaus. Based on that search, no historic or cultural resources have been previously identified on the Project sites. Anza's complete report is contained in Appendix D.

United Auburn Indian Community

On April 24, 2019, Cherilyn Neider, Tribal Historic Preservation of the United Auburn Indian Community responded by email to Keith S. Dunbar. In that email, she stated:

Thank you for your letter received notifying us of the NCPA Solar Project 1. I am contacting you in order to request:

- *Consultation for this project.*
- *All existing cultural resources assessments.*
- *Requests for and results of record searches.*

Attached you will find mitigation measures recommended for this project. These measures address inadvertent discoveries and a tribal cultural resources awareness training as part of the Worker Environmental Awareness and Protection training. Please confirm that the attached mitigation measures will be included in the environmental document and the adopted mitigation, monitoring and reporting program. Thank you for involving UAIC in the planning process at an early stage. We ask

that you make this correspondence a part of the project record and that you provide UAIC with a copy of the final environmental document and adopted mitigation, monitoring and reporting program.

Response:

Also, on April 24, 2019, K.S. Dunbar & Associates, Inc., emailed Ms. Neider an AB 52 Initiation of Consultation letter (Appendix E).

The requested documents were submitted to Ms. Neider on May 2, 2019..

The recommended mitigation measures were considered during the development of the Initial Study and Mitigated Negative Declaration as well as the Mitigation Monitoring and Reporting Program (Appendix F). Although the recommended language was not included verbatim, the intent of the mitigation measures included are similar in nature.

On May 2, 2019, K.S. Dunbar & Associates, Inc., received a letter dated April 15, 2019 from Gene Whitehouse, Chairman of the United Auburn Indian Community also requesting AB 52 consultation on this Project. In addition, Chairman Whiteman Whitehouse stated:

This letter is also a formal request to allow UAIC tribal representatives to observe and participate in all cultural resource surveys, including initial pedestrian surveys for the project. Please send us all existing cultural resource assessments, as well as requests for, and the results of, any records searches that may have been conducted prior to our first consultation meeting. If tribal cultural resources are identified within the project area, it is UAIC's policy that tribal monitors must be present for all ground disturbing activities. Finally, please be advised that UAIC's strong preference is to preserve tribal cultural resources in place and avoid them whenever possible.

Subsurface testing and data recovery must not occur without first consulting with UAIC and receiving UAIC's written consent.

Response:

On May 2, 2019, Keith S. Dunbar, P.E., emailed a response to Chairman Whitehouse which contained the following:

"We have now completed the cultural resources assessments at each of the three proposed solar sites in Lodi (i.e., Century Park East/West, Pixley Basin and Parking Garage). You will be pleased to know that, based on those studies, we are recommending a finding of ***no impact to historical resources*** under CEQA. In addition, no further cultural resources work is recommended. You will also be pleased to know that we are recommending that the Mitigation Monitoring and Reporting Program for this Project include cultural resources mitigation measures as outlined in the attached reports prepared by Anza Resources Consultants.

"In accordance with the terms of §21080.3.2. (b) of the Public Resources Code, consultation on this Project is concluded as the Northern California Power Agency has included the intent of the recommended mitigation measures submitted by Ms. Neider."

3.24.2 Discussion and Mitigation Measures

Tribal Cultural Resources. 1). *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as 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, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code §5020.1(k),*

Answer: No Impact.

Discussion:

Based on record searches at the Native American Heritage Commission and the California Historic Resources Information System, field surveys and Native American consultation, there are no tribal cultural resources within the Proposed Project area. Therefore, no further analysis or mitigation is required.

Tribal Cultural Resources. 2). *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code §5023.1(c), and considering the significance of the resource to a California Native American tribe.*

Answer: No Impact.

Discussion:

Based on record searches at the Native American Heritage Commission and the California Historic Resources Information System, field surveys and Native American consultation, there are no tribal cultural resources within the Proposed Project area. Therefore, no further analysis or mitigation is required.

3.24.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.25 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 telecommunication 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 which 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?	☐	☐	☐	◙

3.25.1 Environmental Setting

Several entities provide utilities and service systems within the Project area including:

- Water — City of Lodi
- Wastewater — City of Lodi
- Electricity — Lodi Electric Utility
- Natural Gas — Pacific Gas & Electric
- Trash — Waste Management

3.25.2 Discussion and Mitigation Measures

Utilities and Service Systems. a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?*

Answer: No Impact.

Discussion:

The Project includes the construction and operation of solar photovoltaic systems at three sites in the City of Lodi. It will not result in the relocation or construction of new or expanded services. The connections to the local electrical grid are immediately adjacent to the Project sites. The local grid has the capacity to accept the additional electricity generated by the Project. Therefore, there would be no impacts and no further analysis or mitigation is required.

Utilities and Service Systems. b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

Answer: No Impact.

Discussion:

The Project will require a minimal amount of water to periodically clean the solar panels. However, the City's existing water supplies are adequate to provide this service. Therefore, there would be no impacts and no further analysis or mitigation is required.

Utilities and Service Systems. c. *Would the project result in a determination by the wastewater treatment provider which 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?*

Answer: No Impact.

Discussion:

The Project will not require wastewater service. Therefore, there would be no impacts and no further analysis or mitigation is required.

Utilities and Service Systems. d. *Would the project 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?*

Answer: No Impact.

Discussion:

The Project will not generate solid waste. Therefore, there would be no impacts and no further analysis or mitigation is required.

Utilities and Service Systems. e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Answer: No Impact.

Discussion:

The Project would comply with all federal, state and local regulations related to solid waste. Therefore, there would be no impacts and no further analysis or mitigation is required.

3.25.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.26 Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Impair and 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 risks 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?	☐	☐	☐	◙

3.26.1 Environmental Setting

According to the City of Lodi's Safety Element, the Planning area is not characterized by substantial areas of wildlands. The topography of the area is relatively homogeneous and steep slopes that could contribute to wildland fires are not common. Data provided by the California Department of Conservation Fire and Resource Assessment Program in 2007 indicate that less than one percent of the Planning area has "Moderate" fire hazard potential. The remaining areas are classified as urban or non-wildland. No portions of the Planning area are classified as having a "High" or "Very High" risk.

3.26.2 Discussion and Mitigation Measures

Wildlife. a. *Would the project impair an adopted emergency response plan or emergency evacuation plan?*

Answer: No Impact.

Discussion:

As discussed in the Transportation section, the Project would not impair an adopted emergency response plan. Therefore, no further analysis or mitigation is required;

Wildlife. b. *Would the project 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?*

Answer: No Impact.

Discussion:

The Project sites are relatively flat with no risk of wildland fires. Implementation of the Project would not change this. Therefore, there would be no impacts and no further analysis or mitigation is required.

Wildlife. c. *Would the project 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 risks or that may result in temporary or ongoing impacts to the environment?*

Answer: No Impact.

Discussion:

The Project would be connected to the local electrical grid. However, the connections would be made immediately adjacent to the Project sites and be underground. Therefore, there would be no impacts and no further analysis or mitigation is required.

Wildlife. d. *Would the project 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?*

Answer: No Impact.

Discussion:

The Project area is not subject to wildland fires. Therefore, there would be no impacts and no further analysis or mitigation is required.

3.26.3 Conclusion

No impacts were identified; therefore, no further analysis or mitigation is required.

3.27 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	◙	☐	☐
b. 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. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	◙	☐	☐

3.27.1 Discussion and Mitigation Measures

Mandatory Findings of Significance. a. *Would 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Compliance with the mitigation measures included in Sections 3.5 through 3.26 above will ensure that implementation of the proposed Project does not have the potential to significantly 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

Mandatory Findings of Significance. b. *Would 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.)*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Compliance with the mitigation measures included in Sections 3.5 through 3.26 above will ensure that implementation of the proposed Project does not have impacts that are individually limited, but cumulatively considerable. Central Basin is not aware of any other projects in the area that could result in cumulative construction impacts.

Mandatory Findings of Significance. c. *Would the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

Answer: Less than Significant with Mitigation Incorporated.

Discussion:

Compliance with the mitigation measures included in Sections 3.5 through 3.26 above will ensure that implementation of the proposed Project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

3.27.2 Conclusion

All potential significant impacts associated with the proposed Project can be mitigated to a less than significant level. Therefore, no further environmental review or mitigation is required.

4 Persons and Organizations Consulted

On July 1, 2019, K.S. Dunbar & Associates, Inc., the Northern California Power Agency's environmental consultant, mailed copies of the Notice of Intent to Adopt a Mitigated Negative Declaration with a link to the Northern California Power Agency's website where the Initial Study and Mitigated Negative Declaration could be electronically downloaded to the following;

4.1 Federal Agencies

Jennifer Norris, Field Supervisor
Sacramento Fish & Wildlife Office
U.S. Fish & Wildlife Service
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1888

Michael S. Jewell, Chief
Regulatory Division
U.S. Army Corps of Engineers – Sacramento District
1325 J Street, Room 1350
Sacramento, California 95814-2922

Amy Dutschke, Regional Director
Pacific Region Regional Office
Bureau of Indian Affairs
U.S. Department of the Interior
2800 Cottage Way, Room W-2820
Sacramento, California 94825-1885

4.2 State Agencies

Scott Morgan, Director
State Clearinghouse
Governor's Office of Planning and Research
Post Office Box 3044
Sacramento, California 95812-3044

Tina Bartlett, Regional Manager
North Central Region (Region 2)
California Department of Fish and Wildlife
1701 Nimbus Road
Rancho Cordova, California 95670

Patrick Palupa, Executive Officer
California Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, California 95670-6114

Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
California Department of Parks and Recreation
1725 23rd Street, Suite 100
Sacramento, California 95816-7100

Wade Crowfoot, Secretary
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, California 95814

Christina Snider, Executive Secretary
California Native American Heritage Commission
1550 Harbor Boulevard, Suite 100
West Sacramento, California 95691-3830

4.3 County Agencies

Kris Balaji, Director
Department of Public Works
San Joaquin County
1810 East Hazelton Avenue
Stockton, California 95205

John Cadrett, Manager, Compliance
Northern Region
San Joaquin Valley Air Pollution Control District
4800 Enterprise Way
Modesto, California 95356

4.4 City Agencies

Melissa Price, Interim Utility Director
Lodi Electric Utility
1331 S Ham Lane
Lodi, California 95242

Craig Hoffman, Director
Community Development Department
City of Lodi
221 W Pine Street
Lodi, California 95240

Charles E. Swimley, Jr.
Director of Public Works
City of Lodi
221 W Pine Street
Lodi, California 95240

4.5 Interested Entities

Rhonda Morningstar Pipe, Chairperson
Buena Vista Rancheria of Me-Wuk Indians
1418 20th Street
Sacramento, California 95871

Silvia Burley, Chairperson
California Valley Miwok Tribe
4620 Shippee Lane
Stockton, California 95212

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of CA
2140 Shattuck Avenue, #602
Berkeley, California 94704

Sara Dutschke Setshwaelo, Chairperson
Ione Band of Mi-Wok Indians
Post Office Box 699
Plymouth, California 95699

Katherine Erolinda Perez, Chairperson
North Valley Yokuts Tribe
Post Office Box 717
Linden, California 95236

Gene Whitehouse, Chairman
United Auburn Indian Community
10720 Indian Hill Road
Auburn, California 95603

Antonio Ruiz, Cultural Resources Officer
Wilton Rancheria
9728 Kent Street
Elk Grove, California 95684

5 Report Authors/Contributors

5.1 Report Authors

This Initial Study and Mitigated Negative Declaration was prepared under contract to the Northern California Power Agency by:

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Spencer Bietz, GIS Specialist

ELMT Consulting

(Biological Resources)
Thomas J. McGill, Managing Director
Travis J. McGill, Director/Biologist

5.2 Report Contributors

Northern California Power Agency

Ron Yuen, Director of Engineering, Generation Services

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Appendix A

Mitigated Negative Declaration

Mitigated Negative Declaration
NCPA Solar Project 1 – Lodi Sites

1. Name of project:	**NCPA Solar Project 1 – Lodi Sites**
2. Project location – Identify street address and cross streets or attach a map showing the project site (preferably a USGS 7½' or 15' topographical map identified by quadrangle name):	See attachment.
3. Entity or Person undertaking project:	
A. Entity	
(1) Name:	Northern California Power Agency
(2) Address:	651 Commerce Drive, Roseville, California 95678-6420
B. Other (Private)	
(1) Name:	
(2) Address:	

Northern California Power Agency, having reviewed the Initial Study of this proposed project, having reviewed the written comments received prior to the public meeting of the Northern California Power Agency, having reviewed the recommendations of the Northern California Power Agency's Staff, does hereby find and declare that the proposed project will not have a significant effect on the environment. A brief statement of the reasons supporting the Northern California Power Agency's findings are as follows:

The Initial Study concluded that all significant impacts can be reduced to a level of less than significant by implementation of the Mitigation Monitoring and Reporting Program developed for this Project.

The Northern California Power Agency finds that the Mitigated Negative Declaration reflects its independent judgment. A copy of the Initial Study and Mitigation Monitoring and Reporting Program are attached.

The location and custodian of the documents and any other materials which constitute the record of proceedings upon which the Northern California Power Agency based its decision to adopt this Mitigated Negative Declaration are as follows:

Custodian:	Ron Yuen Director of Engineering, Generation Services	Location:	Northern California Power Agency 651 Commerce Driver Roseville, California 95678-6420
Phone:	(916) 781-4258		

Date:	Signature

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service before the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century Park East/West, Pixley Basin and Parking Garage sites. Those three sites are the subject of this Initial Study and Mitigated Negative Declaration (IS&MND).

The Century Park East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century Park West site is directly across the railroad tracks from the Century Park East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts-direct current (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}.

The parking garage is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location	Developable Area (acres)	Estimated Capacity (MW_{dc})
Lodi – Pixley Basin	38º07'18.06"N, 121º15'12.14"W	15.0	3.51
Lodi – Century Park East/West	38º06'26.66"N, 121º16'21.63"W	2.5	0.63
Lodi – Parking Garage	38º08'05.25"N, 121º16'18.58"W	0.9	0.18

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century Park East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Appendix B

Air Quality Modeling Results

NCPA Solar Project 1
Northern California Power Agency
Estimated Construction Emissions from Off-Road Heacy Duty Contstuction Equipment During Solar Equipment Installation

2019 Construction Year

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Reactive Organic Gases (ROG)					
Compressor	0.538	0.00118502	1	106	0.48	8	0.48	
Crane	0.3491	0.00076894	1	399	0.43	8	1.06	
Drill Rig	0.1292	0.00028458	1	291	0.75	8	0.50	
Sweeper	0.2347	0.00051696	1	500	0.68	2	0.35	
Tractors/Backhoes/Loaders	0.3678	0.00139075	1	108	0.55	4	0.33	
Trencher	0.6314	0.00058040	1	63	0.75	4	0.11	
Utility Trucks	0.2635	0.00058040	1	479	0.57	4	0.63	
Water Trucks	0.2635	0.00058040	1	500	0.5	2	0.29	
Totals							3.75	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Carbon Monoxide (CO)					
Compressor	3.718	0.00818943	1	106	0.48	8	3.33	
Crane	2.96983	0.00654148	1	399	0.43	8	8.98	
Drill Rig	1.03449	0.00227861	1	291	0.75	8	3.98	
Sweeper	1.23013	0.00270954	1	500	0.68	2	1.84	
Tractors/Backhoes/Loaders	3.63777	0.00845104	1	108	0.55	4	2.01	
Trencher	3.83677	0.00326753	1	63	0.75	4	0.62	
Utility Trucks	1.48346	0.00326753	1	479	0.57	4	3.57	
Water Trucks	1.48346	0.00326753	1	500	0.5	2	1.63	
Totals							25.96	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Oxides of Nitrogen (NO_x)					
Compressor	3.706	0.00816300	1	106	0.48	8	3.32	2.82
Crane	4.29654	0.00946374	1	399	0.43	8	12.99	11.04
Drill Rig	1.55098	0.00341626	1	291	0.75	8	5.96	5.07
Sweeper	2.86598	0.00631273	1	500	0.68	2	4.29	3.65
Tractors/Backhoes/Loaders	3.69287	0.01254423	1	108	0.55	4	2.98	2.53
Trencher	5.69508	0.00587778	1	63	0.75	4	1.11	0.94
Utility Trucks	2.66851	0.00587778	1	479	0.57	4	6.42	5.46
Water Trucks	2.66851	0.00587778	1	500	0.5	2	2.94	2.50
Totals							40.02	34.02

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Oxides of Sulfur (SO_x)					
Compressor	0.007	0.00001542	1	106	0.48	8	0.01	
Crane	0.0049	0.00001079	1	399	0.43	8	0.01	
Drill Rig	0.0048	0.00001057	1	291	0.75	8	0.02	
Sweeper	0.0049	0.00001079	1	500	0.68	2	0.01	
Tractors/Backhoes/Loaders	0.0049	0.00001079	1	108	0.55	4	0.00	
Trencher	0.0049	0.00001079	1	63	0.75	4	0.00	
Utility Trucks	0.0049	0.00001079	1	479	0.57	4	0.01	
Water Trucks	0.0049	0.00001079	1	500	0.5	2	0.01	
Totals							0.07	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Respirable Particlulate Matter (PM_{10})					
Compressor	0.287	0.00063216	1	106	0.48	8	0.26	0.04
Crane	0.173	0.00038106	1	399	0.43	8	0.52	0.08
Drill Rig	0.0479	0.00010551	1	291	0.75	8	0.18	0.03
Sweeper	0.0989	0.00021784	1	500	0.68	2	0.15	0.02
Tractors/Backhoes/Loaders	0.2465	0.00094846	1	108	0.55	4	0.23	0.03
Trencher	0.4306	0.00021366	1	63	0.75	4	0.04	0.01
Utility Trucks	0.097	0.00021366	1	479	0.57	4	0.23	0.04
Water Trucks	0.097	0.00021366	1	500	0.5	2	0.11	0.02
Totals							1.72	0.26

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Fine Particulate Matter ($PM_{2.5}$)					
Compressor	0.287	0.00063216	1	106	0.48	8	0.26	0.04
Crane	0.1592	0.00035066	1	399	0.43	8	0.48	0.07
Drill Rig	0.0441	0.00009714	1	291	0.75	8	0.17	0.03
Sweeper	0.091	0.00020044	1	500	0.68	2	0.14	0.02
Tractors/Backhoes/Loaders	0.2268	0.00087247	1	108	0.55	4	0.21	0.03
Trencher	0.3961	0.00019670	1	63	0.75	4	0.04	0.01
Utility Trucks	0.0893	0.00019670	1	479	0.57	4	0.21	0.03
Water Trucks	0.0893	0.00019670	1	500	0.5	2	0.10	0.01
Totals							1.60	0.24

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Carbon Dioxide (CO_2)					
Compressor	568.299	1.25175991	1	106	0.48	8	510	
Crane	483.1422	1.06418987	1	399	0.43	8	1,461	
Drill Rig	477.0462	1.05076256	1	291	0.75	8	1,835	
Sweeper	480.5735	1.05853194	1	500	0.68	2	720	
Tractors/Backhoes/Loaders	486.8508	1.06897247	1	108	0.55	4	254	
Trencher	485.3135	1.06912599	1	63	0.75	4	202	
Utility Trucks	485.3832	1.06912599	1	479	0.57	4	1,168	
Water Trucks	485.3832	1.06912599	1	500	0.5	2	535	
Totals							6,683	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Methane (CH_4)					
Compressor	0.101	0.00022247	1	106	0.48	8	0.09	
Crane	0.1529	0.00033678	1	399	0.43	8	0.46	
Drill Rig	0.1505	0.00033150	1	291	0.75	8	0.58	
Sweeper	0.152	0.00033480	1	500	0.68	2	0.23	
Tractors/Backhoes/Loaders	0.1537	0.00033833	1	108	0.55	4	0.08	
Trencher	0.1536	0.00033833	1	63	0.75	4	0.06	
Utility Trucks	0.1536	0.00033833	1	479	0.57	4	0.37	
Water Trucks	0.1536	0.00033833	1	500	0.5	2	0.17	
Totals							2.04	

NCPA Solar Project 1
Northern Califonria Power Agency
Estimated Construction Emissions from Off-Road Heacy Duty Contstuction Equipment During Grading at Pixley Basin

2019 Construction Year

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Reactive Organic Gases (ROG)					
Dozers	0.2633	0.00057996	2	550	0.64	8	3.27	
Graders	0.3227	0.00071079	2	259	0.61	8	1.80	
Rollers	0.2341	0.00051564	1	904	0.56	8	2.09	
Scrapers	0.3429	0.00051696	2	500	0.72	8	2.98	
Sweeper	0.2347	0.00058040	1	500	0.68	2	0.39	
Utility Trucks	0.2635	0.00058040	1	479	0.57	4	0.63	
Water Trucks	0.2635	0.00058040	1	500	0.5	8	1.16	
Wheel Loader	0.3234	0.00071233	1	801	0.54	8	2.46	
Totals							14.78	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Carbon Monoxide (CO)					
Dozers	1.35585	0.00298645	2	550	0.64	8	16.82	
Graders	1.52849	0.00336672	2	259	0.61	8	8.51	
Rollers	2.10102	0.00462780	1	904	0.56	8	18.74	
Scrapers	2.59466	0.00571511	2	500	0.72	8	32.92	
Sweeper	1.23013	0.00270954	1	500	0.68	2	1.84	
Utility Trucks	1.48346	0.00326753	1	479	0.57	4	3.57	
Water Trucks	1.48346	0.00326753	1	500	0.5	8	6.54	
Wheel Loader	1.20834	0.00266154	1	801	0.54	8	9.21	
Totals							98.15	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Oxides of Nitrogen (NO_x)					
Dozers	3.34253	0.00736240	2	550	0.64	8	41.47	35.25
Graders	3.21794	0.00708797	2	259	0.61	8	17.92	15.23
Rollers	2.90839	0.00640615	1	904	0.56	8	25.94	22.05
Scrapers	4.15646	0.00915520	2	500	0.72	8	52.73	
Sweeper	4.15646	0.00915520	1	500	0.68	2	6.23	5.29
Utility Trucks	2.66851	0.00587778	1	479	0.57	4	6.42	5.46
Water Trucks	2.66851	0.00587778	1	500	0.5	8	11.76	9.99
Wheel Loader	5.45926	0.01202480	1	801	0.54	8	41.61	35.37
Totals							204.07	173.46

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Oxides of Sulfur (SO_x)					
Dozers	0.0049	0.00001079	2	550	0.64	8	0.06	
Graders	0.0049	0.00001079	2	259	0.61	8	0.03	
Rollers	0.005	0.00001101	1	904	0.56	8	0.04	
Scrapers	0.0049	0.00001079	2	500	0.72	8	0.06	
Sweeper	0.0049	0.00001079	1	500	0.68	2	0.01	
Utility Trucks	0.0049	0.00001079	1	479	0.57	4	0.01	
Water Trucks	0.0049	0.00001079	1	500	0.5	8	0.02	
Wheel Loader	0.0049	0.00001079	1	801	0.54	8	0.04	
Totals							0.27	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Respirable Particlulate Matter (PM_{10})					
Dozers	0.123	0.00027093	2	550	0.64	8	1.53	0.23
Graders	0.1244	0.00027401	2	259	0.61	8	0.69	0.10
Rollers	0.1109	0.00024427	1	904	0.56	8	0.99	0.15
Scrapers	0.1629	0.00035881	2	500	0.72	8	2.07	0.31
Sweeper	0.0989	0.00021784	1	500	0.68	2	0.15	0.02
Utility Trucks	0.097	0.00021366	1	479	0.57	4	0.23	0.04
Water Trucks	0.097	0.00021366	1	500	0.5	8	0.43	0.06
Wheel Loader	0.1462	0.00032203	1	801	0.54	8	1.11	0.17
Totals							7.20	1.08

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Fine Particulate Matter ($PM_{2.5}$)					
Dozers	0.1132	0.00024934	2	550	0.64	8	1.40	0.21
Graders	0.1145	0.00025220	2	259	0.61	8	0.64	0.10
Rollers	0.102	0.00022467	1	904	0.56	8	0.91	0.14
Scrapers	0.1498	0.00032996	2	500	0.72	8	1.90	0.29
Sweeper	0.091	0.00020044	1	500	0.68	2	0.14	0.02
Utility Trucks	0.0893	0.00019670	1	479	0.57	4	0.21	0.03
Water Trucks	0.0893	0.00019670	1	500	0.5	8	0.39	0.06
Wheel Loader	0.1345	0.00029626	1	801	0.54	8	1.03	0.15
Totals							6.62	0.99

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Carbon Dioxide (CO_2)					
Dozers	483.3879	1.06473106	2	550	0.64	8	5,997	
Graders	482.5879	1.06296894	2	259	0.61	8	2,687	
Rollers	489.9774	1.07924537	1	904	0.56	8	4,371	
Scrapers	482.7319	1.06328612	2	500	0.72	8	6,125	
Sweeper	480.5735	1.05853194	1	500	0.68	2	720	
Utility Trucks	485.3832	1.06912599	1	479	0.57	4	1,168	
Water Trucks	485.3632	1.06908194	1	500	0.5	8	2,138	
Wheel Loader	480.523	1.05842070	1	801	0.54	8	3,662	
Totals							26,867	

Equipment	Emission Factor gr/hp-hr	Emission Factor lb/hp-hr	Number	horsepower	load factor	hours/day	Emissions pounds per day	Mitigated Emissions pounds per day
			Methane (CH_4)					
Dozers	0.1529	0.00033678	2	550	0.64	8	1.90	
Graders	0.1527	0.00033634	2	259	0.61	8	0.85	
Rollers	0.155	0.00034141	1	904	0.56	8	1.38	
Scrapers	0.1527	0.00033634	2	500	0.72	8	1.94	
Sweeper	0.152	0.00033480	1	500	0.68	2	0.23	
Utility Trucks	0.1556	0.00034273	1	479	0.57	4	0.37	
Water Trucks	0.1556	0.00034273	1	500	0.5	8	0.69	
Wheel Loader	0.152	0.00033480	1	801	0.54	8	1.16	
Totals							8.51	

Appendix C

Biological Resources Technical Report

May 2, 2019

K.S. DUNBAR & ASSOCIATES
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SUBJECT: Habitat and Jurisdictional Assessment for the Northern California Power Agency Solar Project 1 Located in the City of Lodi, San Joaquin County, California

Introduction

This report contains the findings of ELMT Consulting's (ELMT) habitat and jurisdictional assessment for the Northern California Power Agency (NCPA) Solar Project 1 located in the City of Lodi, San Joaquin County, California. Within the City of Lodi, the NCPA Solar Project 1 consists of three separate project sites: the Lodi Parking Garage Site (Parking Garage), the Lodi Pixley Basin Site (Pixley Basin), and the Lodi Century Park Site (Century Park). The habitat and jurisdictional assessment were conducted by biologist Travis J. McGill on March 27, 2019 to document baseline conditions and assess the potential for special-status[1] plant and wildlife species to occur within the Parking Garage, Century Park, and Pixley Basin project sites that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the project sites to support special-status plant and wildlife species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), and other electronic databases as potentially occurring in the general vicinity of the project sites.

Project Location

Parking Garage

The Parking Garage site is generally located west of State Route 99, north of State Route 12 (Kettleman Lane), east of Interstate 5, and south of the Mokelumne River in the City of Lodi, San Joaquin County, California. The Parking Garage site is depicted on the Lodi North quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series within Section 1 of Township 3 North, Range 6 East. Specifically, the Parking Garage site is located on the third-floor rooftop of an existing parking garage in downtown Lodi and is bordered by East Elm Street to the north, East Pine Street to the south, the Union Pacific railroad to the east, and North Sacramento Street to the west.

1 As used in this report, "special-status" refers to plant and wildlife species that are federally and State listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

Pixley Basin

The Pixley Basin Site is generally located east of State Route 99, north of State Route 12 (Kettleman Lane), west of State Route 88, and south of the Mokelumne River in the City of Lodi, San Joaquin County, California. The Pixley Basin site is depicted on the Lodi North quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series within Section 7 of Township 3 North, Range 7 East. Specifically, the Pixley Basin site is located on an undeveloped park that serves as a stormwater retention and flood control basin north of Auto Center Drive, west of S. Guild Avenue, south of E. Vine Street, and east of Beckman Road.

Century Park

The Century Park Site is generally located west of State Route 99, south of State Route 12 (Kettleman Lane), east of Interstate 5, and south of the Mokelumne River in the City of Lodi, San Joaquin County, California. The Century Park site is depicted on the Lodi South quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series within Section 13 of Township 3 North, Range 6 East. Specifically, the Century Park site is made up of two land parcels, Century Park East and Century Park West. The Century Park East site is located at the western terminus of E. Century Boulevard, north of Salas Park, south of Century Self Storage, and west of the Union Pacific Railroad. The Century Park West site is located at the eastern terminus of W. Century Boulevard, south of Swain Drive, north of Hemlock Drive, and west of the Union Pacific Railroad.

Refer to Exhibits 1 thru 5 in Attachment A for a depiction of the three project site locations.

Project Description

Parking Garage

Burns & McDonnell estimated the developable area of the Parking Garage site to be approximately 0.85 acres, or enough land to potentially yield a project size of 0.15 MW (based on an estimate of 6 acres of land needed per MW developed). The proposed technology type for the project is fixed tilt supported on a structural canopy system attached to the existing parking garage rooftop. The intent of the canopy is that it will serve as the mounting system for the solar array while also creating a shaded carport.

Pixley Basin

Burns & McDonnell estimated the developable area of the Pixley Basin site to be approximately 8.3 acres, or enough land to potentially yield a project size of 1.4 MW (based on an estimate of 6 acres of land needed per MW developed). It is assumed that onsite cut and fill can occur to deepen some areas of the basin and raise other areas for the project while maintaining the same water volume that can be stored in the basin at a given time. The proposed technology type for the solar project is horizontal single axis tracker (HSAT).

Century Park

Burns & McDonnell estimated the developable area of the Century Park site to be approximately 1.7 acres, or enough land to potentially yield a project size of 0.30 MW (based on an estimate of 6 acres of land needed per MW developed). The Century Park East site was positioned in an area to provide reasonable setbacks from the railroad west of the site and the fencing north and south of the site. The proposed

technology type for the solar project is HSAT.

The parcel to the west (Century Park West) was also considered for development. However, due to the existing playground and proximity to several residences, the project team assumed the parcel to the east (Century Park East) would only be developed. Should the parcel to the west also be developed in a manner that preserves the existing playground and provides reasonable setback from the playground and residences, Burns & McDonnell estimates an additional 1.5 acres of land could be developed for an additional 0.25 MW of output. This revised estimate also assumes that the parcel to the east could be extended east another 300-400 feet to be directly adjacent to the existing parking lot.

Methodology

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project sites. In addition to the literature review, a general habitat assessment or field investigation of the project sites was conducted to document existing conditions and assess the potential for special-status biological resources to occur within the project sites.

Literature Review

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project sites. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project sites were determined through a query of the CDFW's QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project sites were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred within the project sites that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1993-2018);
- San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan (SJMSCP);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey2;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

2 A soil series is defined as a group of soils with similar profiles developed from similar parent materials under comparable climatic and vegetation conditions. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the project sites. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project sites.

Habitat Assessment/Field Investigation

Following the literature review, biologist Travis J. McGill inventoried and evaluated the condition of the habitat within the project sites on March 27, 2019. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking meandering transects throughout the project sites. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field investigation.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Plant species observed during the field investigation were identified by visual characteristics and morphology in the field. Unusual and less familiar plant species were photographed during the field investigation and identified in the laboratory using taxonomical guides. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities and land cover types, and presence of potential jurisdictional drainage and/or wetland features were noted.

Soil Series Assessment

On-site and adjoining soils were researched prior to the field investigation using the USDA NRCS Soil Survey for San Joaquin County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project sites have undergone.

Plant Communities

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community and/or land cover type in acres.

Plants

Common plant species observed during the field investigation were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

Wildlife

Wildlife species detected during the field investigation by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are well standardized, scientific names are provided immediately following common names in this report (first reference only).

Jurisdictional Drainages and Wetlands

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project sites.

SJMSCP

The proposed project sites were reviewed against the SJMSCP to determine if the sites are located within any SJMSCP designated Preserves, core habitat areas, or wildlife movement corridors. A preliminary review of the SJMSCP determined that the project sites are located within the Central Zone of the SJMSCP, which encompasses the lands surrounding each of the County's seven incorporated cities (including the City of Lodi). The Central Zone is composed primarily of agricultural lands on the floor of the Central Valley including that are bisected by riparian corridors including the Mokelumne River, the Calaveras River, the Stanislaus River, Old River and the San Joaquin River. The project sites are not located within and SJMSCP designated Preserves, core habitat areas, or wildlife movement corridors.

Existing Site Condition

Parking Garage

The Parking Garage site is located on the third-floor rooftop of an existing parking garage for the World of Wonders Science Museum in downtown Lodi, west of the Union Pacific railroad. Since the Parking Garage site is located on the rooftop of an existing parking garage, no soils occur onsite since the site is completely developed. The project site is located within a heavily developed area in the City of Lodi in an area surrounded by land commercial and industrial land uses. The project site is bordered by commercial developments to the north, south, and west, and the Union Pacific Railroad to the east.

Pixley Basin

The Pixley Basin site is comprised of approximately 27 acres and is located on an undeveloped park (Pixley Park) that serves as a stormwater retention and flood control basin. The Pixley Basin site is surrounded by industrial and commercial uses. Residential areas exist approximately 0.25 miles west of the site, however Highway 99 separates the commercial areas from the residential areas.

The proposed project footprint for the Pixley Basin site is located at an approximate elevation of 58 feet above mean sea level. The Pixley Basin project site is relatively with no areas of significant topographic relief, except for the areas that have been dug out to create the water retention basin. Based on the NRCS USDA Web Soil Survey, the Pixley Basin site is underlain by the following soil units: Tokay fine sandy loam (0 to 2 percent slopes), and Tokay-Urban land complex (0 to 2 percent slopes. Refer to Exhibit 6, *Pixley Basin Soils*, in Attachment A. Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural activities, grading activities, development of the retention basin, and surrounding development).

Century Park

The Century Park East site is located on a City easement and is comprised of approximately 3.1 acres. The site is bordered by an industrial park to the north, recreational fields (Salas Park) the south, residences to the east and the Union Pacific railroad to the west. The Century Park West site is bordered by residential developments to the north, south, and west, and the Union Pacific Railroad to the east.

The Century Park sites are relatively flat at an approximate elevation of 50 feet above mean sea level with no areas of significant topographic relief. Based on the NRCS USDA Web Soil Survey, the Century Park sites are underlain by the following soil unit: Tokay-Urban land complex (0 to 2 percent slopes. Refer to Exhibit 7, *Century Park Soils*, in Attachment A. Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural activities, and development).

Vegetation

Due to existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the project sites. The project sites primarily consist of either vacant, undeveloped land, or developed land that have been subject to a variety of anthropogenic disturbances. Disturbances have eliminated the natural plant communities that once occurred within the boundaries of the project sites. Refer to Attachment B, *Site Photographs*, for representative site photographs. No native plant communities will be impacted from implementation of the proposed projects.

Parking Garage

The Parking Garage supports a land cover type that would be classified as developed. Developed areas generally encompass paved, impervious surfaces. The entire Parking Garage is paved with concrete and no plant species were observed onsite.

Pixley Basin

The project site primarily supports a land cover type that would be classified as disturbed. Refer to Exhibit

8, *Pixley Basin Vegetation* in Attachment A. Early successional and non-native weedy plant species compose a majority of the project site as a result of the weed abatement activities, surrounding development, and construction of the water retention basin. Plant species observed on-site include telegraph weed (*Heterotheca grandiflora*), filaree (*Erodium sp.*), winter vetch (*Vicia villosa*), bicolor lupine (*Lupinus bicolor*), ripgut (*Bromus diandrus*), fiddleneck (*Amsinckia sp.*), and mouse barley (*Hordeum murinum*).

Century Park

The Century Park sites contain land cover types that would be classified as disturbed and developed. Refer to Exhibit 9, *Century Park Vegetation* in Attachment A. Early successional and non-native weedy plant species comprise the western half of the Century Park East site, while the eastern portion of the Century Park East site is developed, with asphalt, loose gravel, and dirt stockpiles. The Century Park West site is comprised of an existing recreational park and does not support any native plant species. Plant species observed onsite include telegraph weed, filaree, fiddleneck, winter vetch, cheeseweed (*Malva parviflora*), Russian thistle (*Salsola tragus*), short-podded mustard (*Hirschfeldia incana*), sow thistle (*Sonchus sp.*), wild radish (*Raphanus raphanistrum*), milk thistle (*Silybum maranum*), cocklebur (*Xanthium strumarium*), pineapple weed (*Matricaria discoidea*), coyote melon (*Cucurbita palmata*), yellow sweet clover (*Mililotus officinalis*), and horseweed (*Erigeron canadensis*).

Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed or are expected to occur within the project sites. The discussion is to be used a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The project sites provide limited habitat for wildlife species except those adapted to a high degree of anthropogenic disturbances and development.

Fish

No fish were observed in the Pixley Basin project site during the field investigation. The water retention basin only supports water for portions of the year and does not provide a perennial water source or connect to a natural water feature that would provide suitable habitat for fish species. The only fish species that have the potential to occur in the Pixley Basin project site are fish that are exotic or introduced such as mosquitofish (*Gambusia affinis*) and bluegill (*Lepomis macrochirus*). No special-status fish species are expected to occur within the Pixley Basin project site.

No hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the Parking Garage or Century Park project sites. No fish are expected to occur and are presumed absent from the Parking Garage or Century Park project sites.

Amphibians

No amphibians were observed within the Pixley Basin project site during the field investigation. The water retention basin only supports water for portions of the year and does not provide a perennial water source

or connect to a natural water feature that would provide long term habitat for amphibian species. The only amphibian species that have the potential to occur in the Pixley Basin project site are tree frog (*Pseudacris regilla*). No special-status amphibian species are expected to occur within the Pixley Basin project site.

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the Parking Garage or Century Park project sites. No amphibians are expected to occur and are presumed absent from the Parking Garage or Century Park project sites.

Reptiles

During the field investigation no reptilian species were observed on the project sites. Common reptilian species adapted to a high degree of anthropogenic disturbances that have the potential to occur on the project sites include western side-blotched lizard (*Uta stansburiana elegans*), and alligator lizard (*Elgaria multicarinata*). Due to the high level of anthropogenic disturbances on-site, and surrounding development, no special-status reptilian species are expected to occur within project sites.

Birds

The project sites provide foraging habitat for bird species adapted to a high degree of human disturbance. In particular, the Pixley Basin site provides suitable nesting opportunities for geese and ducks, and birds that nest on the open ground, such as killdeer (*Charadrius vociferus*). Bird species detected during the field investigation included lesser goldfinch (*Spinus psaltria*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), European starling (*Sturnus vulgaris*), house finch (*Haemorhouse mexicanus*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), killdeer, California scrub-jay (*Aphelocoma californica*), Nuttal's woodpecker (*Picoides nuttalii*), barn swallow (*Hirundo rustica*), Canada goose (*Branta canadensis*), ruddy duck (*Oxyura jamaicensis*), black-necked stilt (*Himantopus mexicanus*), American coot (*Fulica americana*), bufflehead (*Bucephala albeola*), and western meadowlark (*Sturnella neglecta*).

Mammals

During the field investigation cottontail (*Sylvilagus audubonii*) was the only mammalian species observed on the project sites. Common mammalian species adapted to a high degree of anthropogenic disturbances that have the potential to occur within the project sites include California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*).

Nesting Birds

During the field investigation two active Canada goose nests was observed within the Pixley Basin project footprint. The project sites provide suitable nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. Most of the nesting habitat associated with the Parking Garage and Century Park Sites are associated with the ornamental trees adjacent to the project sites. Additionally, the Pixley Basin site provides suitable nesting opportunities for geese and ducks, and birds that nest on the open ground, such as killdeer.

Prior to site development, a pre-construction nesting bird clearance survey should be conducted to ensure no impacts to nesting birds will occur.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The proposed projects will be confined to existing disturbed and/or developed areas and is surrounded by development, which have removed natural plant communities from the surrounding areas. The project sites are isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the project sites to any identified wildlife corridors or linkages. As a result, implementation of the proposed projects will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

Jurisdictional Areas

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The Pixley Basin site supports a stormwater retention and flood control basin that was excavated wholly in the uplands between 2006 and 2014, and does not have a surface hydrologic connection to any downstream waters of the United States or waters of the State. Further, the Pixley Basin does not support riparian vegetation, and therefore would not fall under the jurisdictional authority of the Corps, Regional Board, or CDFW. Therefore, project related activities within the Pixley Basin will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

It should be noted that the vacant property west of the northwestern portion of the Pixley Basin property has been mapped as having two freshwater emergent wetland habitats by the NWI. This area, outside of the Pixley Basin project footprint supports heaving disturbed, vacant land that is subject to routine disking activities. As a result, not freshwater wetland habitats were observed were these two features have been mapped by the NWI.

The Parking Garage and Century Park project sites do not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps,

Regional Board, or CDFW. Therefore, project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

Special-Status Biological Resources

The CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Lodi North, Lodi South, Lockeford, and Waterloo USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project sites to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified six (6) special-status plant species, thirty-five (35) special-status wildlife species, and two (2) special-status plant communities as having potential to occur within the Lodi North, Lodi South, Lockeford, and Waterloo USGS 7.5-minute quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project sites are presented in *Table C-1: Potentially Occurring Special-Status Biological Resources*, provided in Attachment C.

Special-Status Plants

According to the CNDDB and CNPS, six (6) special-status plant species have been recorded in the Lodi North, Lodi South, Lockeford, and Waterloo quadrangles (refer to Attachment C). No special-status plant species were observed onsite during the habitat assessment. The project sites consist of vacant, undeveloped land, or developed land that has been subject to a variety of anthropogenic disturbances. These disturbances have eliminated the natural plant communities that once occurred on the project sites, which has removed suitable habitat for special-status plant species known to occur in the general vicinity of the project sites. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project sites do not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent from the project sites. No focused surveys are recommended.

Special-Status Wildlife

According to the CNDDB, thirty-five (35) special-status wildlife species have been reported in the Lodi North, Lodi South, Lockeford, and Waterloo quadrangles (refer to Attachment C). No special-status wildlife species were observed onsite during the habitat assessment. The project sites consist of vacant, undeveloped land, or developed land that has been subject to a variety of anthropogenic disturbances. These disturbances have eliminated the natural plant communities that once occurred on-site which have greatly reduced potential foraging opportunities for wildlife species.

Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project sites, in particular the Pixley Basin site, have a moderate to high potential to support great egret (*Ardea alba*), and great blue heron (*Ardea herodias*). Both of these species are not federally, or state listed. All remaining special-status wildlife species were determined to have a low

potential to occur or are presumed to be absent from the project sites since the project sites have been heavily disturbed from onsite disturbances and surrounding development.

In order to ensure impacts to the aforementioned species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey should be conducted prior to ground disturbance. With implementation of mitigation through the pre-construction clearance survey, impacts to the aforementioned species will be less than significant.

Special-Status Plant Communities

According to the CNDDB, two (2) special-status plant community has been reported in the Lodi North, Lodi South, Lockeford, and Waterloo USGS 7.5-minute quadrangles: Northern Hardpan Vernal Pool, and Valley Oak Woodland. Based on the results of the field investigation, no special-status plant communities were observed on the project sites.

Critical Habitat

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project sites are not located with federally designated Critical Habitat. Refer to Exhibit 10, *Critical Habitat* in Attachment A. The nearest designated Critical Habitat is located approximately 1 mile north of the Parking Garage site within the Mokelumne River for steelhead (*Oncorhynchus mykiss*), and approximately 4 miles west of the City of Lodi for delta smelt (*Hypomesus transpacificus*).Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the proposed project.

Recommendations

Migratory Bird Treaty Act and Fish and Game Code

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet raptors and special-status species) will be determined by the wildlife biologist, in coordination with the CDFW, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Conclusion

Based on the proposed project footprints and existing site conditions discussed in this report, none of the special-status plant or wildlife species known to occur in the general vicinity of the project sites are expected to be directly or indirectly impacted from implementation of the proposed projects. With completion of the recommendations provided above, no impacts to year-round, seasonal, or special-status avian residents will occur from implementation of the proposed projects. Therefore, it was determined that implementation of the projects will have "no effect" on federally or State listed species known to occur in the general vicinity of the project sites. Additionally, the development of the projects will not impact designated Critical Habitats or regional wildlife movement corridors/linkages.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or tmcgill@elmtconsulting.com or Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions this report.

Sincerely,

Thomas J. McGill, Ph.D.
Managing Director

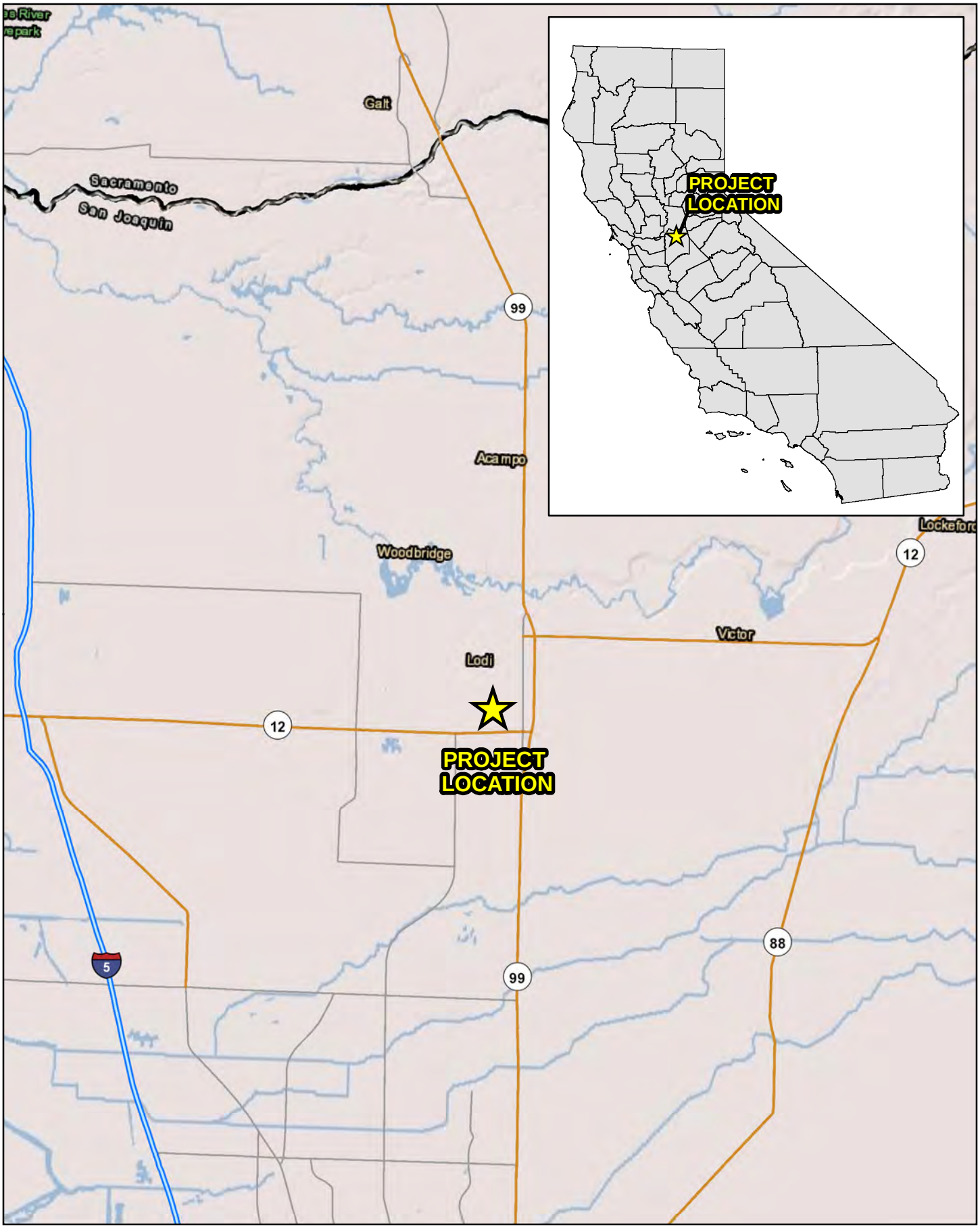
Travis J. McGill
Director

Attachments:

A. *Project Exhibits*
B. *Site Photographs*
C. *Potentially Occurring Special-Status Biological Resources*
D. *Regulations*

Attachment A

Project Exhibits



NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

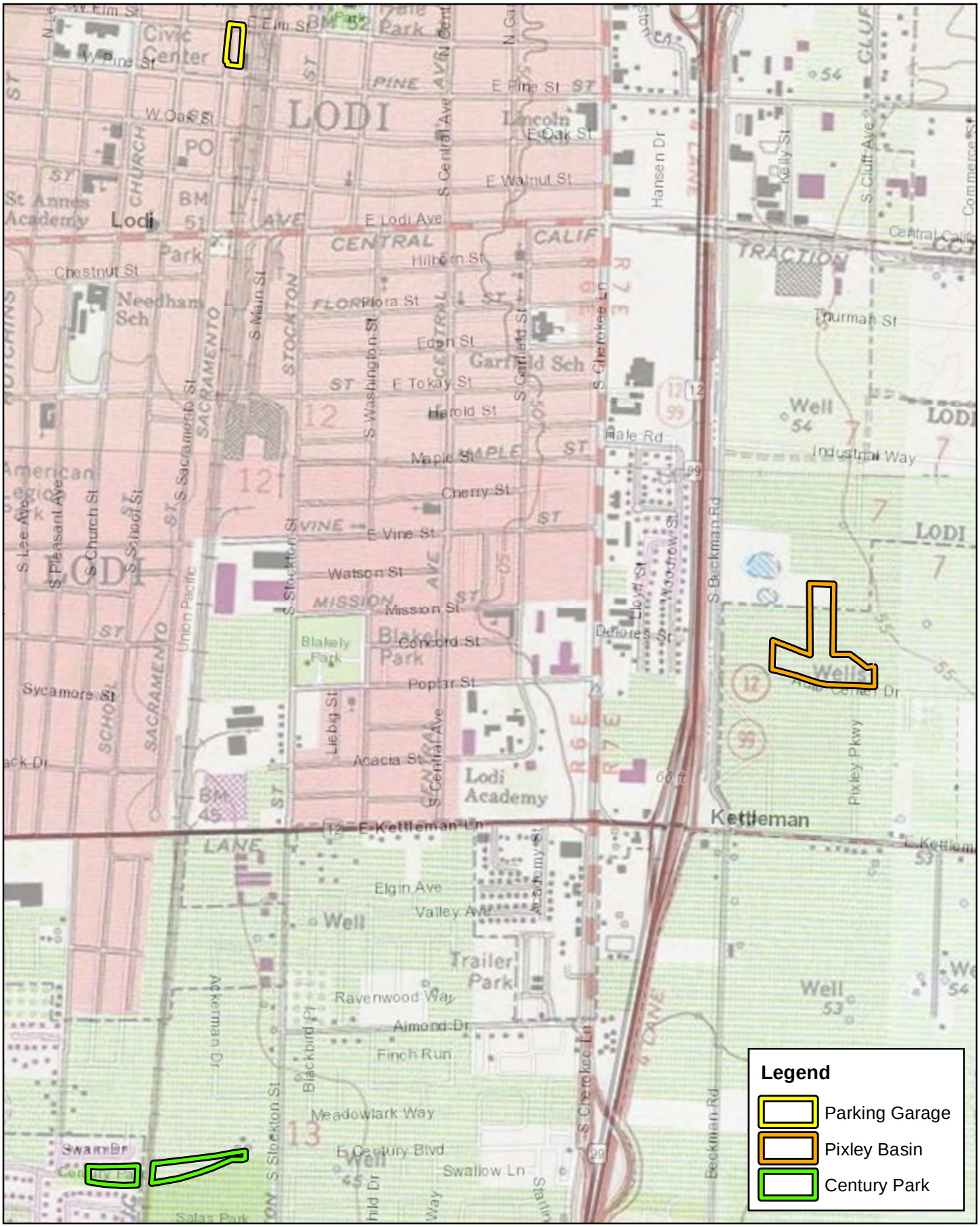
Regional Vicinity

ELMT CONSULTING

0 1.25 2.5 5 Miles

Source: World Transportation, World Shaded Relief, San Joaquin County

Exhibit 1



Source: USA Topographic Map, San Joaquin County

NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

Site Vicinity

Exhibit 2

NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

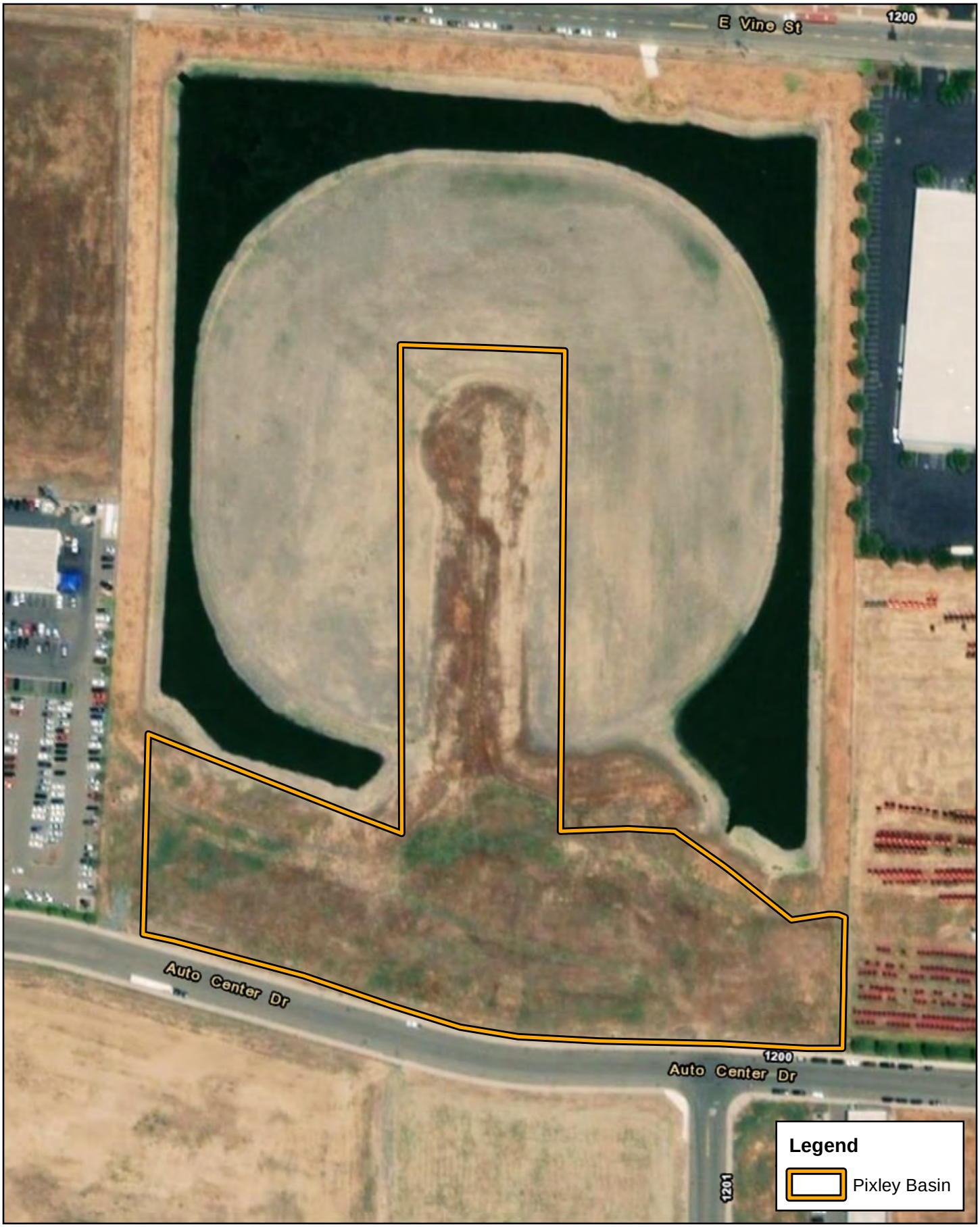
Project Site - Parking Garage

ELMT CONSULTING

0 25 50 100 Feet

Source: ESRI Aerial Imagery, San Joaquin County

Exhibit 3



NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

Project Site - Pixley Basin

ELMT CONSULTING

0 50 100 200 Feet

Source: ESRI Aerial Imagery, San Joaquin County

Exhibit 4

NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

Project Site - Century Park

ELMT CONSULTING

0 125 250 500 Feet

Source: ESRI Aerial Imagery, San Joaquin County

Exhibit 5

NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

Project Site - Pixley Basin Soils

ELMT CONSULTING

0 50 100 200 Feet

Source: ESRI Aerial Imagery, NRCS Soil Survey Geographic Database, San Joaquin County

Exhibit 6

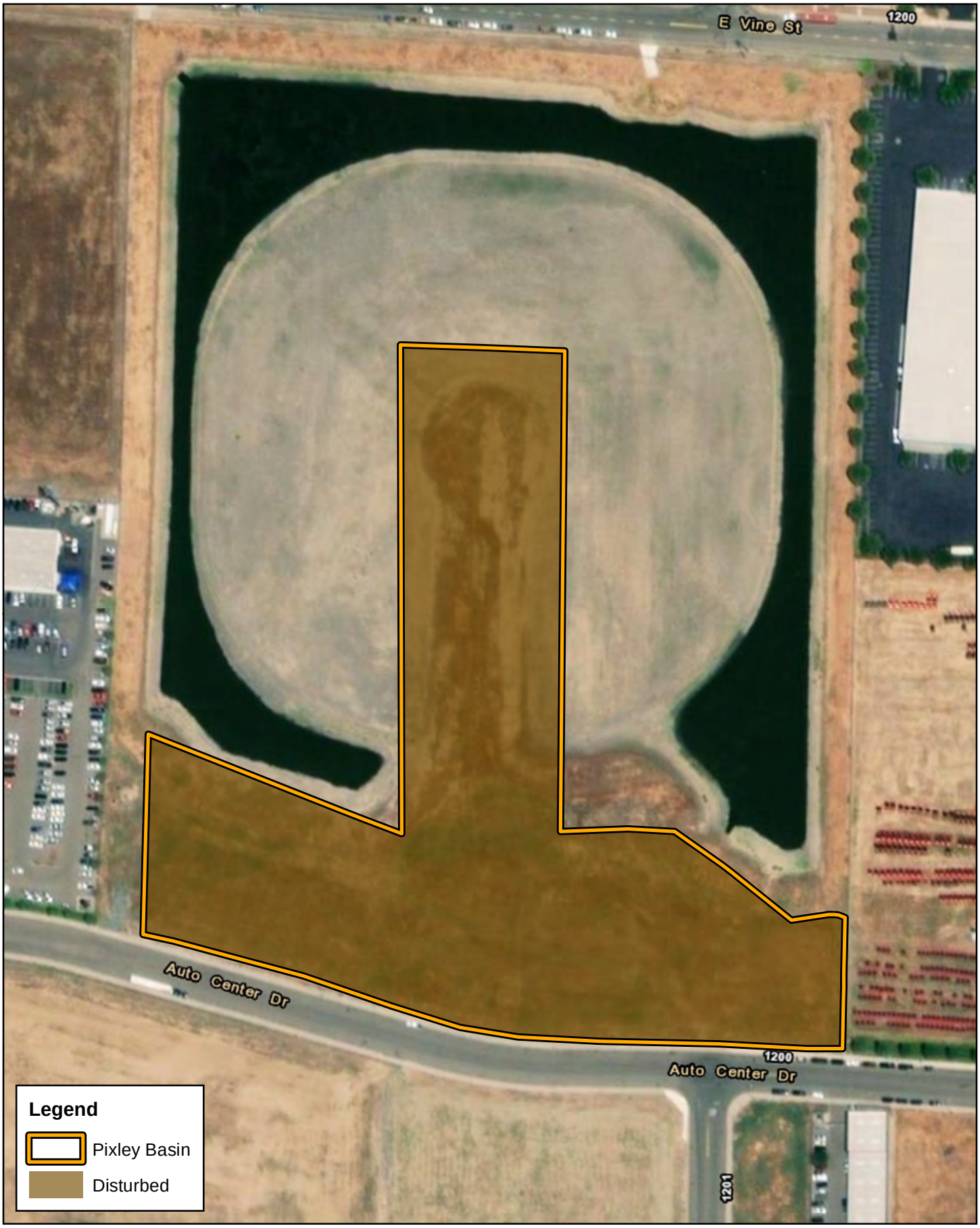
NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

Project Site - Century Park Soils

0 125 250 500 Feet

Source: ESRI Aerial Imagery, NRCS Soil Survey Geographic Database, San Joaquin County

Exhibit 7



NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

Project Site - Pixley Basin Vegetation

ELMT CONSULTING

0 50 100 200 Feet

Source: ESRI Aerial Imagery, San Joaquin County

Exhibit 8

NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

Project Site - Century Park Vegetation

ELMT CONSULTING

0 62.5 125 250 Feet

Source: ESRI Aerial Imagery, San Joaquin County

Exhibit 9

NCPA SOLAR PROJECT 1 - LODI SITES
HABITAT AND JURISDICTIONAL ASSESSMENT

Site Vicinity

ELMT CONSULTING

0 1 2 4 Miles

Source: USA Topographic Map, USFWS Critical Habitat, San Joaquin County

Exhibit 10

Attachment B

Site Photographs

Photograph 1: From the southwest corner of the Parking Garage site looking north.

Photograph 2: From the southwest corner of the Parking Garage site looking east.

Photograph 3: From the southeast corner of the Parking Garage Site looking northwest.

Photograph 4: From the northwest corner of the Parking Garage site looking south.

Photograph 5: From southeast corner of the Pixley Basin site looking west along the southern boundary.

Photograph 6: From the southeast corner of the Pixley Basin site looking northwest.

Photograph 7: From the northwest corner of the Pixley Basin site looking west.

Photograph 8: Looking at the land extension on the northern portion of the Pixley Basin site that extend into the middle of the water retention basin.

Photograph 9: From the northwest corner of the Pixley Basin site looking east.

Photograph 10: From the southwest corner of the Pixley Basin site looking northeast.

Photograph 11: From the eastern boundary of the Century Park East site looking west.

Photograph 12: View of the paved/asphalt area on the eastern half of the Century Park East site.

Photograph 13: From the northwest corner of the Century Park East site looking southwest.

Photograph 14: Looking at the heavily disturbed western half of the Century Park East site.

Photograph 15: From the southwest corner of the Century Park West site looking east.

Photograph 16: From the southeast corner of the Century Park West site looking west.

Photograph 17: From the northeast corner of the Century Park West site looking west.

Photograph 18: From the northwest corner of the Century Park West site looking southeast.

Attachment C

Potentially Occurring Special-Status Biological Resources

Scientific Name	Common Name	Federal Status	State Status	CDFW Listing	CNPS Rare Plant Rank	Potential to Occur
Special-Status Wildlife Species						
Acipenser transmontanus	white sturgeon	None	None	SSC	-	Presumed Absent
Agelaius tricolor	tricolored blackbird	None	Candidate Endangered	SSC	-	Presumed Absent
Ambystoma californiense	California tiger salamander	Threatened	Threatened	WL	-	Presumed Absent
Ardea alba	great egret	None	None	-	-	High
Ardea herodias	great blue heron	None	None	-	-	High
Asio flammeus	short-eared owl	None	None	SSC	-	Presumed Absent
Athene cunicularia	burrowing owl	None	None	SSC	-	low
Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None	-	-	Presumed Absent
Branchinecta mesovallensis	midvalley fairy shrimp	None	None	-	-	Presumed Absent
Buteo swainsoni	Swainson's hawk	None	Threatened	-	-	Presumed Absent
Cardinalis cardinalis	northern cardinal	None	None	WL	-	Presumed Absent
Charadrius montanus	mountain plover	None	None	SSC	-	Presumed Absent
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None	-	-	Presumed Absent
Elanus leucurus	white-tailed kite	None	None	FP	-	Presumed Absent
Emys marmorata	western pond turtle	None	None	SSC	-	Low
Entosphenus tridentatus	Pacific lamprey	None	None	SSC	-	Presumed Absent
Hypomesus transpacificus	Delta smelt	Threatened	Endangered	-	-	Presumed Absent
Hysterocarpus traskii traskii	Sacramento-San Joaquin tule perch	None	None	-	-	Presumed Absent
Icteria virens	yellow-breasted chat	None	None	SSC	-	Presumed Absent
Lavinia exilicauda exilicauda	Sacramento hitch	None	None	SSC	-	Presumed Absent
Lavinia symmetricus ssp. 1	San Joaquin roach	None	None	SSC	-	Presumed Absent
Lepidurus packardi	vernal pool tadpole shrimp	Endangered	None	-	-	Presumed Absent
Linderiella occidentalis	California linderiella	None	None	-	-	Presumed Absent
Melospiza melodia	song sparrow (-inModesto-in population)	None	None	SSC	-	Presumed Absent
Mylopharodon conocephalus	hardhead	None	None	SSC	-	Presumed Absent
Oncorhynchus keta	chum salmon	None	None	-	-	Presumed Absent
Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	Threatened	None	-	-	Presumed Absent
Oncorhynchus tshawytscha pop. 13	chinook salmon - Central Valley fall / late fall-run ESU	None	None	SSC	-	Presumed Absent
Pica nuttalli	yellow-billed magpie	None	None	-	-	Presumed Absent
Pogonichthys macrolepidotus	Sacramento splittail	None	None	SSC	-	Presumed Absent
Progne subis	purple martin	None	None	SSC	-	Presumed Absent
Rana boylii	foothill yellow-legged frog	None	Candidate Threatened	SSC	-	Presumed Absent
Rana draytonii	California red-legged frog	Threatened	None	SSC	-	Presumed Absent
Setophaga petechia	yellow warbler	None	None	SSC	-	Presumed Absent
Thamnophis gigas	giant gartersnake	Threatened	Threatened	-	-	Presumed Absent
Special-Status Plant Species						
Castilleja campestris var. succulenta	succulent owl's-clover	Threatened	Endangered	-	1B.2	Presumed Absent
Legenere limosa	legenere	None	None	-	1B.1	Presumed Absent
Juglans hindsii	Northern California black walnut	None	None	-	1B.1	Presumed Absent
Lilaeopsis masonii	Mason's lilaeopsis	None	Rare	-	1B.1	Presumed Absent
Symphyotrichum lentum	Suisun Marsh aster	None	None	-	1B.2	Presumed Absent
Sagittaria sanfordii	Sanford's arrowhead	None	None	-	1B.2	Presumed Absent
Special-Status Plant Communities						
Northern Hardpan Vernal Pool		-	-	Sensitive Habitat	-	Absent

Valley Oak Woodland			-	-	Sensitive Habitat	-	Absent

U.S. Fish and Wildlife Service (Fed) - Federal

END- Federal Endangered
THR- Federal Threatened

California Department of Fish and Wildlife (CA) - California

END- California Endangered
THR- California Threatened
Candidate- Candidate for listing under the California Endangered Species Act
FP- California Fully Protected
SSC- Species of Special Concern
WL- Watch List

California Native Plant Society (CNPS)

California Rare Plant Rank

1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3 Plants About Which More Information is Needed – A Review List

CNPS Threat Ranks

0.1- Seriously threatened in California
0.2- Moderately threatened in California
0.3- Not very threatened in California

Attachment D

Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

As defined within the Federal Endangered Species Act (FESA) of 1973, an endangered species is any animal or plant listed by regulation as being in danger of extinction throughout all or a significant portion of its geographical range. A threatened species is any animal or plant that is likely to become endangered within the foreseeable future throughout all or a significant portion of its geographical range. Without a special permit, federal law prohibits the "take" of any individuals or habitat of federally listed species. Under Section 9 of the FESA, take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." The term "harm" has been clarified to include "any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." The presence of any federally threatened or endangered species within a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the FESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an FESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If the USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

Pursuant to the Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) of 1918, as amended in 1972, federal law prohibits the taking of migratory birds or their nests or eggs (16 USC 703; 50 CFR 10, 21). The statute states:

> *Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions…*

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at

least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of "waters of the U.S.," including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States." In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term "*waters of the United States*" is defined as follows:

(i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(ii) All interstate waters, including interstate wetlands[1].

(iii) The territorial seas.

(iv) All impoundments of waters otherwise defined as waters of the United States under the definition.

(v) All tributaries[2] of waters identified in paragraphs (i) through (iii) mentioned above.

(vi) All waters adjacent[3] to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

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1 The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

2 The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

3 The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

(vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernals pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) meantioned above.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as "waters of the United States" even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(ii) Prior converted cropland.

(iii) The following ditches:

- (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.

(iv) The following features:

- (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
- (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
- (C) Artificial reflecting pools or swimming pools created in dry land;
- (D) Small ornamental waters created in dry land;
- (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
- (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
- (G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;
(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

Appendix D

Cultural Resources Technical Report

CULTURAL RESOURCES SURVEY
FOR THE
NORTHERN CALIFORNIA POWER AGENCY
SOLAR PROJECT 1 – LODI CENTURY PARK SITE
SAN JOAQUIN COUNTY, CALIFORNIA

Prepared for
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USGS Quadrangle
Lodi South, California
Anza Project No. 19-0005

April 2019

EXECUTIVE SUMMARY

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California. This study regards the Lodi Century Park Project, which is made up of two land parcels with two separate points of interconnection. Century Park East is located on approximately 2.9 acres of City of Lodi property. Century Park East is bordered by an industrial park to the north, recreational fields to the south, East Century Boulevard to the east, and the Union Pacific Railroad to the west. Century Park West is located on approximately 1.7 acres of City of Lodi property. Century Park West is bordered by residences to the north and south, the Union Pacific Railroad to the east, and West Century Boulevard to the west. The project (both Century Park East and Century Park West combined) was modeled with a total photovoltaic output of 300 kilowatts (kW) alternating current. The proposed project is subject to the California Environmental Quality Act (CEQA) with NCPA serving as lead agency.

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the project site. Anza recommends a finding of ***no impact to historical resources*** under CEQA. No further cultural resources study is recommended; however, the following standard measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project related ground disturbing activities.

CULTURAL RESOURCES WORKER SENSITIVITY TRAINING

Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.

UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site

within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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1. INTRODUCTION

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California (Figure 1). The NCPA Solar Project 1 includes the following projects: Century Park East/West, Pixley Basin, and Parking Structure, and is described below (Section 1.1). This study has been prepared in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines (Section 1.2). This cultural resources study includes a cultural resources records search, a summary of Native American scoping for the project, pedestrian survey, and the preparation of this report following the *Archaeological Resources Management Report (ARMR): Recommended Content and Format* guidelines (California Office of Historic Preservation 1990).

1.1 PROJECT DESCRIPTION

The objective of the NCPA Solar Project 1 is to develop a fleet of photovoltaic (PV) solar power plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by NCPA as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial five to seven years of operation, NCPA plans to purchase the plants.

NCPA has completed the site selection and screening portion of the project and the City of Lodi selected three sites for development: Century East/West, Pixley Basin, and Parking Structure sites. The Century Park Project is made up of two land parcels with two separate points of interconnection. Century Park East is located on approximately 2.9 acres of City of Lodi property. Century Park East is bordered by an industrial park to the north, recreational fields to the south, East Century Boulevard to the east, and the Union Pacific Railroad to the west. Century Park West is located on approximately 1.7 acres of City of Lodi property. Century Park West is bordered by residences to the north and south, the Union Pacific Railroad to the east, and West Century Boulevard to the west. The project (both Century Park East and Century Park West combined) was modeled with a total PV output of 300 kW alternating current.

1.2 REGULATORY SETTING

1.2.1 State

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, the probability is high that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Assembly Bill 52 of 2014 (AB 52) took effect July 1, 2015, and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." According to the legislative intent for AB 52, "tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource. See also PRC 21074 (a)(1)(A)-(B).

1.3 PERSONNEL

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt requested the Sacred Lands File search, conducted the survey, and was the primary author of this report. Principal Investigator Katherine Collins, M.A., Registered Professional Archaeologist (RPA), coauthored this report and served as principal investigator for the study. Ms. Collins meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology (National Park Service 1983). GIS Specialist Spencer Bietz prepared all maps and figures.

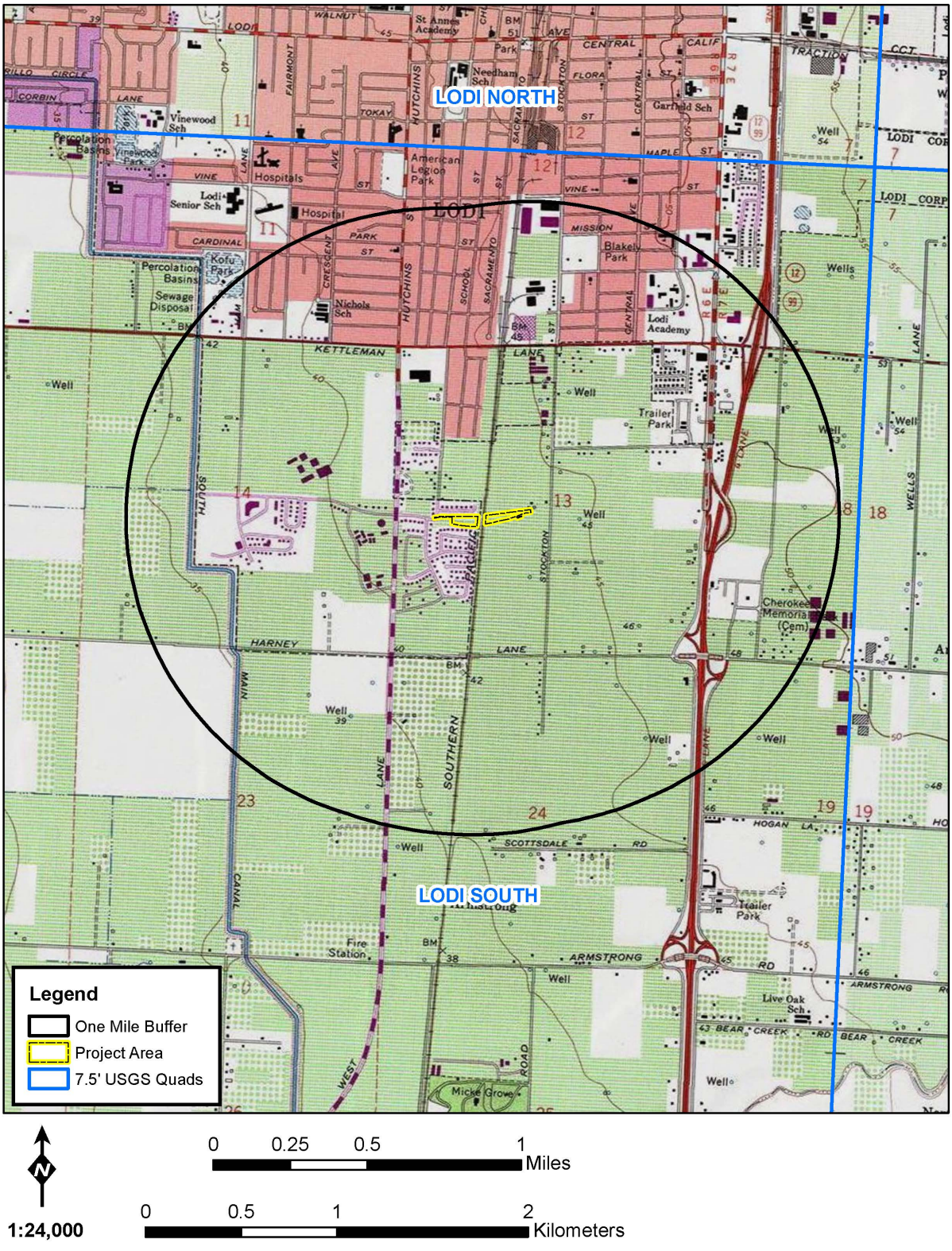

Figure 1. Project Location Map

2. ENVIRONMENTAL SETTING

The Lodi Century Park Project Site is located the northern San Joaquin Valley, famed for its agriculture. Characteristic vegetation communities in the region include agricultural habitats and annual grassland, with much smaller amounts of freshwater emergent wetland, lacustrine, water, and valley foothill riparian habitats (City of Lodi 2009:3.4-2). Agricultural lands support a broad variety of fauna including California ground squirrel, California vole, red-winged blackbird, northern harrier, white-tailed kite, and yellow-billed magpie. Urban areas support fauna such as American crow, rock dove, American robin, Brewer's blackbird, house finch, house sparrow, northern mockingbird, mourning dove, raccoon, Virginia opossum, and striped skunk. Prior to agricultural and urban development the San Joaquin Valley hosted a broad variety of additional species.

Lodi averages 19 inches of rain annually. Lodi has a hot-summer Mediterranean climate including cool, wet winters, often with dense ground fog, and hot, dry summers. The project site is underlain by the upper member of the Pleistocene Quarternary Modesto formation, composed of undivided alluvium (Dawson 2009).

3. CULTURAL SETTING

3.1 PREHISTORIC OVERVIEW

The prehistory of the Central Valley is generally divided into three main periods: Paleoindian, Archaic, and Emergent. The Archaic is further divided into the Lower, Middle, and Upper (Fredrickson 1973, 1974). This chronological framework is used by researchers to understand how prehistoric cultures adapted and coped with environmental and social change. Within this framework researchers recognized certain sets of cultural and technological traits that appeared to span long periods of time and covered large areas. These sets of traits were referred to as either "horizons" or "patterns" in the literature. With smaller (local) units of patterns referred to as "aspects" and "phases" (Fredrickson 1974, Moratto 1984, Rosenthal et al. 2007). Below is a brief overview of prehistoric occupation history in the San Joaquin Valley portion of the Central Valley.

The **Paleoindian Period** (11,550 to 8550 cal B.C.) was characterized by the arrival of small, high-mobile hunter-gathered groups. A characteristic element of this period is the use of fluted points to bring down large game animals. Evidence of Paleoindian occupation in the San Joaquin Valley have been found at Tracy Lake, Wolfson mound (CA-MER-215) in Merced County, and the Tulare Lake basin (Moratto 1984, Rosenthal et al. 2007).

During the **Archaic Period** (8550 cal B.C. to A.D. 1100) climatic changes preceiptated the drying of pluvial lakes resulting in changes in substance strategies employed by the native populations. By the Middle Archaic (5550 to 550 cal B.C.) a set of cultural traits known as the Windmiller Pattern emerged at several sites in the San Joaquin Valley (Rosethal et al. 2007). The presence of milling stones such as manos and metates often characterize Windmiller sites, although mortar and pestles have also been found, indicating that acorns and/or various seeds formed an important part of the diet (Moratto 1984, Rosenthal et al 2007). A variety of faunal remains have been documented at Windmiller Pattern sites including Tule elk, mule deer, and pronghorn, as well as smaller game such as rabbit, water birds, raptors, and rodents (Rosenthal et al. 2007). Also, the presence of angling hooks and baked clay artifacts possibly used as net or line sinkers, along with the remains of sturgeon, salmon, and smaller fishes, indicate that fishing was an additional source of food (Fredrickson 1973; Heizer 1949; Ragir 1972). Items such as net sinkers, pipes, and discoids, as well as cooking "stones" were made of baked clay. Ground and polished charmstones, impressions of twined basketry, shell beads, and bone tools also have been found at Windmiller Pattern sites. Some items, such as shell beads, obsidian tools, and quartz crystals, were obtained by trade.

The archaeological record at Windmiller Pattern sites indicates people practiced a mixed procurement strategy of both game and wild plants, with the addition of acorns and/or seeds. The mixed exploitation of a wide range of natural resources ties into a seasonal foraging strategy. Populations likely occupied the lower elevations of the Sacramento Valley in the winter months and shifted to higher elevations during the summer (Moratto 1984:206). Characteristic Windmiller mortuary practices included ventrally and dorsally extended burials, accompanied by grave goods, in cemeteries that were separate from the habitation sites (Ragir 1972, Rosenthal et al. 2007). Recent research suggests the Windmiller culture persisted into the Upper Archaic (550 cal B.C. to A.D. 1100) in the San Joaquin Valley and was not replaced by the Berkeley Pattern, as it had in other places. Several sites in San Joaquin and Merced Counties (CA-SJO-17, SJO-87, SJO-106, SJO-154, SJO-246, MER-3, MER-215, and MER-323) continued the characteristic Windmiller mortuary practice of extended burials until sometime between 800 and 1,000 years ago (Rosenthal el al. 2007:156).

During the **Emergent Period** (cal A.D. 1100 to Historic) a new set of cultural traits emerged in the Central Valley known as the Augustine Pattern, although there is sporadic evidence of this cultural pattern in the San Joaquin Valley (Moratto 1984, Rosenthal et al. 2007:157). The Pacheco Complex on the western edge of the valley is the only well-defined example in this region. The Augustine Pattern is evidenced by a substantial increase in the intensity of subsistence exploitation, including fishing, hunting, and gathering (particularly the acorn (Moratto 1984:211–214). These changes begin to reflect the cultural pattern known from historic period Native American groups in the area. Augustine Pattern tools and cooking implements included shaped mortars and pestles, hopper mortars, bone awls used for producing coiled baskets, and the bow and arrow. Pottery vessels, known as Cosumnes brownware, are found in some parts of the Central Valley and most likely developed during this period from the prior baked clay industry.

During this period, an increase in sedentism led to the development of social stratification, accompanied by a shift to elaborate ceremonial and social organization. Exchange networks, with the use of clamshell disk beads as currency, also developed during the Augustine Pattern. Mortuary practices during this period included flexed burials and pre-interment burning of offerings in a grave pit, as well as cremation of high-status individuals (Fredrickson 1973:127–129; Moratto 1984:211). In the San Joaquin Valley villages and smaller communities developed along side-streams of the foothills, and river channels and sloughs in the valley. The introduction of the bow and arrow occurred during this time and one of California's most unique point types, the Stockton serrated edge, was developed in the region (Rosenthal el al. 2007).

3.2 ETHNOGRAPHIC OVERVIEW

The project site is located in the traditional territory of the Plains Miwok people. The Plains Miwok were one of six culture groups that spoke a Miwokan language in California. Other Miwok-speaking groups included the Bay Miwok (Saclan), Northern Sierra Miwok, Central Sierra Miwok, Southern Sierra Miwok, and Coast Miwok. Plains Miwok territory was centered in the Central Valley occupying an area between the lower reaches of the Mokelumne and Cosumnes Rivers and the banks of the Sacramento River, from Rio Vista to Freeport (Levy 1978). The word Miwok (miw·yk) generally means "people" in the Miwok language, which is a member of the Penutian language family (Kroeber 1925, Mithun 1999).

The primary sociopolitical unit among the Plains Miwok was the tribelet, comprising the residents of several base settlements and their associated seasonal camps. Each tribelet had a population of about 300 to 500 people and controlled specific territory and resources within it. Each settlement within a tribelet appeared to be the home of localized patrilineage. The tribelet as whole was led by a chieftain which was a hereditary position passed down from father to son. If there was no male heir, the position could be passed to the chief's daughter. The chief acted as an advisor, had the final say in interpersonal disputes, and determined the best time to gather resources (Levy 1978). Settlements typically contained a semi-subterranean earth lodge used for community ritual or social gatherings. Other structures include a semi-subterranean sweathouse, a menstrual hut, and a granary for storing acorns. Families lived in small earth-covered structures (Kroeber 1925, Levy 1978). Ethnohistoric research indicates a Miwok settlement called *Muquelemne* was located on the south bank of Mokelumne River near Lodi (Levy 1978).

The basic subsistence strategy of the Plains Miwok was seasonally mobile hunting and gathering. However, tobacco was cultivated and they also possessed domesticated dogs. Plant foods included acorns, buckeyes, laurel nuts, hazelnuts, seeds, roots, greens, and berries. Acorns, the primary staple, were gathered in the fall and stored through the winter. Seeds were gathered from May through August. Intentional, periodic burning in August ensured an ample supply of seed-bearing annuals and forage for game. The Miwok ate more meat in the winter, when the only plant resources available were those that

had been stored. Hunting was accomplished with the aid of the bow and arrow, traps, and snares. Animal foods consisted of deer; elk; antelope; rodents; waterfowl; quail, pigeons, flickers, and other birds; freshwater mussels and clams; land snails; fish; and insects. Salt was obtained from springs or through trade with people from the Mono Lake area (Bennyhoff 1977; Levy 1978).

The Plains Miwok used a variety of tools made from bone, stone, antler, wood, and textile. Bows were made of wood from a variety of tree species such as oak, ash, willow, pepperwood, maple, or hazel. Arrow heads were fashioned from stone materials such as obsidian obtained through trade, as well as local materials. Typical basketry items were seed beaters; cradles; sifters; rackets used in ball games; and baskets for storing, winnowing, parching, and carrying burdens. Other textiles included mats and cordage (Levy 1978).

Many Miwok groups were subject to missionization efforts during the late eighteenth and early nineteenth centuries. Christian baptisms of Plains Miwok occurred as early as 1811 and did not stop until 1833. During this time over 2,100 Plains Miwok were baptized. As a result of the missionization effort many Plains Miwok were removed from their traditional territory and sent to Mission San Jose located in the present-day city of Fremont. By the beginning of the nineteenth century the Miwok numbered some 19,500 people but by the early twentieth century this number was below one thousand people. Today there are about 3,500 people of Miwok descent, with many living on several reservations in California (White 2019).

3.3 HISTORIC OVERVIEW

The historic period for the state of California generally begins with the establishment of the first Spanish mission and presidio in San Diego in 1769. This marks the beginning of the Spanish period of California history which lasted until 1822 when news of Mexico's independence from Spain in 1821 finally reached California. The Spanish period saw the establishment of a permanent European presence in California in the form of 21 missions located along the coast between San Diego and Sonoma, four military presidios located in San Diego, Monterey, San Francisco and Santa Barbara, and three pueblos (towns) that later became the cities of Los Angeles, San Jose and Santa Cruz (Robinson 1948). The Spanish period ended with Mexican independence from the Spanish crown in 1822. The Mexican period of California history saw the seizure of lands once held by the missions through the Mexican Secularization Act of 1833 and the redistribution of those lands to individuals in the form of land grants known as "ranchos" (Robinson 1948). During this period the Mexican government in California issued about 700 land grants to Mexican citizens and foreign immigrants (Shumway 1988). The outbreak of war between the United States and Mexico and the signing of the Treaty of Guadalupe Hidalgo in 1848 ended the Mexican period and signaled the beginning of the American period of California history. The early American period is marked by the discovery of gold at Sutter's Mill in 1848, resulting in a gold rush that saw a massive influx of settlers from other parts of the United States and around the world, greatly impacting California's native population. In 1869 the transcontinental railroad was completed linking California with the rest of the United States. The gold rush and the establishment of the railroad played major roles in the development of California into a national and worldwide leader in agricultural and industrial production. These early developments also resulted in making California one of the most racially and ethnically diverse states in the Union.

3.3.1 San Joaquin County

The history of San Joaquin County begins in 1850 as one of the original 27 counties of the state of California. The county derives its name from the San Joaquin River, a major river that flows through the region from southern Sierra Nevada Mountains. Early European exploration through the region included

an expedition led by Gabriel Moraga, a Spanish army officer who named the San Joaquin River as well as other natural features as he made his way through the Central Valley. Between 1840 and 1846 the Mexican government in California issued five land grants – Arroyo Seco, Campo de Los Franceses, El Pescadero, Sanjon de los Moquelumnes, and Rancho del Estanislao (also known as Thompson's Rancho) – that encompassed major portions of San Joaquin County (Shumway 1988). The County's generally flat terrain made it a desirable location for building a railroad and in 1866 Congress authorized the Southern Pacific Railroad to build a transcontinental rail route between San Francisco and the Colorado River. By 1870 the Southern Pacific line made its way through San Joaquin County to the City of Modesto (Burns 2007). The establishment of the Southern Pacific and other rail lines through San Joaquin County provided the transportation backbone to move local agricultural produce to markets across the country. Today, agriculture remains an important component of the County's economy.

3.3.2 City of Lodi

The City of Lodi was established in 1869 along the southern banks of Mokelumne River. It was originally named Mokelunme but was changed to Lodi by an act of the California legislature in 1874. Two of Lodi's early residents, Charles Ivory and John Burt established a general store on the corner of Pine and Sacramento Streets. Their store became a magnet for attracting homesteaders and other businesses to the area. Since its inception, agriculture was the backbone of Lodi's economy growing such crops as wheat, watermelon, and grapes. In 1880 some 3.4 million bushels of wheat were grown in San Joaquin County, much of it grown in the Lodi area. Grape vineyards also dominated the area with over two million plants in production in 1899. By the early twentieth century grapes were so important to Lodi that in 1907 residents held the Tokay Carnival to "advertise the beauty and value of the Tokay grape." During the same year a mission-style arch was built at Pine and Sacramento Streets, in the historic core of Lodi, at a cost of $500. The arch still exists today and is a local landmark (Hoover et al. 2002, Lodi Historical Society 2016).

4. BACKGROUND RESEARCH

4.1 CALIFORNIA HISTORICAL RESOURCE INFORMATION SYSTEM

Anza conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Central California Information Center (CCIC) located at California State University, Stanislaus. The search was conducted by CCIC on April 16, 2019, to identify all previous cultural resources work and previously recorded cultural resources within a 0.5-mile radius of the project site (Appendix A). The CHRIS search included a review of the NRHP, CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15-, and 30-minute quadrangle maps.

4.1.1 Previous Studies

The CCIC records search identified 13 cultural resources studies that were conducted within a 0.5-mile radius of the project site, two of which are mapped adjacent between the two project site loci within the Union Pacific Railroad corridor (Table 1).

Table 1. Previous Cultural Resource Studies within a 0.5-Mile Radius of the Project Site

Report Number	Author	Year	Title	Proximity to Project Site
SJ-03995	Nelson, W. J.	2000	Cultural Resource Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield	Adjacent (between East and West sites)
SJ-04094	Davis-King, Shelley	2000	Department of Transportation Negative Archaeological Survey Report: 10-San Joaquin, Southbound West Lane Harney Lane to Armstrong Road.	Outside
SJ-04508	Jones and Stokes Associates, Inc.	2001	Historic Property Survey Report, 10-SJO-12, P.M. 15.2/18.0, Charge Unit 173, E.A. OG5700: Kettleman Lane, Route 12 Widening Project. (Also includes Historic Archaeological Survey Report and Negative Archaeological Survey Report).	Outside
SJ-06005	Billat, L.	2006	New Tower ("NT") Submission Packet, FCC Form 620 Earth Touch, Inc., Maggio Cir. SC-13353A, San Joaquin County, CA	Outside
SJ-06123	Jackson, R. and P. Welsh	2006	Cultural Resources Inventory, Reynolds Ranch / Blue Shield Development Plan, City of Lodi, San Joaquin County, California.	Outside
SJ-06345	SWCA Environmental Consultants	2006	Cultural Resources Final Report of Monitoring and Findings for the QWest Network Construction Project, State of California. SWCA Project No. 10715-180.	Adjacent (between East and West sites)
SJ-07719	Jordan, Nichole	2012	Historic Property Survey Report, Harney Lane/ Union Pacific Railroad Grade Separation Lodi, San Joaquin County, California, Federal Aid Project No. STPL-5154 (041).	Outside

Report Number	Author	Year	Title	Proximity to Project Site
SJ-07719	Jordan, N.	2012	Archaeological Survey Report for the Harney Lane/Union Pacific Railroad Grade Separation Project, Lodi, San Joaquin County, California.	Outside
SJ-07719	Hibma, M.	2012	Historical Resources Evaluation Report for the Harney Lane/Union Pacific Grade Separation Project, Lodi, San Joaquin County, California Federal Project No. STPL 5154 (041).	Outside
SJ-08111	Jordan, N., and K. Smith	2015	Supplemental Historic Property Survey Report for the Harney Lane/Union Pacific Railroad Grade Separation Project, City of Lodi, San Joaquin County; California Federal Project No. STPL 554 (041), Caltrans District 10.	Outside
SJ-08111	Jordan, N. and Smith, K.	2015	Supplemental Archaeological Survey Report for the Harney Lane/Union Pacific Railroad Grade Separation Project, City of Lodi, San Joaquin County, California; Federal Aid Project No. STPL 5154 (041), Caltrans District 10.	Outside
SJ-08642	Vallaire, K.	2016	Supplemental Historic Property Survey Report, 10-SJ-STPL 5154(040). City of Lodi Department of Public Works, New Fur-Lane Bridge Structure for Harney Lane over the Union Pacific Railroad Tracks. San Joaquin County, California	Outside
SJ-08642	Vallaire, K., and M. Falke	2015	Second Supplemental Archaeological Survey Report, Harney Lane/Union Pacific Railroad Grade Separation Project, City of Lodi, San Joaquin County, California, Federal Aid Project STPL 5154(040), Caltrans District 10	Outside

Source: CCIC, April 2019

4.1.2 Previously Recorded Resources

The CCIC records search identified three cultural resources previously recorded within a 0.5-mile radius of the project site (Table 2). One of the resources (P-39-000002) is an unrecorded segment of the historic period Southern Pacific San Joaquin Valley Mainline – now the Union Pacific Railroad – which is adjacent and between the Century East and West project site loci. The other two resources are historic period buildings at least 0.25 mile from the project site.

Table 2. Previously Recorded Cultural Resources within 0.5-Mile of the Project Site

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-000002	CA-SJO-000250H	Southern Pacific Railroad in San Joaquin County	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	25 instances between 1993 and 2012	Adjacent between two loci
P-39-005072	n/a	Barron (Mable) and Beckman Schools	Insufficient information	1991 (San Joaquin County Superintendent of Schools)	Approximately 0.25 mile northwest

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-005144	n/a	Agricultural Shop/ Garage	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	2012 (Hibma, Michael, LSA Associates, Inc.)	Approximately 0.5 mile south

Source: CCIC, April 2019

4.2 NATIVE AMERICAN SCOPING

K.S. Dunbar & Associates, Inc. requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission. The NAHC sent a response on March 11, 2019, stating that a search of the SLF was completed with negative results (i.e., no sacred lands or resources important to Native Americans identified in the search; Appendix B). The NAHC provided a list of seven Native American contacts that may have knowledge regarding Native American cultural resources within or near the project site.

K.S. Dunbar & Associates, Inc. mailed letters and sent emails dated March 12, 2019, to the seven Native American contacts describing the Lodi projects and asking if they had knowledge regarding cultural resources of Native American origin within or near the project sites (Appendix B). The Northern Valley Yokut responded via email on April 2, 2019, requesting that NCPA conduct a SLF search and CCIC records search. The United Auburn Indian Community responded via email on April 24, 2019 and requested formal AB 52 consultation for this project and provided recommended mitigation measures. Consultation between NCPA and United Auburn Indian Community was formally initiated in a letter dated April 24, 2019. No additional responses have been received as of April 30, 2019.

5. FIELDWORK

5.1 SURVEY METHODS

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt conducted a pedestrian survey of the project site on April 25, 2019. Mr. Hunt surveyed the project site using transects spaced 5 to 10 meters apart and oriented north-south. The entire project site was surveyed.

Mr. Hunt examined all exposed ground surface for artifacts (e.g., flaked stone tools and tool-manufacture debris, ground stone tools, ceramic sherds, fire-affected rock), ecofacts (marine shell, bone), soil discoloration that could indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramic sherds, cut bone). Ground disturbances such as burrows and drainages were visually inspected. Photographs documenting the project site and survey are maintained in cloud storage online.

5.2 RESULTS

The project site is highly disturbed with gravel and unkept grasses on the eastern portion (Photographs 1-2) and dense grass and an asphalt basketball court on the western portion (Photograph 3). The project site is bisected by the railroad with discrete fenced portions to the east and west. Ground visibility in the eastern site was poor to fair (approximately 20-50 percent) and spoil piles present indicate previous ground disturbance. The western site has well maintained grass and decomposing asphalt resulting in poor ground visibility (approximately 0 to 15 percent) The survey was negative; that is, no cultural (i.e., archaeological, historic built, or tribal cultural) resources were identified within the project site.

Photograph 1. Overview of Century East project site, facing west.

Photograph 2. View of middle of Century East project site, facing south.

Photograph 3. View of Century West project site, facing west.

6. MANAGEMENT RECOMMENDATIONS

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the project site. No further cultural resources study is recommended; however, the following standard measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project related ground disturbing activities.

6.1 CULTURAL RESOURCES WORKER SENSITIVITY TRAINING

Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.

6.2 UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

6.3 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

7. REFERENCES

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1972 *The Early Horizon in Central California Prehistory*. Contributions of the University of California Archaeological Research Facility, No. 15. Berkeley,CA: University of California Press.

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Appendix A:
Records Search Summary

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 4/16/2018

Records Search File No.: 11043L
Access Agreement: #540
Project: NCPA Lodi Century Solar PV Project; W. Century Blvd., east of Church St. and E. Century Blvd., west of S. Stockton Street

Kevin Hunt
Anza Resource Consultants
603 Seagaze Drive #1018
Oceanside, CA 92054

kevin@anzaresourceconsultants.com

Dear Mr. Hunt:

The Central California Information Center received your Priority Response record search request for the project area/radius referenced above, located on the Lodi South 7.5' quadrangle in San Joaquin County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☒ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Summary Data:

Resources within project area:	1 immediately on/adjacent: Unrecorded segment of P-39-000002, Southern Pacific RR
Resources within 1/2 mi radius:	2: P-39-005072 and P-39-005144 Please note: The historic building inventory for the City of Lodi has not been mapped in GIS; please refer to the attached OHP Historic Property Data File address list provided your for use in determining if any of the properties listed fall within the ½-mile radius.
Reports within project area:	2 immediately on/adjacent: SJ-03995 and SJ-06345
Reports within 1/2 mi radius:	7: SJ-04094, 4508, 6005, 6123, 7719, 8111, 8642

Resource Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details): ☐ enclosed ☒ not requested ☐ nothing listed

Report Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Resource Record Copies: ☒ enclosed ☐ not requested ☐ nothing listed

Report Copies: ☒ enclosed ☐ not requested ☐ nothing listed

OHP Historic Properties Directory: ☒ enclosed ☐ not requested ☐ nothing listed

City of Lodi listing (see CCaIC 11042L file)

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed

Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps: (see CCaIC 11042L file) ☒ enclosed ☐ not requested ☐ nothing listed

Map Number One, *History of San Joaquin County, California, with Illustrations* (1889; 1968 reprint)
Map of the County of San Joaquin, California (1883)
Lodi 1:62500-scale (1939)
Lodi South 7.5' (1953)

Local Inventories: ☐ enclosed ☐ not requested ☒ nothing listed

GLO and/or Rancho Plat Maps: ☒ enclosed ☐ not requested ☐ nothing listed

T3N R6E, Sheet 41-202 (1853-1865)

Shipwreck Inventory: ☒ not available at CCIC; please go to

http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Note: Billing will be transmitted separately via email by our Financial Services office *($594.23), payable within 60 days of receipt of the invoice.

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: Laurie Marroquin CSU Stanislaus Financial Services
lamarroquin@csustan.edu

Appendix B:
Native American Scoping

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

March 11, 2019

Keith S. Dunbar
K.S. Dunbar & Associates, Inc.

VIA Email to: ksdpe67@gmail.com

RE: NCPA Solar Project 1 – Lodi Sites, San Joaquin County

Dear Mr. Dunbar:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez
for

Katy Sanchez
Associate Environmental Planner

Attachment

Native American Heritage Commission
Native American Contacts List
3/11/2019

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk / Miwok
Sacramento ,CA 95811
rhonda@buenavistatribe.com
(916) 491-0011 Office
(916) 491-0012 Fax

California Valley Miwok Tribe
4620 Shippee Lane — Miwok
Stockton ,CA 95212
(209) 931-4567 Office
(209) 931-4333 Fax

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of Ca
P.O. Box 395 — Miwok
West Point ,CA 95255
l.ewilson@yahoo.com
(209) 293-4179 Office

Ione Band of Miwok Indians
Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699 — Miwok
Plymouth ,CA 95669
sara@ionemiwok.org
(209) 245-5800 Office
(209) 245-6377 Fax

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden ,CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn ,CA 95603 — Miwok
bguth@auburnrancheria.com
(530) 883-2390 Office
(530) 883-2380 Fax

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove ,CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office
(916) 683-6015 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
NCPA Solar Project 1 – Lodi Sites, San Joaquin County.

Fwd: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites

Keith Dunbar <ksdpe67@gmail.com>
Tue 4/2/2019 9:56 AM
To: Kevin Hunt <kevin@anzaresourceconsultants.com>

Kevin,

Good morning!

FYI!

Have a great day,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, CA 92590-4314
(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

---------- Forwarded message ---------
From: **canutes** <canutes@verizon.net>
Date: Tue, Apr 2, 2019 at 9:41 AM
Subject: Re: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites
To: Keith Dunbar <ksdpe67@gmail.com>

Mr. Dunbar,
The tribe has reviewed the information. The tribe is requesting that the NCPA request a record search from the Native American Heritage Commission and the information center as the area of the proposed project is in an area of sensitivity.

Nototomne Cultural Preservation
Northern Valley Yokut
Katherine
Perez
P.O Box 717
Linden, CA 95236
Cell: 209.649.8972
Email: canutes@verizon.net

Sent from my iPad

On Mar 12, 2019, at 11:54 AM, Keith Dunbar <ksdpe67@gmail.com> wrote:

Katherine Erolinda Perez, Chairperson,

An AB 52 Notification of the Northern California Power Agency's NCPA Solar Project 1 - Lodi Sites is attached in accordance with recommendations of the Native American Heritage Commission.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.

Environmental Engineering

45375 Vista Del Mar

Temecula, CA 92590-4314

(951) 699-2082

Cell: (949) 412-2634

ksdpe67@gmail.com

<AB 52 Tribal Consultation Notification N Valley Yokuts.pdf>

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Consultation for the NCPA Solar Project 1 - Lodi Sites

1 message

Cherilyn Neider <cneider@auburnrancheria.com> Wed, Apr 24, 2019 at 9:25 AM
To: "ksdpe67@gmail.com" <ksdpe67@gmail.com>

Dear Keith S. Dunbar,

Thank you for your letter received notifying us of the NCPA Solar Project 1. I am contacting you in order to request:

- Consultation for this project;
- All existing cultural resource assessments;
- Requests for and results of records searches.

Attached you will find mitigation measures recommended for this project. These measures address inadvertent discoveries and a tribal cultural resources awareness training as part of the Worker Environmental Awareness and Protection training. Please confirm that the attached mitigation measures will be included in the environmental document and the adopted mitigation, monitoring and reporting program. Thank you for involving UAIC in the planning process at an early stage. We ask that you make this correspondence a part of the project record and that you provide UAIC with a copy of the final environmental document and adopted mitigation, monitoring and reporting program.

Thank you,
Cherilyn

Cherilyn Neider
Tribal Historic Preservation
United Auburn Indian Community
530.883.2394

3 attachments

5_Mitigation_Measures_CEQA_Construction_Worker_Awareness_Training.docx
22K

Worker Awareness Brochure.pdf
858K

3_Mitigation_Measures_CEQA_Discoveries.docx
24K

If Human Remains are Found

The protocols for human remains discoveries are similar for other discoveries. **It is important to treat any human remains and the situation in which they are discovered with sensitivity, dignity, and respect.**

1. All work within 100 feet of the find will immediately stop. Work will also stop in areas where there is reason to believe additional human remains could be located (generally determined by a tribal monitor or qualified archaeologist).
2. UAIC and the on-site project/construction will be notified immediately.
3. **The location of any Native American Human remains must stay confidential.**

The United Auburn Indian Community

The United Auburn Indian Community is comprised of Miwok and Southern Maidu (Nisenan) people who are traditionally and culturally affiliated with this geographic area. The Tribe's area of geographic traditional and cultural affiliation encompasses all of Amador, El Dorado, Nevada, Placer, Sacramento, Sutter and Yuba counties, as well as portions of Butte, Plumas, San Joaquin, Sierra, Solano and Yolo counties; which includes the project area.

Contact us at

530-883-2394

https://www.auburnrancheria.com/

United Auburn Indian Community
of the Auburn Rancheria
10720 Indian Hill Road
Auburn CA, 95603

Respect on the Project for Native American Culture

Prepared by:
The United Auburn Indian Community
Preservation Department

Protection Measures and Protocols

The United Auburn Indian Community has developed the measures listed below to protect any unanticipated finds of tribal cultural resources and achieve compliance with federal and state cultural and environmental laws.

1. All work must stop IMMEDIATELY at that location and within 100 feet of the find. Work may be stopped by the tribal monitor or a qualified archaeologist. Work can continue on the rest of the project, as long as project activities stay at least 100 feet away.

2. The on-site project/construction manager will immediately be informed of the possible find and contact a qualified archeologist or tribal monitor of the find.

3. Under NO circumstances will any contractor or employee collect the archaeological material.

4. Over the next days or weeks following the discovery, a number of visitors may be present in order to investigate and evaluate the find. These may include: agency officials, the County Coroner, professional archaeologists, members of the tribe or the California Native American Heritage Commission, the California Office of Historic Preservation, and local representatives of the historical society (if the find is historic in nature). It is important for the integrity of the find and for culturally-appropriate treatment, and so that there is no violation issued, that reasonable methods be taken to ensure that there is no disturbance or damage (including theft) to the find and its context and surrounding areas.

5. It is important to respect the direction of the tribal monitor or other authorized tribal representative regarding identification and treatment of finds and to have some flexibility regarding where work might be able recommence outside of the find location area.

6. The location and nature of the discovery will be strictly confidential, shared only with individuals that need to know.

Cultural Resource Examples

There are many types of archaeological resources. The most common kind of artifacts, or markers of human activity that are found include stone tools, shell, beads, plant remains, animal bones, and a type of dark soil called midden. Archaeology from the historic era can also be found: these kinds of artifacts and features can include bottles, cans, ceramics, building foundations, bricks, and many more.

Tribal Cultural Resource – Awareness Training - Mitigation Measure

A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

Inadvertent Discoveries Mitigation Measure

If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR's to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

Initiation of AB 52 Tribal Consultation

Initiation Date:	April 24, 2019
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency
Consultation Coordinator:	Keith S. Dunbar, P.E., BCEE. Hon.D.WRE., F.ASCE
Tribe:	United Auburn Indian Community
Designated Contact:	Cherilyn Neider, Tribal Historic Preservation
Request Received:	April 24, 2019

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the United Auburn Indian Community.

In response to the AB 52 Tribal Consultation Notification sent to the tribe on February 26, 2019, the Northern California Power Agency (NCPA) has received your formal written request for tribal consultation pursuant to AB 52 for the above-named project.

Initiation of Consultation:

State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) requires the lead agency to begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation. **Please consider this notice as the official initiation of the AB 52 Tribal Consultation process between the Northern California Power Agency and Tribe.** As information becomes available on the proposed project, NCPA's consultation coordinator will schedule a face to face meeting with the tribe's designated contact if so requested

The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impact. The consultation coordinator may be reached by phone (951) 699-2082, or by email at ksdpe67@gmail.com. General comments may be submitted electronically, however, confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, be done by formal letter, in person, or over the telephone. If you wish to submit information in writing, correspondence may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined developable area of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts-direct current (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location		Developable Area (acres)	Estimated Capacity (MW_{dc})
	Latitude, Longitude	Section, Township, Range		
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	Sec 7, T 3 N, R 7 E, MDB&M	15.0	3.51
Lodi – Century Park East/West	38°06'26.66"N, 121°16'21.63"W	Sec 13, T 3 N, R 6 E, MDB&M	2.5	0.63
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	Sec 1, T 3 N, R 6 E, MDB&M	0.9	0.18

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century Park East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

CULTURAL RESOURCES SURVEY
FOR THE
NORTHERN CALIFORNIA POWER AGENCY
SOLAR PROJECT 1 – LODI PARKING GARAGE
SAN JOAQUIN COUNTY, CALIFORNIA

Prepared for
K.S. Dunbar and Associates, Inc.
45375 Vista Del Mar
Temecula, CA 92590-4314

Prepared by
Anza Resource Consultants
603 Seagaze Drive, #1018
Oceanside, CA 92054
www.anzaresourceconsultants.com

USGS Quadrangle
Lodi North, California
Anza Project No. 19-0005

May 2019

EXECUTIVE SUMMARY

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California. This study regards the Lodi Parking Garage project site, which is located on the third-floor rooftop of an existing parking garage in downtown Lodi. The design intent for this project is to build a canopy racking structure across the total area of the garage rooftop to house solar photovoltaic (PV) modules with a total PV output of 150 kilowatt alternating current. The proposed project is subject to the California Environmental Quality Act (CEQA) with NCPA serving as lead agency. This study includes a cultural resources records search, incorporation of Native American scoping, survey of the project site, and preparation of this technical report in compliance with the cultural resources requirements of CEQA.

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within the project site; however, the NRHP-listed Mission Arch is located adjacent to the south of the project straddling East Pine Street. Construction of the project would not directly or indirectly impact the adjacent NRHP-listed Mission Arch. Anza recommends a finding of ***no impact to historical resources*** under CEQA. No further cultural resources work is recommended. The following standard measures are recommended in the case of the unanticipated discovery of cultural resources during project related ground disturbing activities, though little if any ground disturbance is anticipated.

UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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1. INTRODUCTION

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California (Figure 1). The NCPA Solar Project 1 includes the following projects: Century East/West, Pixley Basin, and Parking Structure, and is described below (Section 1.1). This study has been prepared in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines (Section 1.2). This cultural resources study includes a cultural resources records search, a summary of Native American scoping for the project, pedestrian survey, and the preparation of this report following the *Archaeological Resources Management Report (ARMR): Recommended Content and Format* guidelines (California Office of Historic Preservation 1990).

1.1 PROJECT DESCRIPTION

The objective of the NCPA Solar Project 1 is to develop a fleet of photovoltaic (PV) solar power plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by NCPA as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial five to seven years of operation, NCPA plans to purchase the plants.

NCPA has completed the site selection and screening portion of the project and the City of Lodi selected three sites for development: Century East/West, Pixley Basin, and Parking Garage sites. The Parking Garage project site is located on the third-floor rooftop of an existing parking garage in downtown Lodi. The project is bordered by East Elm Street to the north, East Pine Street to the south, the Union Pacific railroad to the east, and North Sacramento Street to the west. The design intent for this project is to build a canopy racking structure across the total area of the garage rooftop to house solar PV modules with a total PV output of 150 kilowatt alternating current.

1.2 REGULATORY SETTING

1.2.1 State

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, the probability is high that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Assembly Bill 52 of 2014 (AB 52) took effect July 1, 2015, and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." According to the legislative intent for AB 52, "tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource. See also PRC 21074 (a)(1)(A)-(B).

1.3 PERSONNEL

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt requested the records search, conducted the survey, and was the primary author of this report. Principal Investigator Katherine Collins, M.A., Registered Professional Archaeologist (RPA), coauthored this report and served as principal investigator for the study. Ms. Collins meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology (National Park Service 1983). GIS Specialist Spencer Bietz prepared all maps and figures.

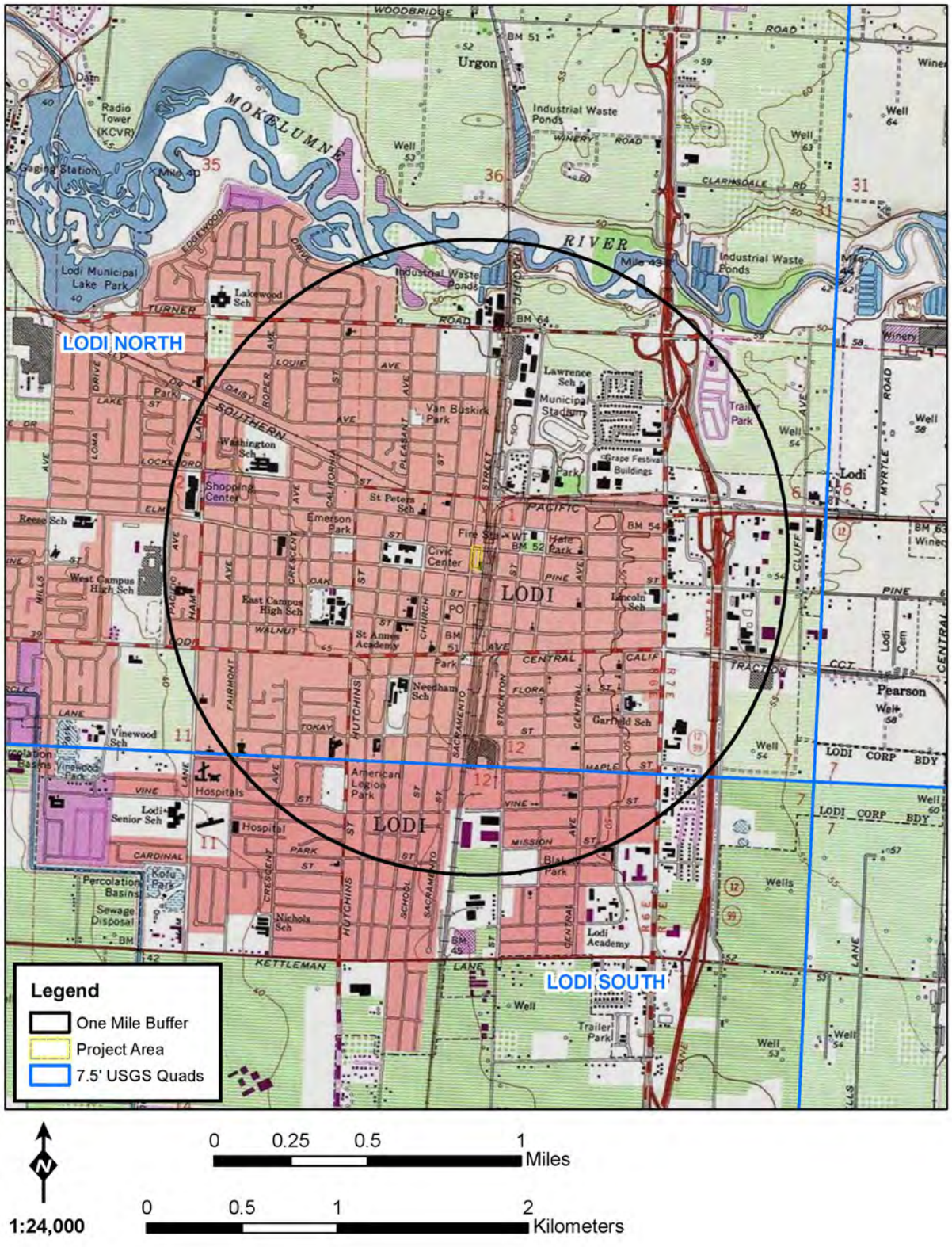

Figure 1. Project Location Map

2. ENVIRONMENTAL SETTING

The Lodi Parking Garage is located the northern San Joaquin Valley, famed for its agriculture. The project site is specifically located in an area that has been urbanized since the late-1800s and the immediate area around the site possesses only ornamental vegetation and faunal species adapted to urban environments. Characteristic vegetation communities in the region include agricultural habitats and annual grassland, with much smaller amounts of freshwater emergent wetland, lacustrine, water, and valley foothill riparian habitats (City of Lodi 2009:3.4-2). Agricultural lands support a broad variety of fauna including California ground squirrel, California vole, red-winged blackbird, northern harrier, white-tailed kite, and yellow-billed magpie. Urban areas support fauna such as American crow, rock dove, American robin, Brewer's blackbird, house finch, house sparrow, northern mockingbird, mourning dove, raccoon, Virginia opossum, and striped skunk.

Lodi averages 19 inches of rain annually. Lodi has a hot-summer Mediterranean climate including cool, wet winters, often with dense ground fog, and hot, dry summers. The project site is underlain by the upper member of the Pleistocene Quarternary Modesto formation, composed of undivided alluvium (Dawson 2009).

3. CULTURAL SETTING

3.1 PREHISTORIC OVERVIEW

The prehistory of the Central Valley is generally divided into three main periods: Paleoindian, Archaic, and Emergent. The Archaic is further divided into the Lower, Middle, and Upper (Fredrickson 1973, 1974). This chronological framework is used by researchers to understand how prehistoric cultures adapted and coped with environmental and social change. Within this framework researchers recognized certain sets of cultural and technological traits that appeared to span long periods of time and covered large areas. These sets of traits were referred to as either "horizons" or "patterns" in the literature. With smaller (local) units of patterns referred to as "aspects" and "phases" (Fredrickson 1974, Moratto 1984, Rosenthal et al. 2007). Below is a brief overview of prehistoric occupation history in the San Joaquin Valley portion of the Central Valley.

The **Paleoindian Period** (11,550 to 8550 cal B.C.) was characterized by the arrival of small, high-mobile hunter-gathered groups. A characteristic element of this period is the use of fluted points to bring down large game animals. Evidence of Paleoindian occupation in the San Joaquin Valley have been found at Tracy Lake, Wolfson mound (CA-MER-215) in Merced County, and the Tulare Lake basin (Moratto 1984, Rosenthal et al. 2007).

During the **Archaic Period** (8550 cal B.C. to A.D. 1100) climatic changes preceiptated the drying of pluvial lakes resulting in changes in substance strategies employed by the native populations. By the Middle Archaic (5550 to 550 cal B.C.) a set of cultural traits known as the Windmiller Pattern emerged at several sites in the San Joaquin Valley (Rosenthal et al. 2007). The presence of milling stones such as manos and metates often characterize Windmiller sites, although mortar and pestles have also been found, indicating that acorns and/or various seeds formed an important part of the diet (Moratto 1984, Rosenthal et al 2007). A variety of faunal remains have been documented at Windmiller Pattern sites including Tule elk, mule deer, and pronghorn, as well as smaller game such as rabbit, water birds, raptors, and rodents (Rosenthal et al. 2007). Also, the presence of angling hooks and baked clay artifacts possibly used as net or line sinkers, along with the remains of sturgeon, salmon, and smaller fishes, indicate that fishing was an additional source of food (Fredrickson 1973; Heizer 1949; Ragir 1972). Items such as net sinkers, pipes, and discoids, as well as cooking "stones" were made of baked clay. Ground and polished charmstones, impressions of twined basketry, shell beads, and bone tools also have been found at Windmiller Pattern sites. Some items, such as shell beads, obsidian tools, and quartz crystals, were obtained by trade.

The archaeological record at Windmiller Pattern sites indicates people practiced a mixed procurement strategy of both game and wild plants, with the addition of acorns and/or seeds. The mixed exploitation of a wide range of natural resources ties into a seasonal foraging strategy. Populations likely occupied the lower elevations of the Sacramento Valley in the winter months and shifted to higher elevations during the summer (Moratto 1984:206). Characteristic Windmiller mortuary practices included ventrally and dorsally extended burials, accompanied by grave goods, in cemeteries that were separate from the habitation sites (Ragir 1972, Rosenthal et al. 2007). Recent research suggests the Windmiller culture persisted into the Upper Archaic (550 cal B.C. to A.D. 1100) in the San Joaquin Valley and was not replaced by the Berkeley Pattern, as it had in other places. Several sites in San Joaquin and Merced Counties (CA-SJO-17, SJO-87, SJO-106, SJO-154, SJO-246, MER-3, MER-215, and MER-323) continued the characteristic Windmiller mortuary practice of extended burials until sometime between 800 and 1,000 years ago (Rosenthal el al. 2007:156).

During the **Emergent Period** (cal A.D. 1100 to Historic) a new set of cultural traits emerged in the Central Valley known as the Augustine Pattern, although there is sporadic evidence of this cultural pattern in the San Joaquin Valley (Moratto 1984, Rosenthal et al. 2007:157). The Pacheco Complex on the western edge of the valley is the only well-defined example in this region. The Augustine Pattern is evidenced by a substantial increase in the intensity of subsistence exploitation, including fishing, hunting, and gathering (particularly the acorn (Moratto 1984:211–214). These changes begin to reflect the cultural pattern known from historic period Native American groups in the area. Augustine Pattern tools and cooking implements included shaped mortars and pestles, hopper mortars, bone awls used for producing coiled baskets, and the bow and arrow. Pottery vessels, known as Cosumnes brownware, are found in some parts of the Central Valley and most likely developed during this period from the prior baked clay industry.

During this period, an increase in sedentism led to the development of social stratification, accompanied by a shift to elaborate ceremonial and social organization. Exchange networks, with the use of clamshell disk beads as currency, also developed during the Augustine Pattern. Mortuary practices during this period included flexed burials and pre-interment burning of offerings in a grave pit, as well as cremation of high-status individuals (Fredrickson 1973:127–129; Moratto 1984:211). In the San Joaquin Valley villages and smaller communities developed along side-streams of the foothills, and river channels and sloughs in the valley. The introduction of the bow and arrow occurred during this time and one of California's most unique point types, the Stockton serrated edge, was developed in the region (Rosenthal el al. 2007).

3.2 ETHNOGRAPHIC OVERVIEW

The project site is located in the traditional territory of the Plains Miwok people. The Plains Miwok were one of six culture groups that spoke a Miwokan language in California. Other Miwok-speaking groups included the Bay Miwok (Saclan), Northern Sierra Miwok, Central Sierra Miwok, Southern Sierra Miwok, and Coast Miwok. Plains Miwok territory was centered in the Central Valley occupying an area between the lower reaches of the Mokelumne and Cosumnes Rivers and the banks of the Sacramento River, from Rio Vista to Freeport (Levy 1978). The word Miwok (miw·yk) generally means "people" in the Miwok language, which is a member of the Penutian language family (Kroeber 1925, Mithun 1999).

The primary sociopolitical unit among the Plains Miwok was the tribelet, comprising the residents of several base settlements and their associated seasonal camps. Each tribelet had a population of about 300 to 500 people and controlled specific territory and resources within it. Each settlement within a tribelet appeared to be the home of localized patrilineage. The tribelet as whole was led by a chieftain which was a hereditary position passed down from father to son. If there was no male heir, the position could be passed to the chief's daughter. The chief acted as an advisor, had the final say in interpersonal disputes, and determined the best time to gather resources (Levy 1978). Settlements typically contained a semi-subterranean earth lodge used for community ritual or social gatherings. Other structures include a semi-subterranean sweathouse, a menstrual hut, and a granary for storing acorns. Families lived in small earth-covered structures (Kroeber 1925, Levy 1978). Ethnohistoric research indicates a Miwok settlement called *Muquelemne* was located on the south bank of Mokelumne River near Lodi (Levy 1978).

The basic subsistence strategy of the Plains Miwok was seasonally mobile hunting and gathering. However, tobacco was cultivated and they also possessed domesticated dogs. Plant foods included acorns, buckeyes, laurel nuts, hazelnuts, seeds, roots, greens, and berries. Acorns, the primary staple, were gathered in the fall and stored through the winter. Seeds were gathered from May through August. Intentional, periodic burning in August ensured an ample supply of seed-bearing annuals and forage for game. The Miwok ate more meat in the winter, when the only plant resources available were those that

had been stored. Hunting was accomplished with the aid of the bow and arrow, traps, and snares. Animal foods consisted of deer; elk; antelope; rodents; waterfowl; quail, pigeons, flickers, and other birds; freshwater mussels and clams; land snails; fish; and insects. Salt was obtained from springs or through trade with people from the Mono Lake area (Bennyhoff 1977; Levy 1978).

The Plains Miwok used a variety of tools made from bone, stone, antler, wood, and textile. Bows were made of wood from a variety of tree species such as oak, ash, willow, pepperwood, maple, or hazel. Arrow heads were fashioned from stone materials such as obsidian obtained through trade, as well as local materials. Typical basketry items were seed beaters; cradles; sifters; rackets used in ball games; and baskets for storing, winnowing, parching, and carrying burdens. Other textiles included mats and cordage (Levy 1978).

Many Miwok groups were subject to missionization efforts during the late eighteenth and early nineteenth centuries. Christian baptisms of Plains Miwok occurred as early as 1811 and did not stop until 1833. During this time over 2,100 Plains Miwok were baptized. As a result of the missionization effort many Plains Miwok were removed from their traditional territory and sent to Mission San Jose located in the present-day city of Fremont. By the beginning of the nineteenth century the Miwok numbered some 19,500 people but by the early twentieth century this number was below one thousand people. Today there are about 3,500 people of Miwok descent, with many living on several reservations in California (White 2019).

3.3 HISTORIC OVERVIEW

The historic period for the state of California generally begins with the establishment of the first Spanish mission and presidio in San Diego in 1769. This marks the beginning of the Spanish period of California history which lasted until 1822 when news of Mexico's independence from Spain in 1821 finally reached California. The Spanish period saw the establishment of a permanent European presence in California in the form of 21 missions located along the coast between San Diego and Sonoma, four military presidios located in San Diego, Monterey, San Francisco and Santa Barbara, and three pueblos (towns) that later became the cities of Los Angeles, San Jose and Santa Cruz (Robinson 1948). The Spanish period ended with Mexican independence from the Spanish crown in 1822. The Mexican period of California history saw the seizure of lands once held by the missions through the Mexican Secularization Act of 1833 and the redistribution of those lands to individuals in the form of land grants known as "ranchos" (Robinson 1948). During this period the Mexican government in California issued about 700 land grants to Mexican citizens and foreign immigrants (Shumway 1988). The outbreak of war between the United States and Mexico and the signing of the Treaty of Guadalupe Hidalgo in 1848 ended the Mexican period and signaled the beginning of the American period of California history. The early American period is marked by the discovery of gold at Sutter's Mill in 1848, resulting in a gold rush that saw a massive influx of settlers from other parts of the United States and around the world, greatly impacting California's native population. In 1869 the transcontinental railroad was completed linking California with the rest of the United States. The gold rush and the establishment of the railroad played major roles in the development of California into a national and worldwide leader in agricultural and industrial production. These early developments also resulted in making California one of the most racially and ethnically diverse states in the Union.

3.3.1 San Joaquin County

The history of San Joaquin County begins in 1850 as one of the original 27 counties of the state of California. The county derives its name from the San Joaquin River, a major river that flows through the region from southern Sierra Nevada Mountains. Early European exploration through the region included

an expedition led by Gabriel Moraga, a Spanish army officer who named the San Joaquin River as well as other natural features as he made his way through the Central Valley. Between 1840 and 1846 the Mexican government in California issued five land grants – Arroyo Seco, Campo de Los Franceses, El Pescadero, Sanjon de los Moquelumnes, and Rancho del Estanislao (also known as Thompson's Rancho) – that encompassed major portions of San Joaquin County (Shumway 1988). The County's generally flat terrain made it a desirable location for building a railroad and in 1866 Congress authorized the Southern Pacific Railroad to build a transcontinental rail route between San Francisco and the Colorado River. By 1870 the Southern Pacific line made its way through San Joaquin County to the City of Modesto (Burns 2007). The establishment of the Southern Pacific and other rail lines through San Joaquin County provided the transportation backbone to move local agricultural produce to markets across the country. Today, agriculture remains an important component of the County's economy.

3.3.2 City of Lodi

The City of Lodi was established in 1869 along the southern banks of Mokelumne River. It was originally named Mokelunme but was changed to Lodi by an act of the California legislature in 1874. Two of Lodi's early residents, Charles Ivory and John Burt established a general store on the corner of Pine and Sacramento Streets. Their store became a magnet for attracting homesteaders and other businesses to the area. Since its inception, agriculture was the backbone of Lodi's economy growing such crops as wheat, watermelon, and grapes. In 1880 some 3.4 million bushels of wheat were grown in San Joaquin County, much of it grown in the Lodi area. Grape vineyards also dominated the area with over two million plants in production in 1899. By the early twentieth century grapes were so important to Lodi that in 1907 residents held the Tokay Carnival to "advertise the beauty and value of the Tokay grape." During the same year a mission-style arch was built at Pine and Sacramento Streets, in the historic core of Lodi, at a cost of $500. The arch still exists today and is a local landmark (Hoover et al. 2002, Lodi Historical Society 2016).

4. BACKGROUND RESEARCH

4.1 CALIFORNIA HISTORICAL RESOURCE INFORMATION SYSTEM

Anza conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Central California Information Center (CCIC) located at California State University, Stanislaus. The search was conducted by CCIC on April 17, 2019, to identify all previous cultural resources work and previously recorded cultural resources within a 0.5-mile radius of the project site (Appendix A). The CHRIS search included a review of the NRHP, CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15-, and 30-minute quadrangle maps.

4.1.1 Previous Studies

The CCIC records search identified 19 cultural resources studies that were conducted within a 0.5-mile radius of the project site, three of which are mapped within the project site, and one (SJ-02756) that had two sub-reports (Table 1).

Table 1. Previous Cultural Resource Studies within a 0.5-Mile Radius of the Project Site

Report Number	Author	Year	Title	Proximity to Project Site
SJ-02756	Dougherty, John W.	1995	Historic Properties Survey Report Lodi Multimodal Station Study Project Number STPLE-5929 (15)	**Within**
SJ-02756	Harris, D.	1995	Historical Architectural Survey Report for a Proposed Multimodal Transportation Facility in the City of Lodi	**Within**
SJ-02756	Dougherty, J.	1995	Negative Archaeological Survey Report	**Within**
SJ-03379	Southern Pacific Transportation Co.	1994	Historic Report (49 C.F.R. 1105.8) Southern Pacific Transportation Company Proposed Abandonment In San Joaquin and Calaveras Counties, California ICC Docket No. AB-12 (Sub-No. 155X).	Outside
SJ-03995	Nelson, W. J.	2000	Cultural Resource Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield	Outside
SJ-04378	Dougherty, John	1999	Archaeological Monitoring of the Lodi Mulitmodal Project, Lodi, California.	**Within**
SJ-04379	Bakic, Tracy D.	1999	Reevaluation Report, Lodi Southern Pacific Passenger Depot, City of Lodi, San Joaquin County, California.	**Within**
SJ-04456	Brown, R. Keith	2000	Review of Environmental Screening: Proposed Mobile Radio Facility Downtown Lodi, Site No. CA-1572D, 401 North Stockton Street, Lodi, California.	Outside

Report Number	Author	Year	Title	Proximity to Project Site
SJ-04506	Egherman, Rachael	2001	Lodi Energy Center Cultural Resources (Archaeological and Historic Built Environment Resources) Technical Report.	Outside
SJ-04596	Jones & Stokes Associates	2000	Draft: Inventory and Evaluation of NRHP Eligibility of California Army National Guard Armories.	Outside
SJ-04977	Boda, J.	1989	Henderson Brothers Company, Incorporated, Ninety-Three Going on One Hundred.	Outside
SJ-05011	Leary, C. M.	1990	A Brief Review of Medicine in Lodi for the Past 80 Years.	Outside
SJ-05342	Wagers, J. C.	1975	The San Joaquin and Sierra Nevada Railroad. [journal article]	Outside
SJ-05910	Bonner, W.	2005	New Tower ("NT") Submission Packet FCC Form 620: Mountain Union Telecommunications, MUT-Downtown Lodi, San Joaquin County, CA	Outside
SJ-06023	Supernowicz, D.	2005	New Tower ("NT") Submission Packet, FCC Form 620 T-Mobile USA, Inc., Sacramento Street, SC-13338A, San Joaquin County, CA	Outside
SJ-06117	Jones, K.	2006	Letter Report: Archaeological Survey of the Proposed W. Lockeford Cingular Wireless Cell Site (CN-1235-02), San Joaquin County, California PL #1735-09	Outside
SJ-06345	SWCA Environmental Consultants	2006	Cultural Resources Final Report of Monitoring and Findings for the QWest Network Construction Project, State of California. SWCA Project No. 10715-180.	Outside
SJ-06546	Jones & Stokes	2007	Cultural Resources Sensitivity Assessment for Five Alternative Water Treatment Plant Sites and Associated Pipeline Routes, City of Lodi, San Joaquin County, California	Outside
SJ-07879	Cox, B., and E. Hammerle	2013	GPRP S. Sacramento and W. Locust, Lodi, San Joaquin County; PG&E Cultural Resources Constraints Report PM 30966786	Outside
SJ-07880	Russell, M.	2013	Archaeological Monitoring Summary Report for 30966786 GPRP S. Sacramento Street and W. Locust Street, San Joaquin County	Outside
SJ-08896	Peak, M.	2018	Historic Property Survey Report 10 San Joaquin CML-5154(043) Lockeford Street, Lodi, CA	Outside
SJ-08896	Peak, M.	2017	Historical Resources Evaluation Report for the Lockeford Street Improvement Project City of Lodi, California	Outside
SJ-08896	Peak, M.	2017	Archaeological Survey Report for the Lockeford Street Improvement Project City of Lodi, California	Outside

Source: CCIC, April 2019

4.1.1.1 SJ-02756

The 1995 Historic Properties Survey Report Lodi Multimodal Station Study Project Number STPLE-5929 (15) is a Caltrans-format report prepared in 1995 that's attachments include an archaeological report and historical architecture survey report (Table 1). This report identified and discussed the historic Southern Pacific [Railroad] Passenger Depot (P-39-00073 in Table 2) and was negative for archaeological resources. This report recommended the Southern Pacific Passenger Depot (P-39-00073) eligible for the NRHP under Criterion A (association with important events in history).

4.1.1.2 SJ-04378

This report describes archaeological monitoring conducted during the construction of the Lodi Multimodal Station Project in 1999. One post-1915 historic refuse deposit was noted in the report but not formally mapped or recorded as a resource. The report noted the deposit appeared to be smeared layers lacking stratification and not significant.

4.1.1.3 SJ-04379

The 1999 Reevaluation Report, Lodi Southern Pacific Passenger Depot, City of Lodi, San Joaquin County, California, reevaluated the Southern Pacific Passenger Depot (P-39-00073) and recommended that the depot was no longer eligible for NRHP listing under Criteria A or C due to its move to the multimodal facility resulting in significant changes in integrity to the resource.

4.1.2 Previously Recorded Resources

The CCIC records search identified 16 cultural resources previously recorded within a 0.5-mile radius of the project site, three of which are located adjacent to the project (Table 2). The Southern Pacific Passenger Depot (P-39-000073) was moved from the project site to south of East Pine Street but is still considered adjacent to the project. This historic railroad depot was moved from its original location and subsequently recommended ineligible for NRHP listing through survey re-evaluation (Report SJ-04379). The Southern Pacific San Joaquin Valley Mainline (P-39-000002) – now the Union Pacific Railroad – is adjacent to the project site to the east but has been found ineligible for NRHP, CRHR, or local register listing. The Mission Arch (P-39-000491) is adjacent to the south of the project site spanning East Pine Street and is listed on the NRHP and CRHR.

Table 2. Previously Recorded Cultural Resources within 0.5-Mile of the Project Site

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-000002	CA-SJO-000250H	Southern Pacific Railroad in San Joaquin County	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	25 instances between 1993 and 2012	**Adjacent to the east**
P-39-000069		Hotel Lodi	Individual property listed in NR by the Keeper. Listed in the CR. (Code 1S)	1994 (Eric W. Veerkamp)	Approximately 0.25 mile west

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-000073		Southern Pacific Passenger Depot	Recommended ineligible for NR designation through survey re-evaluation (Report SJ-04379)	1995 (Dennis E. Harris)	**Adjacent to south. Formerly at project site**
P-39-000491		Mission Arch	Individual property listed in NR by the Keeper. Listed in the CR. (Code 1S)	1980 (Paul Roddy)	**Adjacent to the south**
P-39-000506		Woman's Club of Lodi	Individual property listed in NR by the Keeper. Listed in the CR. (Code 1S)	1981 (J. Arbuckle)	Approximately 0.4 mile west
P-39-000666		Miyajima Hotel	Identified in reconnaissance level survey: Not evaluated. (Code 7R)	1988 (Maryln Bourne Lortie)	Approximately 0.1 mile east
P-39-004277		217 N. Central, Lodi; HUD000803G	Determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or Local Listing (Code 6Y)	1980 (Kay Fujita)	Approximately 0.4 mile southeast
P-39-004317		California Army National Guard Armory, Lodi	Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the CR. (Code 2S2)	2000 (Ove Juul)	Approximately 0.4 mile north
P-39-004926		Needham (Clyde) School	Insufficient information	2000 (Douglas A. Bryoccson)	Approximately 0.5 mile southwest
P-39-004931		Lodi High School	Insufficient information	1991 (San Joaquin County Superintendent of Schools)	Approximately 0.5 mile west
P-39-005076		Elmwood & Emerson Schools	Insufficient information	1991 (San Joaquin County Superintendent of Schools)	Approximately 0.5 mile west
P-39-005324		121 E. Lockeford Street - Site 3	Insufficient information	1991 (San Joaquin County Superintendent of Schools)	Approximately 0.3 mile north
P-39-005325		Lawrence Park - Site 5	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	2017 (Gerry, R., M. Peak)	Approximately 0.5 mile northeast

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-005326		Lodi Grape Festival Grounds - Site 6	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	2017 (Gerry, R., M. Peak)	Approximately 0.5 mile northeast
P-39-005328		322, 326, 334 E. Lockeford Street - Site 8A, 8B, 8C	Recommended not eligible for CRHR listing	2017 (Gerry, R., M. Peak)	Approximately 0.25 mile northeast
P-39-005329		224 N. Main Street - Site 9	Recommended not eligible for CRHR listing	2017 (Gerry, R., M. Peak)	Approximately 0.25 mile northeast

Source: CCIC, April 2019

4.2 NATIVE AMERICAN SCOPING

K.S. Dunbar & Associates, Inc. requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission. The NAHC sent a response on March 11, 2019, stating that a search of the SLF was completed with negative results (i.e., no sacred lands or resources important to Native Americans identified in the search; Appendix B). The NAHC provided a list of seven Native American contacts that may have knowledge regarding Native American cultural resources within or near the project site.

K.S. Dunbar & Associates, Inc. mailed letters and sent emails dated March 12, 2019, to the seven Native American contacts describing the Lodi projects and asking if they had knowledge regarding cultural resources of Native American origin within or near the project sites (Appendix B). The Northern Valley Yokut responded via email on April 2, 2019, requesting that NCPA conduct a SLF search and CCIC records search. The United Auburn Indian Community responded via email on April 24, 2019 and requested formal AB 52 consultation for this project and provided recommended mitigation measures. Consultation between NCPA and United Auburn Indian Community was formally initiated in a letter dated April 24, 2019. No additional responses have been received as of April 30, 2019.

5. FIELDWORK

5.1 SURVEY METHODS

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt conducted a windshield survey of the project site on April 25, 2019. Because the project site is atop an existing structure, pedestrian survey was not warranted. Only the ground near the project point-of-interconnection with the electrical utility was inspected on-foot.

Mr. Hunt examined all exposed ground surface for artifacts (e.g., flaked stone tools and tool-manufacture debris, ground stone tools, ceramic sherds, fire-affected rock), ecofacts (marine shell, bone), soil discoloration that could indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramic sherds, cut bone). Ground disturbances such as burrows and drainages were visually inspected. Photographs documenting the project site and survey are maintained by Anza in cloud storage online.

5.2 RESULTS

The project site is an extant modern three-story parking garage (Photographs 1-3). The NRHP-listed Mission Arch is located adjacent to the south of the project site (Photograph 2). The survey was negative; that is, no cultural (i.e., archaeological, historic built, or tribal cultural) resources were identified within the project site.

Photograph 1. Overview of east side of project site, facing northwest.

Photograph 2. View of south elevation of parking garage and Mission Arch, facing northwest.

Photograph 3. North elevation of parking garage, facing south-southeast.

6. DISCUSSION

The NCPA Solar Project 1 – Lodi Parking Garage project site intends to place PV solar panels atop a rack system above the roof of a modern three-story parking garage. The parking garage is at the former location of the Southern Pacific Passenger Depot. One NRHP-listed resource – the Mission Arch or Lodi Arch (P-39-000491) – is located adjacent to the south of the project site spanning East Pine Avenue. The modern parking garage was constructed adjacent to the Mission Arch and is taller than the arch. It is unlikely the solar panels would be visible to viewers of the arch from street level, and even if visible, their placement atop a modern parking structure would not further reduce the integrity of setting for the Mission Arch. Based on this analysis, installation of the proposed project atop the parking garage would not create a direct or indirect impact to the Mission Arch (P-39-000491). No archaeological resources were identified within the project site.

7. MANAGEMENT RECOMMENDATIONS

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within the project site. Construction of the project would not directly or indirectly impact the adjacent NRHP-listed Mission Arch. No further cultural resources work is recommended. The following standard measures are recommended in the case of the unanticipated discovery of cultural resources during project related ground disturbing activities, though little if any ground disturbance is anticipated.

7.1 UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

7.2 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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Appendix A:
Records Search Summary

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 4/17/2018

Records Search File No.: 11044L
Access Agreement: #540
Project: NCPA Lodi Parking Garage Solar PV Project; NE corner of N. Sacramento Street at E. Pine

Kevin Hunt
Anza Resource Consultants
603 Seagaze Drive #1018
Oceanside, CA 92054

kevin@anzaresourceconsultants.com

Dear Mr. Hunt:

The Central California Information Center received your Priority Response record search request for the project area/radius referenced above, located on the Lodi North 7.5' quadrangle in San Joaquin County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☒ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Summary Data:

Resources within project area:	1 immediately adjacent: P-39-000073, Southern Pacific RR Depot
Resources within 1/2 mi radius:	15: P-39-000002*, 69, 491, 506, 666, 4277, 4317, 4926, 4931, 5076, 5324, 5325. 5326, 5328, 5329 *for copy see CCaIC 11043L file Please note: The historic building inventory for the City of Lodi has not been mapped in GIS; please refer to the attached OHP Historic Property Data File address list provided your for use in determining if any of the properties listed fall within the ½-mile radius.
Reports within project area:	3: SJ-02756, 4378, 4379
Reports within 1/2 mi radius:	16: SJ-03379, 3995, 4456, 4506, 4596, 4977, 5011, 5342, 5910, 6023, 6117, 6345, 6546, 7879, 7880, 8896

Resource Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details): ☐ enclosed ☒ not requested ☐ nothing listed

Report Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Resource Record Copies: ☒ enclosed ☐ not requested ☐ nothing listed

Report Copies: ☒ enclosed ☐ not requested ☐ nothing listed

OHP Historic Properties Directory: ☒ enclosed ☐ not requested ☐ nothing listed

See City of Lodi listing
Note: 7 resources listed that are in the radius are mapped in GIS:
P-39-000069, listed on the NRHP and California Register of Historical Resources (CRHR)
P-39-000073, NRS S 2S2, listed on the CRHR
P-39-000491, listed on the NRHP & CRHR
P-39-000506, listed on the NRHP & CRHR
P-39-000666, NRS 7R
P-39-004277, NRS 6Y
P-39-004317, NRS S 2S2, listed on the CRHR

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed

Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps: (see also CCaIC 11042L file*) ☒ enclosed ☐ not requested ☐ nothing listed

Map Number One, *History of San Joaquin County, California, with Illustrations* (1889; 1968 reprint)*
Map of the County of San Joaquin, California (1883)*
Lodi 1:62,500-scale (1939)*
Woodbridge 1:31,680-scale (1910; 1939 reprint)

Local Inventories: ☐ enclosed ☐ not requested ☒ nothing listed

GLO and/or Rancho Plat Maps: ☒ enclosed ☐ not requested ☐ nothing listed

T3N R6E, Sheet 41-202 (1853-1865)

Shipwreck Inventory: ☒ not available at CCIC; please go to

http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Note: Billing will be transmitted separately via email by our Financial Services office *($989.63), payable within 60 days of receipt of the invoice.

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: Laurie Marroquin CSU Stanislaus Financial Services
lamarroquin@csustan.edu

Appendix B:
Native American Scoping

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

March 11, 2019

Keith S. Dunbar
K.S. Dunbar & Associates, Inc.

VIA Email to: ksdpe67@gmail.com

RE: NCPA Solar Project 1 – Lodi Sites, San Joaquin County

Dear Mr. Dunbar:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

for

Katy Sanchez
Associate Environmental Planner

Attachment

Native American Heritage Commission
Native American Contacts List
3/11/2019

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk / Miwok
Sacramento ,CA 95811
rhonda@buenavistatribe.com
(916) 491-0011 Office
(916) 491-0012 Fax

California Valley Miwok Tribe
4620 Shippee Lane — Miwok
Stockton ,CA 95212
(209) 931-4567 Office
(209) 931-4333 Fax

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of Ca
P.O. Box 395 — Miwok
West Point ,CA 95255
l.ewilson@yahoo.com
(209) 293-4179 Office

Ione Band of Miwok Indians
Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699 — Miwok
Plymouth ,CA 95669
sara@ionemiwok.org
(209) 245-5800 Office
(209) 245-6377 Fax

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden ,CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn ,CA 95603 — Miwok
bguth@auburnrancheria.com
(530) 883-2390 Office
(530) 883-2380 Fax

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove ,CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office
(916) 683-6015 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
NCPA Solar Project 1 – Lodi Sites, San Joaquin County.

Fwd: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites

Keith Dunbar <ksdpe67@gmail.com>
Tue 4/2/2019 9:56 AM
To: Kevin Hunt <kevin@anzaresourceconsultants.com>

Kevin,

Good morning!

FYI!

Have a great day,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, CA 92590-4314
(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

---------- Forwarded message ---------
From: **canutes** <canutes@verizon.net>
Date: Tue, Apr 2, 2019 at 9:41 AM
Subject: Re: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites
To: Keith Dunbar <ksdpe67@gmail.com>

Mr. Dunbar,
The tribe has reviewed the information. The tribe is requesting that the NCPA request a record search from the Native American Heritage Commission and the information center as the area of the proposed project is in an area of sensitivity.

Nototomne Cultural Preservation
Northern Valley Yokut
Katherine
Perez
P.O Box 717
Linden, CA 95236
Cell: 209.649.8972
Email: canutes@verizon.net

Sent from my iPad

On Mar 12, 2019, at 11:54 AM, Keith Dunbar <ksdpe67@gmail.com> wrote:

Katherine Erolinda Perez, Chairperson,

An AB 52 Notification of the Northern California Power Agency's NCPA Solar Project 1 - Lodi Sites is attached in accordance with recommendations of the Native American Heritage Commission.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.

Environmental Engineering

45375 Vista Del Mar

Temecula, CA 92590-4314

(951) 699-2082

Cell: (949) 412-2634

ksdpe67@gmail.com

<AB 52 Tribal Consultation Notification N Valley Yokuts.pdf>

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Consultation for the NCPA Solar Project 1 - Lodi Sites

1 message

Cherilyn Neider <cneider@auburnrancheria.com> Wed, Apr 24, 2019 at 9:25 AM
To: "ksdpe67@gmail.com" <ksdpe67@gmail.com>

Dear Keith S. Dunbar,

Thank you for your letter received notifying us of the NCPA Solar Project 1. I am contacting you in order to request:

- Consultation for this project;
- All existing cultural resource assessments;
- Requests for and results of records searches.

Attached you will find mitigation measures recommended for this project. These measures address inadvertent discoveries and a tribal cultural resources awareness training as part of the Worker Environmental Awareness and Protection training. Please confirm that the attached mitigation measures will be included in the environmental document and the adopted mitigation, monitoring and reporting program. Thank you for involving UAIC in the planning process at an early stage. We ask that you make this correspondence a part of the project record and that you provide UAIC with a copy of the final environmental document and adopted mitigation, monitoring and reporting program.

Thank you,
Cherilyn

Cherilyn Neider
Tribal Historic Preservation
United Auburn Indian Community
530.883.2394

3 attachments

5_Mitigation_Measures_CEQA_Construction_Worker_Awareness_Training.docx
22K

Worker Awareness Brochure.pdf
858K

3_Mitigation_Measures_CEQA_Discoveries.docx
24K

If Human Remains are Found

The protocols for human remains discoveries are similar for other discoveries. **It is important to treat any human remains and the situation in which they are discovered with sensitivity, dignity, and respect.**

1. All work within 100 feet of the find will immediately stop. Work will also stop in areas where there is reason to believe additional human remains could be located (generally determined by a tribal monitor or qualified archaeologist).
2. UAIC and the on-site project/construction will be notified immediately.
3. **The location of any Native American Human remains must stay confidential.**

The United Auburn Indian Community

The United Auburn Indian Community is comprised of Miwok and Southern Maidu (Nisenan) people who are traditionally and culturally affiliated with this geographic area. The Tribe's area of geographic traditional and cultural affiliation encompasses all of Amador, El Dorado, Nevada, Placer, Sacramento, Sutter and Yuba counties, as well as portions of Butte, Plumas, San Joaquin, Sierra, Solano and Yolo counties; which includes the project area.

Contact us at

530-883-2394

https://www.auburnrancheria.com/

United Auburn Indian Community
of the Auburn Rancheria
10720 Indian Hill Road
Auburn CA, 95603

Respect on the Project for Native American Culture

Prepared by:
The United Auburn Indian Community
Preservation Department

Protection Measures and Protocols

The United Auburn Indian Community has developed the measures listed below to protect any unanticipated finds of tribal cultural resources and achieve compliance with federal and state cultural and environmental laws.

1. All work must stop IMMEDIATELY at that location and within 100 feet of the find. Work may be stopped by the tribal monitor or a qualified archaeologist. Work can continue on the rest of the project, as long as project activities stay at least 100 feet away.

2. The on-site project/construction manager will immediately be informed of the possible find and contact a qualified archeologist or tribal monitor of the find.

3. Under NO circumstances will any contractor or employee collect the archaeological material.

4. Over the next days or weeks following the discovery, a number of visitors may be present in order to investigate and evaluate the find. These may include: agency officials, the County Coroner, professional archaeologists, members of the tribe or the California Native American Heritage Commission, the California Office of Historic Preservation, and local representatives of the historical society (if the find is historic in nature). It is important for the integrity of the find and for culturally-appropriate treatment, and so that there is no violation issued, that reasonable methods be taken to ensure that there is no disturbance or damage (including theft) to the find and its context and surrounding areas.

5. It is important to respect the direction of the tribal monitor or other authorized tribal representative regarding identification and treatment of finds and to have some flexibility regarding where work might be able recommence outside of the find location area.

6. The location and nature of the discovery will be strictly confidential, shared only with individuals that need to know.

Cultural Resource Examples

There are many types of archaeological resources. The most common kind of artifacts, or markers of human activity that are found include stone tools, shell, beads, plant remains, animal bones, and a type of dark soil called midden. Archaeology from the historic era can also be found: these kinds of artifacts and features can include bottles, cans, ceramics, building foundations, bricks, and many more.

Tribal Cultural Resource – Awareness Training - Mitigation Measure

A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

Inadvertent Discoveries Mitigation Measure

If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR's to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

Initiation of AB 52 Tribal Consultation

Initiation Date:	April 24, 2019
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency
Consultation Coordinator:	Keith S. Dunbar, P.E., BCEE. Hon.D.WRE., F.ASCE
Tribe:	United Auburn Indian Community
Designated Contact:	Cherilyn Neider, Tribal Historic Preservation
Request Received:	April 24, 2019

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the United Auburn Indian Community.

In response to the AB 52 Tribal Consultation Notification sent to the tribe on February 26, 2019, the Northern California Power Agency (NCPA) has received your formal written request for tribal consultation pursuant to AB 52 for the above-named project.

Initiation of Consultation:

State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) requires the lead agency to begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation. Please consider this notice as the official initiation of the AB 52 Tribal Consultation process between the Northern California Power Agency and Tribe. As information becomes available on the proposed project, NCPA's consultation coordinator will schedule a face to face meeting with the tribe's designated contact if so requested

The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impact. The consultation coordinator may be reached by phone (951) 699-2082, or by email at ksdpe67@gmail.com. General comments may be submitted electronically, however, confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, be done by formal letter, in person, or over the telephone. If you wish to submit information in writing, correspondence may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined developable area of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts-direct current (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location		Developable Area (acres)	Estimated Capacity (MW_{dc})
	Latitude, Longitude	Section, Township, Range		
Lodi – Pixley Basin	38º07'18.06"N, 121º15'12.14"W	Sec 7, T 3 N, R 7 E, MDB&M	15.0	3.51
Lodi – Century Park East/West	38º06'26.66"N, 121º16'21.63"W	Sec 13, T 3 N, R 6 E, MDB&M	2.5	0.63
Lodi – Parking Structure	38º08'05.25"N, 121º16'18.58"W	Sec 1, T 3 N, R 6 E, MDB&M	0.9	0.18

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century Park East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

CULTURAL RESOURCES SURVEY
FOR THE
NORTHERN CALIFORNIA POWER AGENCY
SOLAR PROJECT 1 – LODI PIXLEY SITE
SAN JOAQUIN COUNTY, CALIFORNIA

Prepared for
K.S. Dunbar and Associates, Inc.
45375 Vista Del Mar
Temecula, CA 92590-4314

Prepared by
Anza Resource Consultants
603 Seagaze Drive, #1018
Oceanside, CA 92054
www.anzaresourceconsultants.com

USGS Quadrangle
Lodi South, California
Anza Project No. 19-0005

April 2019

EXECUTIVE SUMMARY

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California. This study regards the Lodi Pixley project site, which occupies approximately 27 acres located in an undeveloped park that serves as a stormwater detention and flood control basin. The Lodi Pixley project site is located north of Auto Center Drive at the intersection of Pixley Parkway. The proposed project is subject to the California Environmental Quality Act (CEQA) with NCPA serving as lead agency. This study includes a cultural resources records search, Sacred Lands File search and Native American scoping, a pedestrian survey of the project site, and preparation of this technical report in compliance with the cultural resources requirements of CEQA.

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the project site. Anza recommends a finding of ***no impact to historical resources*** under CEQA. No further cultural resources study is recommended; however, the following standard measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project related ground disturbing activities.

CULTURAL RESOURCES WORKER SENSITIVITY TRAINING

Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.

UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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APPENDICES

1. INTRODUCTION

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California (Figure 1). The NCPA Solar Project 1 includes the following projects: Century East/West, Pixley Basin, and Parking Structure, and is described below (Section 1.1). This study has been prepared in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines (Section 1.2). This cultural resources study includes a cultural resources records search, a summary of Native American scoping for the project, pedestrian survey, and the preparation of this report following the *Archaeological Resources Management Report (ARMR): Recommended Content and Format* guidelines (California Office of Historic Preservation 1990).

1.1 PROJECT DESCRIPTION

The objective of the NCPA Solar Project 1 is to develop a fleet of photovoltaic (PV) solar power plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by NCPA as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial five to seven years of operation, NCPA plans to purchase the plants.

NCPA has completed the site selection and screening portion of the project and the City of Lodi selected three sites for development: Century East/West, Pixley Basin, and Parking Structure sites. The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. It is estimated that approximately 8.3 acres of the site are developable, which would accommodate a project size of 1.4 megawatts.

1.2 REGULATORY SETTING

1.2.1 State

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, the probability is high that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Assembly Bill 52 of 2014 (AB 52) took effect July 1, 2015, and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." According to the legislative intent for AB 52, "tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource. See also PRC 21074 (a)(1)(A)-(B).

1.3 PERSONNEL

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt requested the Sacred Lands File search, conducted the survey, and was the primary author of this report. Principal Investigator Katherine Collins, M.A., Registered Professional Archaeologist (RPA), coauthored this report and served as principal investigator for the study. Ms. Collins meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology (National Park Service 1983). GIS Specialist Spencer Bietz prepared all maps and figures.

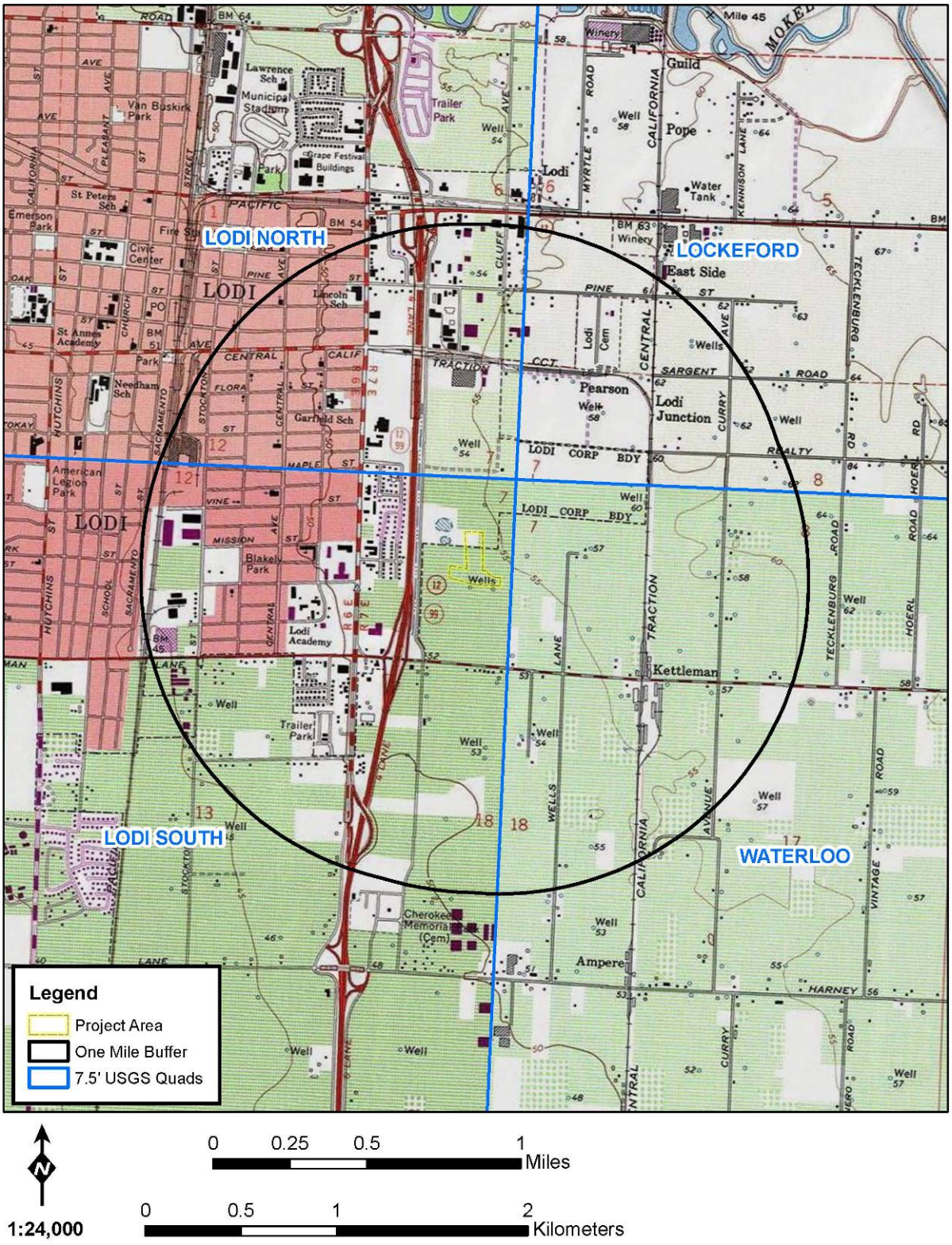

Figure 1. Project Location Map

2. ENVIRONMENTAL SETTING

The Lodi Pixley Site is located the northern San Joaquin Valley, famed for its agriculture. Characteristic vegetation communities in the region include agricultural habitats and annual grassland, with much smaller amounts of freshwater emergent wetland, lacustrine, water, and valley foothill riparian habitats (City of Lodi 2009:3.4-2). Agricultural lands support a broad variety of fauna including California ground squirrel, California vole, red-winged blackbird, northern harrier, white-tailed kite, and yellow-billed magpie. Urban areas support fauna such as American crow, rock dove, American robin, Brewer's blackbird, house finch, house sparrow, northern mockingbird, mourning dove, raccoon, Virginia opossum, and striped skunk. Prior to agricultural and urban development the San Joaquin Valley hosted a broad variety of additional species.

Lodi averages 19 inches of rain annually. Lodi has a hot-summer Mediterranean climate including cool, wet winters, often with dense ground fog, and hot, dry summers. The project site is underlain by the upper member of the Pleistocene Quarternary Modesto formation, composed of undivided alluvium (Dawson 2009).

3. CULTURAL SETTING

3.1 PREHISTORIC OVERVIEW

The prehistory of the Central Valley is generally divided into three main periods: Paleoindian, Archaic, and Emergent. The Archaic is further divided into the Lower, Middle, and Upper (Fredrickson 1973, 1974). This chronological framework is used by researchers to understand how prehistoric cultures adapted and coped with environmental and social change. Within this framework researchers recognized certain sets of cultural and technological traits that appeared to span long periods of time and covered large areas. These sets of traits were referred to as either "horizons" or "patterns" in the literature. With smaller (local) units of patterns referred to as "aspects" and "phases" (Fredrickson 1974, Moratto 1984, Rosenthal et al. 2007). Below is a brief overview of prehistoric occupation history in the San Joaquin Valley portion of the Central Valley.

The **Paleoindian Period** (11,550 to 8550 cal B.C.) was characterized by the arrival of small, high-mobile hunter-gathered groups. A characteristic element of this period is the use of fluted points to bring down large game animals. Evidence of Paleoindian occupation in the San Joaquin Valley have been found at Tracy Lake, Wolfson mound (CA-MER-215) in Merced County, and the Tulare Lake basin (Moratto 1984, Rosenthal et al. 2007).

During the **Archaic Period** (8550 cal B.C. to A.D. 1100) climatic changes preceiptated the drying of pluvial lakes resulting in changes in substance strategies employed by the native populations. By the Middle Archaic (5550 to 550 cal B.C.) a set of cultural traits known as the Windmiller Pattern emerged at several sites in the San Joaquin Valley (Rosethal et al. 2007). The presence of milling stones such as manos and metates often characterize Windmiller sites, although mortar and pestles have also been found, indicating that acorns and/or various seeds formed an important part of the diet (Moratto 1984, Rosenthal et al 2007). A variety of faunal remains have been documented at Windmiller Pattern sites including Tule elk, mule deer, and pronghorn, as well as smaller game such as rabbit, water birds, raptors, and rodents (Rosenthal et al. 2007). Also, the presence of angling hooks and baked clay artifacts possibly used as net or line sinkers, along with the remains of sturgeon, salmon, and smaller fishes, indicate that fishing was an additional source of food (Fredrickson 1973; Heizer 1949; Ragir 1972). Items such as net sinkers, pipes, and discoids, as well as cooking "stones" were made of baked clay. Ground and polished charmstones, impressions of twined basketry, shell beads, and bone tools also have been found at Windmiller Pattern sites. Some items, such as shell beads, obsidian tools, and quartz crystals, were obtained by trade.

The archaeological record at Windmiller Pattern sites indicates people practiced a mixed procurement strategy of both game and wild plants, with the addition of acorns and/or seeds. The mixed exploitation of a wide range of natural resources ties into a seasonal foraging strategy. Populations likely occupied the lower elevations of the Sacramento Valley in the winter months and shifted to higher elevations during the summer (Moratto 1984:206). Characteristic Windmiller mortuary practices included ventrally and dorsally extended burials, accompanied by grave goods, in cemeteries that were separate from the habitation sites (Ragir 1972, Rosenthal et al. 2007). Recent research suggests the Windmiller culture persisted into the Upper Archaic (550 cal B.C. to A.D. 1100) in the San Joaquin Valley and was not replaced by the Berkeley Pattern, as it had in other places. Several sites in San Joaquin and Merced Counties (CA-SJO-17, SJO-87, SJO-106, SJO-154, SJO-246, MER-3, MER-215, and MER-323) continued the characteristic Windmiller mortuary practice of extended burials until sometime between 800 and 1,000 years ago (Rosenthal el al. 2007:156).

During the **Emergent Period** (cal A.D. 1100 to Historic) a new set of cultural traits emerged in the Central Valley known as the Augustine Pattern, although there is sporadic evidence of this cultural pattern in the San Joaquin Valley (Moratto 1984, Rosenthal et al. 2007:157). The Pacheco Complex on the western edge of the valley is the only well-defined example in this region. The Augustine Pattern is evidenced by a substantial increase in the intensity of subsistence exploitation, including fishing, hunting, and gathering (particularly the acorn (Moratto 1984:211–214). These changes begin to reflect the cultural pattern known from historic period Native American groups in the area. Augustine Pattern tools and cooking implements included shaped mortars and pestles, hopper mortars, bone awls used for producing coiled baskets, and the bow and arrow. Pottery vessels, known as Cosumnes brownware, are found in some parts of the Central Valley and most likely developed during this period from the prior baked clay industry.

During this period, an increase in sedentism led to the development of social stratification, accompanied by a shift to elaborate ceremonial and social organization. Exchange networks, with the use of clamshell disk beads as currency, also developed during the Augustine Pattern. Mortuary practices during this period included flexed burials and pre-interment burning of offerings in a grave pit, as well as cremation of high-status individuals (Fredrickson 1973:127–129; Moratto 1984:211). In the San Joaquin Valley villages and smaller communities developed along side-streams of the foothills, and river channels and sloughs in the valley. The introduction of the bow and arrow occurred during this time and one of California's most unique point types, the Stockton serrated edge, was developed in the region (Rosenthal el al. 2007).

3.2 ETHNOGRAPHIC OVERVIEW

The project site is located in the traditional territory of the Plains Miwok people. The Plains Miwok were one of six culture groups that spoke a Miwokan language in California. Other Miwok-speaking groups included the Bay Miwok (Saclan), Northern Sierra Miwok, Central Sierra Miwok, Southern Sierra Miwok, and Coast Miwok. Plains Miwok territory was centered in the Central Valley occupying an area between the lower reaches of the Mokelumne and Cosumnes Rivers and the banks of the Sacramento River, from Rio Vista to Freeport (Levy 1978). The word Miwok (miw·yk) generally means "people" in the Miwok language, which is a member of the Penutian language family (Kroeber 1925, Mithun 1999).

The primary sociopolitical unit among the Plains Miwok was the tribelet, comprising the residents of several base settlements and their associated seasonal camps. Each tribelet had a population of about 300 to 500 people and controlled specific territory and resources within it. Each settlement within a tribelet appeared to be the home of localized patrilineage. The tribelet as whole was led by a chieftain which was a hereditary position passed down from father to son. If there was no male heir, the position could be passed to the chief's daughter. The chief acted as an advisor, had the final say in interpersonal disputes, and determined the best time to gather resources (Levy 1978). Settlements typically contained a semi-subterranean earth lodge used for community ritual or social gatherings. Other structures include a semi-subterranean sweathouse, a menstrual hut, and a granary for storing acorns. Families lived in small earth-covered structures (Kroeber 1925, Levy 1978). Ethnohistoric research indicates a Miwok settlement called *Muquelemne* was located on the south bank of Mokelumne River near Lodi (Levy 1978).

The basic subsistence strategy of the Plains Miwok was seasonally mobile hunting and gathering. However, tobacco was cultivated and they also possessed domesticated dogs. Plant foods included acorns, buckeyes, laurel nuts, hazelnuts, seeds, roots, greens, and berries. Acorns, the primary staple, were gathered in the fall and stored through the winter. Seeds were gathered from May through August. Intentional, periodic burning in August ensured an ample supply of seed-bearing annuals and forage for game. The Miwok ate more meat in the winter, when the only plant resources available were those that

had been stored. Hunting was accomplished with the aid of the bow and arrow, traps, and snares. Animal foods consisted of deer; elk; antelope; rodents; waterfowl; quail, pigeons, flickers, and other birds; freshwater mussels and clams; land snails; fish; and insects. Salt was obtained from springs or through trade with people from the Mono Lake area (Bennyhoff 1977; Levy 1978).

The Plains Miwok used a variety of tools made from bone, stone, antler, wood, and textile. Bows were made of wood from a variety of tree species such as oak, ash, willow, pepperwood, maple, or hazel. Arrow heads were fashioned from stone materials such as obsidian obtained through trade, as well as local materials. Typical basketry items were seed beaters; cradles; sifters; rackets used in ball games; and baskets for storing, winnowing, parching, and carrying burdens. Other textiles included mats and cordage (Levy 1978).

Many Miwok groups were subject to missionization efforts during the late eighteenth and early nineteenth centuries. Christian baptisms of Plains Miwok occurred as early as 1811 and did not stop until 1833. During this time over 2,100 Plains Miwok were baptized. As a result of the missionization effort many Plains Miwok were removed from their traditional territory and sent to Mission San Jose located in the present-day city of Fremont. By the beginning of the nineteenth century the Miwok numbered some 19,500 people but by the early twentieth century this number was below one thousand people. Today there are about 3,500 people of Miwok descent, with many living on several reservations in California (White 2019).

3.3 HISTORIC OVERVIEW

The historic period for the state of California generally begins with the establishment of the first Spanish mission and presidio in San Diego in 1769. This marks the beginning of the Spanish period of California history which lasted until 1822 when news of Mexico's independence from Spain in 1821 finally reached California. The Spanish period saw the establishment of a permanent European presence in California in the form of 21 missions located along the coast between San Diego and Sonoma, four military presidios located in San Diego, Monterey, San Francisco and Santa Barbara, and three pueblos (towns) that later became the cities of Los Angeles, San Jose and Santa Cruz (Robinson 1948). The Spanish period ended with Mexican independence from the Spanish crown in 1822. The Mexican period of California history saw the seizure of lands once held by the missions through the Mexican Secularization Act of 1833 and the redistribution of those lands to individuals in the form of land grants known as "ranchos" (Robinson 1948). During this period the Mexican government in California issued about 700 land grants to Mexican citizens and foreign immigrants (Shumway 1988). The outbreak of war between the United States and Mexico and the signing of the Treaty of Guadalupe Hidalgo in 1848 ended the Mexican period and signaled the beginning of the American period of California history. The early American period is marked by the discovery of gold at Sutter's Mill in 1848, resulting in a gold rush that saw a massive influx of settlers from other parts of the United States and around the world, greatly impacting California's native population. In 1869 the transcontinental railroad was completed linking California with the rest of the United States. The gold rush and the establishment of the railroad played major roles in the development of California into a national and worldwide leader in agricultural and industrial production. These early developments also resulted in making California one of the most racially and ethnically diverse states in the Union.

3.3.1 San Joaquin County

The history of San Joaquin County begins in 1850 as one of the original 27 counties of the state of California. The county derives its name from the San Joaquin River, a major river that flows through the region from southern Sierra Nevada Mountains. Early European exploration through the region included

an expedition led by Gabriel Moraga, a Spanish army officer who named the San Joaquin River as well as other natural features as he made his way through the Central Valley. Between 1840 and 1846 the Mexican government in California issued five land grants – Arroyo Seco, Campo de Los Franceses, El Pescadero, Sanjon de los Moquelumnes, and Rancho del Estanislao (also known as Thompson's Rancho) – that encompassed major portions of San Joaquin County (Shumway 1988). The County's generally flat terrain made it a desirable location for building a railroad and in 1866 Congress authorized the Southern Pacific Railroad to build a transcontinental rail route between San Francisco and the Colorado River. By 1870 the Southern Pacific line made its way through San Joaquin County to the City of Modesto (Burns 2007). The establishment of the Southern Pacific and other rail lines through San Joaquin County provided the transportation backbone to move local agricultural produce to markets across the country. Today, agriculture remains an important component of the County's economy.

3.3.2 City of Lodi

The City of Lodi was established in 1869 along the southern banks of Mokelumne River. It was originally named Mokelunme but was changed to Lodi by an act of the California legislature in 1874. Two of Lodi's early residents, Charles Ivory and John Burt established a general store on the corner of Pine and Sacramento Streets. Their store became a magnet for attracting homesteaders and other businesses to the area. Since its inception, agriculture was the backbone of Lodi's economy growing such crops as wheat, watermelon, and grapes. In 1880 some 3.4 million bushels of wheat were grown in San Joaquin County, much of it grown in the Lodi area. Grape vineyards also dominated the area with over two million plants in production in 1899. By the early twentieth century grapes were so important to Lodi that in 1907 residents held the Tokay Carnival to "advertise the beauty and value of the Tokay grape." During the same year a mission-style arch was built at Pine and Sacramento Streets, in the historic core of Lodi, at a cost of $500. The arch still exists today and is a local landmark (Hoover et al. 2002, Lodi Historical Society 2016).

4. BACKGROUND RESEARCH

4.1 CALIFORNIA HISTORICAL RESOURCE INFORMATION SYSTEM

Anza conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Central California Information Center (CCIC) located at California State University, Stanislaus. The search was conducted by CCIC on April 16, 2019, to identify all previous cultural resources work and previously recorded cultural resources within a 0.5-mile radius of the project site (Appendix A). The CHRIS search included a review of the NRHP, CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15-, and 30-minute quadrangle maps.

4.1.1 Previous Studies

The CCIC records search identified two cultural resources studies that were conducted within a 0.5-mile radius of the project site, neither of which are mapped within the project site (Table 1).

Table 1. Previous Cultural Resource Studies within a 0.5-Mile Radius of the Project Site

Report Number	Author	Year	Title	Proximity to Project Site
SJ-00821	Peak, A.	1978	Cultural Resource Assessment of the Proposed City of Lodi C-2 Basin Project San Joaquin County, California	Outside
SJ-04508	Jones and Stokes Associates, Inc.	2001	Historic Property Survey Report, 10-SJO-12, P.M. 15.2/18.0, Charge Unit 173, E.A. OG5700: Kettleman Lane, Route 12 Widening Project	Outside

Source: CCIC, April 2019

4.1.2 Previously Recorded Resources

No cultural resources were recorded within 0.5 mile of the project site (Appendix A).

4.2 NATIVE AMERICAN SCOPING

K.S. Dunbar & Associates, Inc. requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission. The NAHC sent a response on March 11, 2019, stating that a search of the SLF was completed with negative results (i.e., no sacred lands or resources important to Native Americans identified in the search; Appendix B). The NAHC provided a list of seven Native American contacts that may have knowledge regarding Native American cultural resources within or near the project site.

K.S. Dunbar & Associates, Inc. mailed letters and sent emails dated March 12, 2019, to the seven Native American contacts describing the Lodi projects and asking if they had knowledge regarding cultural resources of Native American origin within or near the project sites (Appendix B). The Northern Valley Yokut responded via email on April 2, 2019, requesting that NCPA conduct a SLF search and CCIC records search. The United Auburn Indian Community responded via email on April 24, 2019 and requested formal AB 52 consultation for this project and provided recommended mitigation measures.

Consultation between NCPA and United Auburn Indian Community was formally initiated in a letter dated April 24, 2019. No additional responses have been received as of April 30, 2019.

5. FIELDWORK

5.1 SURVEY METHODS

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt conducted a pedestrian survey of the project site on April 25, 2019. Mr. Hunt surveyed the project site using transects spaced 5 to 10 meters apart and oriented north-south. The entire project site was surveyed.

Mr. Hunt examined all exposed ground surface for artifacts (e.g., flaked stone tools and tool-manufacture debris, ground stone tools, ceramic sherds, fire-affected rock), ecofacts (marine shell, bone), soil discoloration that could indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramic sherds, cut bone). Ground disturbances such as burrows and drainages were visually inspected. Photographs documenting the project site and survey are maintained by Anza in cloud storage online.

5.2 RESULTS

The project site is highly disturbed with a water retention basin, contoured embankments, and berms near the project margins (Photographs 1-3). The water retention basin was full and provided zero ground visibility (Photograph 2). The remainder of the project site was covered by dense mixed grasses and occasional plants with odd bare patches resulting in poor ground visibility (approximately 5-15 percent). The survey was negative; that is, no cultural (i.e., archaeological, historic built, or tribal cultural) resources were identified within the project site.

Photograph 1. Overview of project site towards water retention basin, facing northeast.

Photograph 2. View of west side of water retention basin, facing northeast.

Photograph 3. Overview of project site, facing south.

6. MANAGEMENT RECOMMENDATIONS

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the project site. No further cultural resources work is recommended. The following measures are recommended in the case of the unanticipated discovery of cultural resources during project related ground disturbing activities.

6.1 UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

6.2 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

7. REFERENCES

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Appendix A:
Records Search Summary

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 4/16/2018

Records Search File No.: 11042L
Access Agreement: #540
Project: NCPA Lodi Pixley Solar PV
Project; north side of Auto Center Drive at Pixley Way

Kevin Hunt
Anza Resource
Consultants
603 Seagaze Drive #1018
Oceanside, CA 92054

kevin@anzaresourceconsultants.com

Dear Mr. Hunt:

The Central California Information Center received your Priority Response record search request for the project area/radius referenced above, located on the Lockeford, Lodi North, Lodi South and Waterloo 7.5' quadrangles in San Joaquin County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☒ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Summary Data:

Resources within project area:	None formally reported to the Information Center.
Resources within 1/2 mi radius:	None formally reported to the Information Center. Please note: The historic building inventory for the City of Lodi has not been mapped in GIS; please refer to the attached OHP Historic Property Data File address list provided your for use in determining if any of the properties listed fall within the ½-mile radius.
Reports within project area:	None formally reported to the Information Center.
Reports within 1/2 mi radius:	2: SJ-00821 and SJ-04508

Resource Database Printout (list): ☐ enclosed ☐ not requested ☐ nothing listed

Resource Database Printout (details): ☐ enclosed ☐ not requested ☒ nothing listed

Resource Digital Database Records: ☐ enclosed ☐ not requested ☒ nothing listed

Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details): ☐ enclosed ☒ not requested ☐ nothing listed

Report Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Resource Record Copies: ☐ enclosed ☐ not requested ☒ nothing listed

Report Copies: ☐ enclosed ☒ not requested ☐ nothing listed

OHP Historic Properties Directory: ☒ enclosed ☐ not requested ☐ nothing listed

City of Lodi listing

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed

Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps: ☒ enclosed ☐ not requested ☐ nothing listed

Map Number One, *History of San Joaquin County, California, with Illustrations* (1889; 1968 reprint)
Map of the County of San Joaquin, California (1883)
Lodi 1:62500-scale (1939)
Lodi South 7.5' (1953)

Local Inventories: ☐ enclosed ☐ not requested ☒ nothing listed

GLO and/or Rancho Plat Maps: ☒ enclosed ☐ not requested ☐ nothing listed

T3N R7E, Sheet 41-203 (1953-1865)

Shipwreck Inventory: ☒ not available at CCIC; please go to

http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Note: Billing will be transmitted separately via email by our Financial Services office *($978.45), payable within 60 days of receipt of the invoice.

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: Laurie Marroquin CSU Stanislaus Financial Services
lamarroquin@csustan.edu

Appendix B:
Native American Scoping

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

March 11, 2019

Keith S. Dunbar
K.S. Dunbar & Associates, Inc.

VIA Email to: ksdpe67@gmail.com

RE: NCPA Solar Project 1 – Lodi Sites, San Joaquin County

Dear Mr. Dunbar:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez
for

Katy Sanchez
Associate Environmental Planner

Attachment

Native American Heritage Commission
Native American Contacts List
3/11/2019

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk / Miwok
Sacramento ,CA 95811
rhonda@buenavistatribe.com
(916) 491-0011 Office
(916) 491-0012 Fax

California Valley Miwok Tribe
4620 Shippee Lane — Miwok
Stockton ,CA 95212
(209) 931-4567 Office
(209) 931-4333 Fax

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of Ca
P.O. Box 395 — Miwok
West Point ,CA 95255
l.ewilson@yahoo.com
(209) 293-4179 Office

Ione Band of Miwok Indians
Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699 — Miwok
Plymouth ,CA 95669
sara@ionemiwok.org
(209) 245-5800 Office
(209) 245-6377 Fax

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden ,CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn ,CA 95603 — Miwok
bguth@auburnrancheria.com
(530) 883-2390 Office
(530) 883-2380 Fax

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove ,CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office
(916) 683-6015 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
NCPA Solar Project 1 – Lodi Sites, San Joaquin County.

Fwd: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites

Keith Dunbar <ksdpe67@gmail.com>
Tue 4/2/2019 9:56 AM
To: Kevin Hunt <kevin@anzaresourceconsultants.com>

Kevin,

Good morning!

FYI!

Have a great day,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

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(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

---------- Forwarded message ---------
From: **canutes** <canutes@verizon.net>
Date: Tue, Apr 2, 2019 at 9:41 AM
Subject: Re: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites
To: Keith Dunbar <ksdpe67@gmail.com>

Mr. Dunbar,
The tribe has reviewed the information. The tribe is requesting that the NCPA request a record search from the Native American Heritage Commission and the information center as the area of the proposed project is in an area of sensitivity.

Nototomne Cultural Preservation
Northern Valley Yokut
Katherine
Perez
P.O Box 717
Linden, CA 95236
Cell: 209.649.8972
Email: canutes@verizon.net

Sent from my iPad

On Mar 12, 2019, at 11:54 AM, Keith Dunbar <ksdpe67@gmail.com> wrote:

Katherine Erolinda Perez, Chairperson,

An AB 52 Notification of the Northern California Power Agency's NCPA Solar Project 1 - Lodi Sites is attached in accordance with recommendations of the Native American Heritage Commission.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.

Environmental Engineering

45375 Vista Del Mar

Temecula, CA 92590-4314

(951) 699-2082

Cell: (949) 412-2634

ksdpe67@gmail.com

<AB 52 Tribal Consultation Notification N Valley Yokuts.pdf>

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Consultation for the NCPA Solar Project 1 - Lodi Sites

1 message

Cherilyn Neider <cneider@auburnrancheria.com> Wed, Apr 24, 2019 at 9:25 AM
To: "ksdpe67@gmail.com" <ksdpe67@gmail.com>

Dear Keith S. Dunbar,

Thank you for your letter received notifying us of the NCPA Solar Project 1. I am contacting you in order to request:

- Consultation for this project;
- All existing cultural resource assessments;
- Requests for and results of records searches.

Attached you will find mitigation measures recommended for this project. These measures address inadvertent discoveries and a tribal cultural resources awareness training as part of the Worker Environmental Awareness and Protection training. Please confirm that the attached mitigation measures will be included in the environmental document and the adopted mitigation, monitoring and reporting program. Thank you for involving UAIC in the planning process at an early stage. We ask that you make this correspondence a part of the project record and that you provide UAIC with a copy of the final environmental document and adopted mitigation, monitoring and reporting program.

Thank you,
Cherilyn

Cherilyn Neider
Tribal Historic Preservation
United Auburn Indian Community
530.883.2394

3 attachments

5_Mitigation_Measures_CEQA_Construction_Worker_Awareness_Training.docx
22K

Worker Awareness Brochure.pdf
858K

3_Mitigation_Measures_CEQA_Discoveries.docx
24K

If Human Remains are Found

The protocols for human remains discoveries are similar for other discoveries. **It is important to treat any human remains and the situation in which they are discovered with sensitivity, dignity, and respect.**

1. All work within 100 feet of the find will immediately stop. Work will also stop in areas where there is reason to believe additional human remains could be located (generally determined by a tribal monitor or qualified archaeologist).
2. UAIC and the on-site project/construction will be notified immediately.
3. **The location of any Native American Human remains must stay confidential.**

The United Auburn Indian Community

The United Auburn Indian Community is comprised of Miwok and Southern Maidu (Nisenan) people who are traditionally and culturally affiliated with this geographic area. The Tribe's area of geographic traditional and cultural affiliation encompasses all of Amador, El Dorado, Nevada, Placer, Sacramento, Sutter and Yuba counties, as well as portions of Butte, Plumas, San Joaquin, Sierra, Solano and Yolo counties; which includes the project area.

Contact us at

530-883-2394

https://www.auburnrancheria.com/

United Auburn Indian Community
of the Auburn Rancheria
10720 Indian Hill Road
Auburn CA, 95603

Respect on the Project for Native American Culture

Prepared by:
The United Auburn Indian Community
Preservation Department

Protection Measures and Protocols

The United Auburn Indian Community has developed the measures listed below to protect any unanticipated finds of tribal cultural resources and achieve compliance with federal and state cultural and environmental laws.

1. All work must stop IMMEDIATELY at that location and within 100 feet of the find. Work may be stopped by the tribal monitor or a qualified archaeologist. Work can continue on the rest of the project, as long as project activities stay at least 100 feet away.

2. The on-site project/construction manager will immediately be informed of the possible find and contact a qualified archeologist or tribal monitor of the find.

3. Under NO circumstances will any contractor or employee collect the archaeological material.

4. Over the next days or weeks following the discovery, a number of visitors may be present in order to investigate and evaluate the find. These may include: agency officials, the County Coroner, professional archaeologists, members of the tribe or the California Native American Heritage Commission, the California Office of Historic Preservation, and local representatives of the historical society (if the find is historic in nature). It is important for the integrity of the find and for culturally-appropriate treatment, and so that there is no violation issued, that reasonable methods be taken to ensure that there is no disturbance or damage (including theft) to the find and its context and surrounding areas.

5. It is important to respect the direction of the tribal monitor or other authorized tribal representative regarding identification and treatment of finds and to have some flexibility regarding where work might be able recommence outside of the find location area.

6. The location and nature of the discovery will be strictly confidential, shared only with individuals that need to know.

Cultural Resource Examples

There are many types of archaeological resources. The most common kind of artifacts, or markers of human activity that are found include stone tools, shell, beads, plant remains, animal bones, and a type of dark soil called midden. Archaeology from the historic era can also be found: these kinds of artifacts and features can include bottles, cans, ceramics, building foundations, bricks, and many more.

Tribal Cultural Resource – Awareness Training - Mitigation Measure

A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

Inadvertent Discoveries Mitigation Measure

If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR's to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

Initiation of AB 52 Tribal Consultation

Initiation Date:	April 24, 2019
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency
Consultation Coordinator:	Keith S. Dunbar, P.E., BCEE. Hon.D.WRE., F.ASCE
Tribe:	United Auburn Indian Community
Designated Contact:	Cherilyn Neider, Tribal Historic Preservation
Request Received:	April 24, 2019

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the United Auburn Indian Community.

In response to the AB 52 Tribal Consultation Notification sent to the tribe on February 26, 2019, the Northern California Power Agency (NCPA) has received your formal written request for tribal consultation pursuant to AB 52 for the above-named project.

Initiation of Consultation:

State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) requires the lead agency to begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation. **Please consider this notice as the official initiation of the AB 52 Tribal Consultation process between the Northern California Power Agency and Tribe.** As information becomes available on the proposed project, NCPA's consultation coordinator will schedule a face to face meeting with the tribe's designated contact if so requested

The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impact. The consultation coordinator may be reached by phone (951) 699-2082, or by email at ksdpe67@gmail.com. General comments may be submitted electronically, however, confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, be done by formal letter, in person, or over the telephone. If you wish to submit information in writing, correspondence may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined developable area of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts-direct current (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location		Developable Area (acres)	Estimated Capacity (MW_{dc})
	Latitude, Longitude	Section, Township, Range		
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	Sec 7, T 3 N, R 7 E, MDB&M	15.0	3.51
Lodi – Century Park East/West	38°06'26.66"N, 121°16'21.63"W	Sec 13, T 3 N, R 6 E, MDB&M	2.5	0.63
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	Sec 1, T 3 N, R 6 E, MDB&M	0.9	0.18

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century Park East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Appendix E

AB 52 Consultation

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

AB 52 Tribal Consultation Notification

Date:	March 12, 2019
To:	Silvia Burley, Chairperson
Tribe:	California Valley Miwok Tribe
Subject:	Notification for Tribal Consultation
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the California Valley Miwok Tribe.

Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

Confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter, in person, or over the telephone, the tribes request to consult on the above-named project must be received no later than 30 days from the date of this notification.

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 3 acres which would accommodate a project size of 0.5 megawatts (MW).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 8.3 acres which would accommodate a project size of 1.4 MW.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.15 MW.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location	Developable Area (acres)	Estimated Capacity (MW)
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	13.5	2.25
Lodi – Century East/West	38°06'26.66"N, 121°16'21.63"W	3.0	0.5
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	0.9	0.15

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

AB 52 Tribal Consultation Notification

Date:	February 26, 2019
To:	Sara Dutschke Setshwaelo, Chairperson
Tribe:	Ione Band of Mi-wok Indians
Subject:	Notification for Tribal Consultation
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the Ione Band of Mi-Wok Indians.

Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

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Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

Confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter, in person, or over the telephone, the tribes request to consult on the above-named project must be received no later than 30 days from the date of this notification.

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 3 acres which would accommodate a project size of 0.5 megawatts (MW).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 8.3 acres which would accommodate a project size of 1.4 MW.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.15 MW.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location	Developable Area (acres)	Estimated Capacity (MW)
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	8.3	1.4
Lodi – Century East/West	38°06'26.66"N, 121°16'21.63"W	1.7	0.3
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	0.9	0.15

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

AB 52 Tribal Consultation Notification

Date:	March 12, 2019
To:	Katherine Erolinda Perez, Chairperson
Tribe:	Northern Valley Yokuts Tribe
Subject:	Notification for Tribal Consultation
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the Northern Valley Yokuts Tribe.

Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

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K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

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Overview of the Proposed Project:

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The project will be executed in three phases:

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The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 3 acres which would accommodate a project size of 0.5 megawatts (MW).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 8.3 acres which would accommodate a project size of 1.4 MW.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.15 MW.

Location of the Proposed Project

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Lodi – Century East/West	38°06'26.66"N, 121°16'21.63"W	3.0	0.5
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	0.9	0.15

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

AB 52 Tribal Consultation Notification

Date:	March 12, 2019
To:	Administration
Tribe:	California Valley Miwok Tribe AKA Sheep Rancheria of Me-Wuk Indians of CA
Subject:	Notification for Tribal Consultation
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the California Valley Miwok Tribe AKA Sheep Rancheria of Me-Wuk Indians of CA.

Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

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(951) 699-2082
E-Mail: ksddpe67@gmail.com

Confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, is done by formal letter, in person, or over the telephone, the tribes request to consult on the above-named project must be received no later than 30 days from the date of this notification.

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 3 acres which would accommodate a project size of 0.5 megawatts (MW).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 8.3 acres which would accommodate a project size of 1.4 MW.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.15 MW.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location	Developable Area (acres)	Estimated Capacity (MW)
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	13.5	2.25
Lodi – Century East/West	38°06'26.66"N, 121°16'21.63"W	3.0	0.5
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	0.9	0.15

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

AB 52 Tribal Consultation Notification

Date:	February 26, 2019
To:	Thomas Tortez, Tribal Chairman
Tribe:	Torres Martinez Desert Cahuilla Indians
Subject:	Notification for Tribal Consultation
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the Torres Martinez Desert Cahuilla Indians.

Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

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Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 3 acres which would accommodate a project size of 0.5 megawatts (MW).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 8.3 acres which would accommodate a project size of 1.4 MW.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.15 MW.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location	Developable Area (acres)	Estimated Capacity (MW)
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	8.3	1.4
Lodi – Century East/West	38°06'26.66"N, 121°16'21.63"W	1.7	0.3
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	0.9	0.15

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

AB 52 Tribal Consultation Notification

Date:	February 26, 2019
To:	Gene Whitehouse, Chairman
Tribe:	United Auburn Indian Community
Subject:	Notification for Tribal Consultation
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the United Auburn Indian Community.

Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

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Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 3 acres which would accommodate a project size of 0.5 megawatts (MW).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 8.3 acres which would accommodate a project size of 1.4 MW.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.15 MW.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location	Developable Area (acres)	Estimated Capacity (MW)
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	8.3	1.4
Lodi – Century East/West	38°06'26.66"N, 121°16'21.63"W	1.7	0.3
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	0.9	0.15

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

AB 52 Tribal Consultation Notification

Date:	February 26, 2019
To:	Antonio Ruiz, Cultural Resources Officer
Tribe:	Wilton Rancheria
Subject:	Notification for Tribal Consultation
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the Wilton Rancheria.

Request for Consultation:

California law under Assembly Bill 52 (Public Resources Code §21080.3.1) now allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. This request must be in writing to NCPA and identify a lead contact person. NCPA will begin the consultation process within 30 days of receiving the tribes request for consultation. The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impacts. If you wish to informally submit information, written comments may be sent to:

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Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

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NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined size of these sites is 3 acres which would accommodate a project size of 0.5 megawatts (MW).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 8.3 acres which would accommodate a project size of 1.4 MW.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.15 MW.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location	Developable Area (acres)	Estimated Capacity (MW)
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	8.3	1.4
Lodi – Century East/West	38°06'26.66"N, 121°16'21.63"W	1.7	0.3
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	0.9	0.15

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Notification - NCPA Solar Project 1 - Lodi Sites

2 messages

Keith Dunbar <ksdpe67@gmail.com> Tue, Mar 12, 2019 at 11:54 AM
To: canutes@verizon.net
Cc: Aaron Werner <Aaron.Werner@ncpa.com>

Katherine Erolinda Perez, Chairperson,

An AB 52 Notification of the Northern California Power Agency's NCPA Solar Project 1 - Lodi Sites is attached in accordance with recommendations of the Native American Heritage Commission.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, CA 92590-4314
(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

AB 52 Tribal Consultation Notification N Valley Yokuts.pdf
1026K

canutes <canutes@verizon.net> Tue, Apr 2, 2019 at 9:41 AM
To: Keith Dunbar <ksdpe67@gmail.com>

Mr. Dunbar,
The tribe has reviewed the information. The tribe is requesting that the NCPA request a record search from the Native American Heritage Commission and the information center as the area of the proposed project is in an area of sensitivity.

Nototomne Cultural Preservation
Northern Valley Yokut
Katherine
Perez
P.O Box 717
Linden, CA 95236
Cell: 209.649.8972
Email: canutes@verizon.net

Sent from my iPad
[Quoted text hidden]

<AB 52 Tribal Consultation Notification N Valley Yokuts.pdf>

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Consultation for the NCPA Solar Project 1 - Lodi Sites

1 message

Cherilyn Neider <cneider@auburnrancheria.com> Wed, Apr 24, 2019 at 9:25 AM
To: "ksdpe67@gmail.com" <ksdpe67@gmail.com>

Dear Keith S. Dunbar,

Thank you for your letter received notifying us of the NCPA Solar Project 1. I am contacting you in order to request:

- Consultation for this project;
- All existing cultural resource assessments;
- Requests for and results of records searches.

Attached you will find mitigation measures recommended for this project. These measures address inadvertent discoveries and a tribal cultural resources awareness training as part of the Worker Environmental Awareness and Protection training. Please confirm that the attached mitigation measures will be included in the environmental document and the adopted mitigation, monitoring and reporting program. Thank you for involving UAIC in the planning process at an early stage. We ask that you make this correspondence a part of the project record and that you provide UAIC with a copy of the final environmental document and adopted mitigation, monitoring and reporting program.

Thank you,
Cherilyn

Cherilyn Neider
Tribal Historic Preservation
United Auburn Indian Community
530.883.2394

3 attachments

5_Mitigation_Measures_CEQA_Construction_Worker_Awareness_Training.docx
22K

Worker Awareness Brochure.pdf
858K

3_Mitigation_Measures_CEQA_Discoveries.docx
24K

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

Initiation of AB 52 Tribal Consultation

Initiation Date:	April 24, 2019
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency
Consultation Coordinator:	Keith S. Dunbar, P.E., BCEE. Hon.D.WRE., F.ASCE
Tribe:	United Auburn Indian Community
Designated Contact:	Cherilyn Neider, Tribal Historic Preservation
Request Received:	April 24, 2019

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the United Auburn Indian Community.

In response to the AB 52 Tribal Consultation Notification sent to the tribe on February 26, 2019, the Northern California Power Agency (NCPA) has received your formal written request for tribal consultation pursuant to AB 52 for the above-named project.

Initiation of Consultation:

State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) requires the lead agency to begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation. **Please consider this notice as the official initiation of the AB 52 Tribal Consultation process between the Northern California Power Agency and Tribe.** As information becomes available on the proposed project, NCPA's consultation coordinator will schedule a face to face meeting with the tribe's designated contact if so requested

The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impact. The consultation coordinator may be reached by phone (951) 699-2082, or by email at ksdpe67@gmail.com. General comments may be submitted electronically, however, confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, be done by formal letter, in person, or over the telephone. If you wish to submit information in writing, correspondence may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
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- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined developable area of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts-direct current (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location		Developable Area (acres)	Estimated Capacity (MW_{dc})
	Latitude, Longitude	Section, Township, Range		
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	Sec 7, T 3 N, R 7 E, MDB&M	15.0	3.51
Lodi – Century Park East/West	38°06'26.66"N, 121°16'21.63"W	Sec 13, T 3 N, R 6 E, MDB&M	2.5	0.63
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	Sec 1, T 3 N, R 6 E, MDB&M	0.9	0.18

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century Park East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

MIWOK United Auburn Indian Community
MAIDU of the Auburn Rancheria

Gene Whitehouse, Chairman | John L. Williams, Vice Chairman | Calvin Moman, Secretary | Jason Camp, Treasurer | Gabe Cayton, Council Member

April 15, 2019

Keith S. Dunbar
Environmental Engineer
K.S. Dunbar & Associates, Inc.
45375 Vista Del Mar
Temecula, CA 92590-4314

RE: AB 52 Consultation Request for the NCPA Solar Project 1 - Lodi Sites Project, Lodi, CA

Dear Environmental Engineer Keith S. Dunbar,

The United Auburn Indian Community (UAIC) received a letter from K.S. Dunbar & Associates, Inc. dated 3/1/2019, formally notifying us of a proposed project, the NCPA Solar Project 1 - Lodi Sites Project in Lodi, and an opportunity to consult under AB 52. This letter is notice that UAIC would like to initiate consultation under AB 52.

This letter is also a formal request to allow UAIC tribal representatives to observe and participate in all cultural resource surveys, including initial pedestrian surveys for the project. Please send us all existing cultural resource assessments, as well as requests for, and the results of, any records searches that may have been conducted prior to our first consultation meeting. If tribal cultural resources are identified within the project area, it is UAIC's policy that tribal monitors must be present for all ground disturbing activities. Finally, please be advised that UAIC's strong preference is to preserve tribal cultural resources in place and avoid them whenever possible. Subsurface testing and data recovery must not occur without first consulting with UAIC and receiving UAIC's written consent.

In the letter, Environmental Engineer Keith S. Dunbar is identified as the lead contact person for consultation on the proposed project. Melodi McAdams, our Cultural Resources Supervisor, will be UAIC's point of contact for this consultation. Please contact Ms. McAdams, Cultural Resources Supervisor, at (530) 328-1109 or email at mmcadams@auburnrancheria.com if you have any questions.

Thank you for involving UAIC in the planning process at an early stage. We ask that you make this letter a part of the project record and we look forward to working with you to ensure that tribal cultural resources are protected.

Sincerely,

Gene Whitehouse
Chairman

CC: Matthew Moore, UAIC Tribal Historic Preservation Officer

K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, CA 92590-4314
(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

Erica D. Dunbar, President
Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
Chief Executive Officer

May 2, 2019

Gene Whitehouse, Chairman
United Auburn Indian Community
10720 Indian Hill Road
Auburn, California 95603

AB 52 Consultation Request
NCPA Solar Project 1 – Lodi Sites

Chairman Whitehouse:

Thank you for your April 15, 2019 letter in which you requested the initiation of consultation under the provisions of AB 52 on the subject project. (Note: Your letter was just received in today's mail.)

As you may be aware, on April 24, 2019, we received an email from Cherilyn Neider of your Tribal Historic Preservation Department also requesting the initiation of consultation. A formal notification of the initiation of consultation was emailed to her on the same day.

We have now completed the cultural resources assessments at each of the three proposed solar sites in Lodi (i.e., Century Park East/West, Pixley Basin and Parking Garage). You will be pleased to know that, based on those studies, we are recommending a finding of ***no impact to historical resources*** under CEQA. In addition, no further cultural resources work is recommended. You will also be pleased to know that we are recommending that the Mitigation Monitoring and Reporting Program for this Project include cultural resources mitigation measures as outlined in the attached reports prepared by Anza Resources Consultants.

In accordance with the terms of §21080.3.2. (b) of the Public Resources Code, consultation on this Project is concluded as the Northern California Power Agency has included the intent of the recommended mitigation measures submitted by Ms. Neider.

If you have any questions on this, please contact me.

Sincerely,

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE

Attachments

cc: Melodi McAdams, Cultural Resources Supervisor
Cherilyn Neider, Tribal Historic Preservation
Ron Yuen, Director of Engineering, Generation Services, NCPA

CULTURAL RESOURCES SURVEY
FOR THE
NORTHERN CALIFORNIA POWER AGENCY
SOLAR PROJECT 1 – LODI CENTURY PARK SITE
SAN JOAQUIN COUNTY, CALIFORNIA

Prepared for
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USGS Quadrangle
Lodi South, California
Anza Project No. 19-0005

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EXECUTIVE SUMMARY

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California. This study regards the Lodi Century Park Project, which is made up of two land parcels with two separate points of interconnection. Century Park East is located on approximately 2.9 acres of City of Lodi property. Century Park East is bordered by an industrial park to the north, recreational fields to the south, East Century Boulevard to the east, and the Union Pacific Railroad to the west. Century Park West is located on approximately 1.7 acres of City of Lodi property. Century Park West is bordered by residences to the north and south, the Union Pacific Railroad to the east, and West Century Boulevard to the west. The project (both Century Park East and Century Park West combined) was modeled with a total photovoltaic output of 300 kilowatts (kW) alternating current. The proposed project is subject to the California Environmental Quality Act (CEQA) with NCPA serving as lead agency.

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the project site. Anza recommends a finding of ***no impact to historical resources*** under CEQA. No further cultural resources study is recommended; however, the following standard measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project related ground disturbing activities.

CULTURAL RESOURCES WORKER SENSITIVITY TRAINING

Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.

UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site

within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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1. INTRODUCTION

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California (Figure 1). The NCPA Solar Project 1 includes the following projects: Century Park East/West, Pixley Basin, and Parking Structure, and is described below (Section 1.1). This study has been prepared in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines (Section 1.2). This cultural resources study includes a cultural resources records search, a summary of Native American scoping for the project, pedestrian survey, and the preparation of this report following the *Archaeological Resources Management Report (ARMR): Recommended Content and Format* guidelines (California Office of Historic Preservation 1990).

1.1 PROJECT DESCRIPTION

The objective of the NCPA Solar Project 1 is to develop a fleet of photovoltaic (PV) solar power plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by NCPA as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial five to seven years of operation, NCPA plans to purchase the plants.

NCPA has completed the site selection and screening portion of the project and the City of Lodi selected three sites for development: Century East/West, Pixley Basin, and Parking Structure sites. The Century Park Project is made up of two land parcels with two separate points of interconnection. Century Park East is located on approximately 2.9 acres of City of Lodi property. Century Park East is bordered by an industrial park to the north, recreational fields to the south, East Century Boulevard to the east, and the Union Pacific Railroad to the west. Century Park West is located on approximately 1.7 acres of City of Lodi property. Century Park West is bordered by residences to the north and south, the Union Pacific Railroad to the east, and West Century Boulevard to the west. The project (both Century Park East and Century Park West combined) was modeled with a total PV output of 300 kW alternating current.

1.2 REGULATORY SETTING

1.2.1 State

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, the probability is high that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Assembly Bill 52 of 2014 (AB 52) took effect July 1, 2015, and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." According to the legislative intent for AB 52, "tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource. See also PRC 21074 (a)(1)(A)-(B).

1.3 PERSONNEL

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt requested the Sacred Lands File search, conducted the survey, and was the primary author of this report. Principal Investigator Katherine Collins, M.A., Registered Professional Archaeologist (RPA), coauthored this report and served as principal investigator for the study. Ms. Collins meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology (National Park Service 1983). GIS Specialist Spencer Bietz prepared all maps and figures.

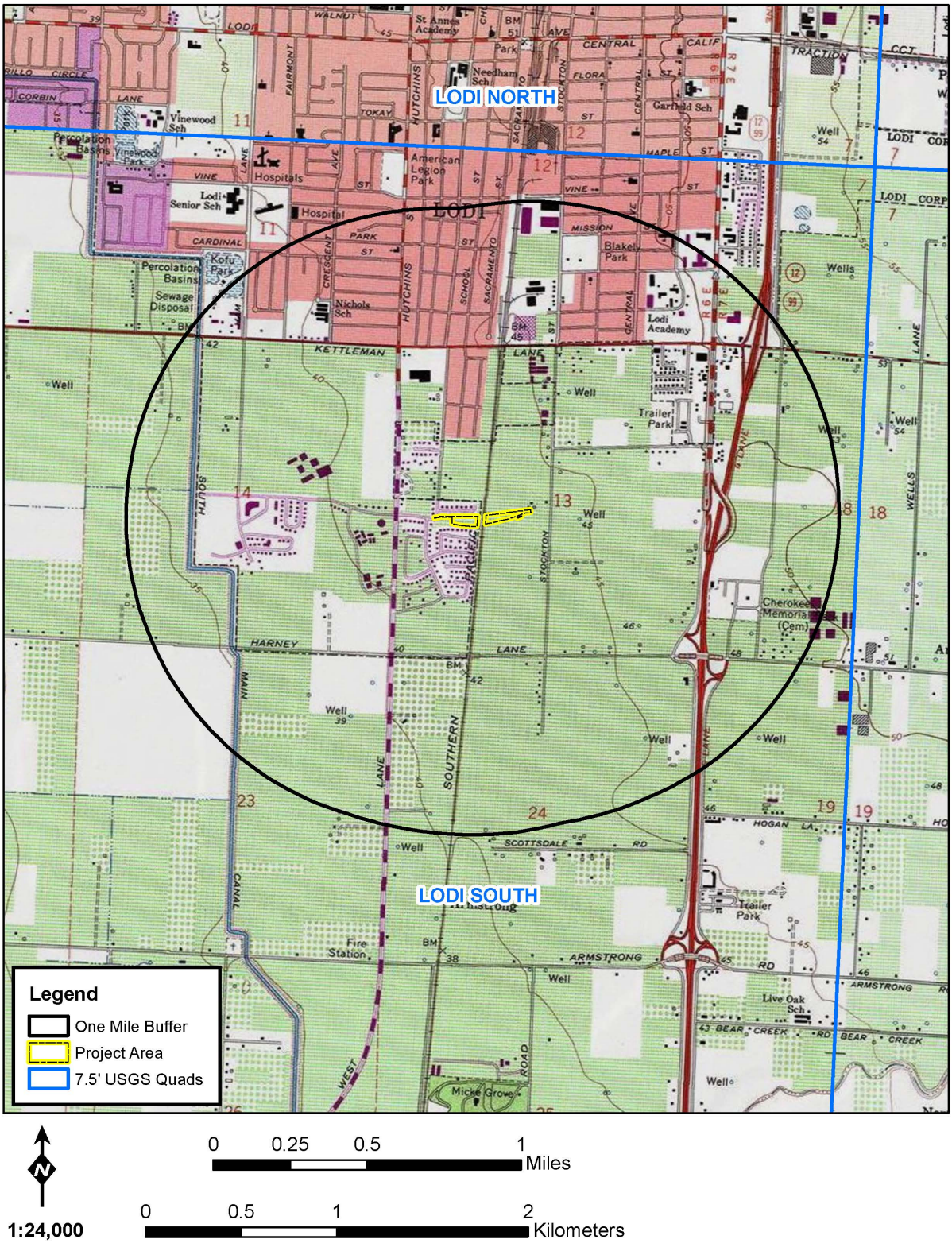

Figure 1. Project Location Map

2. ENVIRONMENTAL SETTING

The Lodi Century Park Project Site is located the northern San Joaquin Valley, famed for its agriculture. Characteristic vegetation communities in the region include agricultural habitats and annual grassland, with much smaller amounts of freshwater emergent wetland, lacustrine, water, and valley foothill riparian habitats (City of Lodi 2009:3.4-2). Agricultural lands support a broad variety of fauna including California ground squirrel, California vole, red-winged blackbird, northern harrier, white-tailed kite, and yellow-billed magpie. Urban areas support fauna such as American crow, rock dove, American robin, Brewer's blackbird, house finch, house sparrow, northern mockingbird, mourning dove, raccoon, Virginia opossum, and striped skunk. Prior to agricultural and urban development the San Joaquin Valley hosted a broad variety of additional species.

Lodi averages 19 inches of rain annually. Lodi has a hot-summer Mediterranean climate including cool, wet winters, often with dense ground fog, and hot, dry summers. The project site is underlain by the upper member of the Pleistocene Quarternary Modesto formation, composed of undivided alluvium (Dawson 2009).

3. CULTURAL SETTING

3.1 PREHISTORIC OVERVIEW

The prehistory of the Central Valley is generally divided into three main periods: Paleoindian, Archaic, and Emergent. The Archaic is further divided into the Lower, Middle, and Upper (Fredrickson 1973, 1974). This chronological framework is used by researchers to understand how prehistoric cultures adapted and coped with environmental and social change. Within this framework researchers recognized certain sets of cultural and technological traits that appeared to span long periods of time and covered large areas. These sets of traits were referred to as either "horizons" or "patterns" in the literature. With smaller (local) units of patterns referred to as "aspects" and "phases" (Fredrickson 1974, Moratto 1984, Rosenthal et al. 2007). Below is a brief overview of prehistoric occupation history in the San Joaquin Valley portion of the Central Valley.

The **Paleoindian Period** (11,550 to 8550 cal B.C.) was characterized by the arrival of small, high-mobile hunter-gathered groups. A characteristic element of this period is the use of fluted points to bring down large game animals. Evidence of Paleoindian occupation in the San Joaquin Valley have been found at Tracy Lake, Wolfson mound (CA-MER-215) in Merced County, and the Tulare Lake basin (Moratto 1984, Rosenthal et al. 2007).

During the **Archaic Period** (8550 cal B.C. to A.D. 1100) climatic changes preceiptated the drying of pluvial lakes resulting in changes in substance strategies employed by the native populations. By the Middle Archaic (5550 to 550 cal B.C.) a set of cultural traits known as the Windmiller Pattern emerged at several sites in the San Joaquin Valley (Rosethal et al. 2007). The presence of milling stones such as manos and metates often characterize Windmiller sites, although mortar and pestles have also been found, indicating that acorns and/or various seeds formed an important part of the diet (Moratto 1984, Rosenthal et al 2007). A variety of faunal remains have been documented at Windmiller Pattern sites including Tule elk, mule deer, and pronghorn, as well as smaller game such as rabbit, water birds, raptors, and rodents (Rosenthal et al. 2007). Also, the presence of angling hooks and baked clay artifacts possibly used as net or line sinkers, along with the remains of sturgeon, salmon, and smaller fishes, indicate that fishing was an additional source of food (Fredrickson 1973; Heizer 1949; Ragir 1972). Items such as net sinkers, pipes, and discoids, as well as cooking "stones" were made of baked clay. Ground and polished charmstones, impressions of twined basketry, shell beads, and bone tools also have been found at Windmiller Pattern sites. Some items, such as shell beads, obsidian tools, and quartz crystals, were obtained by trade.

The archaeological record at Windmiller Pattern sites indicates people practiced a mixed procurement strategy of both game and wild plants, with the addition of acorns and/or seeds. The mixed exploitation of a wide range of natural resources ties into a seasonal foraging strategy. Populations likely occupied the lower elevations of the Sacramento Valley in the winter months and shifted to higher elevations during the summer (Moratto 1984:206). Characteristic Windmiller mortuary practices included ventrally and dorsally extended burials, accompanied by grave goods, in cemeteries that were separate from the habitation sites (Ragir 1972, Rosenthal et al. 2007). Recent research suggests the Windmiller culture persisted into the Upper Archaic (550 cal B.C. to A.D. 1100) in the San Joaquin Valley and was not replaced by the Berkeley Pattern, as it had in other places. Several sites in San Joaquin and Merced Counties (CA-SJO-17, SJO-87, SJO-106, SJO-154, SJO-246, MER-3, MER-215, and MER-323) continued the characteristic Windmiller mortuary practice of extended burials until sometime between 800 and 1,000 years ago (Rosenthal el al. 2007:156).

During the **Emergent Period** (cal A.D. 1100 to Historic) a new set of cultural traits emerged in the Central Valley known as the Augustine Pattern, although there is sporadic evidence of this cultural pattern in the San Joaquin Valley (Moratto 1984, Rosenthal et al. 2007:157). The Pacheco Complex on the western edge of the valley is the only well-defined example in this region. The Augustine Pattern is evidenced by a substantial increase in the intensity of subsistence exploitation, including fishing, hunting, and gathering (particularly the acorn (Moratto 1984:211–214). These changes begin to reflect the cultural pattern known from historic period Native American groups in the area. Augustine Pattern tools and cooking implements included shaped mortars and pestles, hopper mortars, bone awls used for producing coiled baskets, and the bow and arrow. Pottery vessels, known as Cosumnes brownware, are found in some parts of the Central Valley and most likely developed during this period from the prior baked clay industry.

During this period, an increase in sedentism led to the development of social stratification, accompanied by a shift to elaborate ceremonial and social organization. Exchange networks, with the use of clamshell disk beads as currency, also developed during the Augustine Pattern. Mortuary practices during this period included flexed burials and pre-interment burning of offerings in a grave pit, as well as cremation of high-status individuals (Fredrickson 1973:127–129; Moratto 1984:211). In the San Joaquin Valley villages and smaller communities developed along side-streams of the foothills, and river channels and sloughs in the valley. The introduction of the bow and arrow occurred during this time and one of California's most unique point types, the Stockton serrated edge, was developed in the region (Rosenthal el al. 2007).

3.2 ETHNOGRAPHIC OVERVIEW

The project site is located in the traditional territory of the Plains Miwok people. The Plains Miwok were one of six culture groups that spoke a Miwokan language in California. Other Miwok-speaking groups included the Bay Miwok (Saclan), Northern Sierra Miwok, Central Sierra Miwok, Southern Sierra Miwok, and Coast Miwok. Plains Miwok territory was centered in the Central Valley occupying an area between the lower reaches of the Mokelumne and Cosumnes Rivers and the banks of the Sacramento River, from Rio Vista to Freeport (Levy 1978). The word Miwok (miw·yk) generally means "people" in the Miwok language, which is a member of the Penutian language family (Kroeber 1925, Mithun 1999).

The primary sociopolitical unit among the Plains Miwok was the tribelet, comprising the residents of several base settlements and their associated seasonal camps. Each tribelet had a population of about 300 to 500 people and controlled specific territory and resources within it. Each settlement within a tribelet appeared to be the home of localized patrilineage. The tribelet as whole was led by a chieftain which was a hereditary position passed down from father to son. If there was no male heir, the position could be passed to the chief's daughter. The chief acted as an advisor, had the final say in interpersonal disputes, and determined the best time to gather resources (Levy 1978). Settlements typically contained a semi-subterranean earth lodge used for community ritual or social gatherings. Other structures include a semi-subterranean sweathouse, a menstrual hut, and a granary for storing acorns. Families lived in small earth-covered structures (Kroeber 1925, Levy 1978). Ethnohistoric research indicates a Miwok settlement called *Muquelemne* was located on the south bank of Mokelumne River near Lodi (Levy 1978).

The basic subsistence strategy of the Plains Miwok was seasonally mobile hunting and gathering. However, tobacco was cultivated and they also possessed domesticated dogs. Plant foods included acorns, buckeyes, laurel nuts, hazelnuts, seeds, roots, greens, and berries. Acorns, the primary staple, were gathered in the fall and stored through the winter. Seeds were gathered from May through August. Intentional, periodic burning in August ensured an ample supply of seed-bearing annuals and forage for game. The Miwok ate more meat in the winter, when the only plant resources available were those that

had been stored. Hunting was accomplished with the aid of the bow and arrow, traps, and snares. Animal foods consisted of deer; elk; antelope; rodents; waterfowl; quail, pigeons, flickers, and other birds; freshwater mussels and clams; land snails; fish; and insects. Salt was obtained from springs or through trade with people from the Mono Lake area (Bennyhoff 1977; Levy 1978).

The Plains Miwok used a variety of tools made from bone, stone, antler, wood, and textile. Bows were made of wood from a variety of tree species such as oak, ash, willow, pepperwood, maple, or hazel. Arrow heads were fashioned from stone materials such as obsidian obtained through trade, as well as local materials. Typical basketry items were seed beaters; cradles; sifters; rackets used in ball games; and baskets for storing, winnowing, parching, and carrying burdens. Other textiles included mats and cordage (Levy 1978).

Many Miwok groups were subject to missionization efforts during the late eighteenth and early nineteenth centuries. Christian baptisms of Plains Miwok occurred as early as 1811 and did not stop until 1833. During this time over 2,100 Plains Miwok were baptized. As a result of the missionization effort many Plains Miwok were removed from their traditional territory and sent to Mission San Jose located in the present-day city of Fremont. By the beginning of the nineteenth century the Miwok numbered some 19,500 people but by the early twentieth century this number was below one thousand people. Today there are about 3,500 people of Miwok descent, with many living on several reservations in California (White 2019).

3.3 HISTORIC OVERVIEW

The historic period for the state of California generally begins with the establishment of the first Spanish mission and presidio in San Diego in 1769. This marks the beginning of the Spanish period of California history which lasted until 1822 when news of Mexico's independence from Spain in 1821 finally reached California. The Spanish period saw the establishment of a permanent European presence in California in the form of 21 missions located along the coast between San Diego and Sonoma, four military presidios located in San Diego, Monterey, San Francisco and Santa Barbara, and three pueblos (towns) that later became the cities of Los Angeles, San Jose and Santa Cruz (Robinson 1948). The Spanish period ended with Mexican independence from the Spanish crown in 1822. The Mexican period of California history saw the seizure of lands once held by the missions through the Mexican Secularization Act of 1833 and the redistribution of those lands to individuals in the form of land grants known as "ranchos" (Robinson 1948). During this period the Mexican government in California issued about 700 land grants to Mexican citizens and foreign immigrants (Shumway 1988). The outbreak of war between the United States and Mexico and the signing of the Treaty of Guadalupe Hidalgo in 1848 ended the Mexican period and signaled the beginning of the American period of California history. The early American period is marked by the discovery of gold at Sutter's Mill in 1848, resulting in a gold rush that saw a massive influx of settlers from other parts of the United States and around the world, greatly impacting California's native population. In 1869 the transcontinental railroad was completed linking California with the rest of the United States. The gold rush and the establishment of the railroad played major roles in the development of California into a national and worldwide leader in agricultural and industrial production. These early developments also resulted in making California one of the most racially and ethnically diverse states in the Union.

3.3.1 San Joaquin County

The history of San Joaquin County begins in 1850 as one of the original 27 counties of the state of California. The county derives its name from the San Joaquin River, a major river that flows through the region from southern Sierra Nevada Mountains. Early European exploration through the region included

an expedition led by Gabriel Moraga, a Spanish army officer who named the San Joaquin River as well as other natural features as he made his way through the Central Valley. Between 1840 and 1846 the Mexican government in California issued five land grants – Arroyo Seco, Campo de Los Franceses, El Pescadero, Sanjon de los Moquelumnes, and Rancho del Estanislao (also known as Thompson's Rancho) – that encompassed major portions of San Joaquin County (Shumway 1988). The County's generally flat terrain made it a desirable location for building a railroad and in 1866 Congress authorized the Southern Pacific Railroad to build a transcontinental rail route between San Francisco and the Colorado River. By 1870 the Southern Pacific line made its way through San Joaquin County to the City of Modesto (Burns 2007). The establishment of the Southern Pacific and other rail lines through San Joaquin County provided the transportation backbone to move local agricultural produce to markets across the country. Today, agriculture remains an important component of the County's economy.

3.3.2 City of Lodi

The City of Lodi was established in 1869 along the southern banks of Mokelumne River. It was originally named Mokelunme but was changed to Lodi by an act of the California legislature in 1874. Two of Lodi's early residents, Charles Ivory and John Burt established a general store on the corner of Pine and Sacramento Streets. Their store became a magnet for attracting homesteaders and other businesses to the area. Since its inception, agriculture was the backbone of Lodi's economy growing such crops as wheat, watermelon, and grapes. In 1880 some 3.4 million bushels of wheat were grown in San Joaquin County, much of it grown in the Lodi area. Grape vineyards also dominated the area with over two million plants in production in 1899. By the early twentieth century grapes were so important to Lodi that in 1907 residents held the Tokay Carnival to "advertise the beauty and value of the Tokay grape." During the same year a mission-style arch was built at Pine and Sacramento Streets, in the historic core of Lodi, at a cost of $500. The arch still exists today and is a local landmark (Hoover et al. 2002, Lodi Historical Society 2016).

4. BACKGROUND RESEARCH

4.1 CALIFORNIA HISTORICAL RESOURCE INFORMATION SYSTEM

Anza conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Central California Information Center (CCIC) located at California State University, Stanislaus. The search was conducted by CCIC on April 16, 2019, to identify all previous cultural resources work and previously recorded cultural resources within a 0.5-mile radius of the project site (Appendix A). The CHRIS search included a review of the NRHP, CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15-, and 30-minute quadrangle maps.

4.1.1 Previous Studies

The CCIC records search identified 13 cultural resources studies that were conducted within a 0.5-mile radius of the project site, two of which are mapped adjacent between the two project site loci within the Union Pacific Railroad corridor (Table 1).

Table 1. Previous Cultural Resource Studies within a 0.5-Mile Radius of the Project Site

Report Number	Author	Year	Title	Proximity to Project Site
SJ-03995	Nelson, W. J.	2000	Cultural Resource Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield	Adjacent (between East and West sites)
SJ-04094	Davis-King, Shelley	2000	Department of Transportation Negative Archaeological Survey Report: 10-San Joaquin, Southbound West Lane Harney Lane to Armstrong Road.	Outside
SJ-04508	Jones and Stokes Associates, Inc.	2001	Historic Property Survey Report, 10-SJO-12, P.M. 15.2/18.0, Charge Unit 173, E.A. OG5700: Kettleman Lane, Route 12 Widening Project. (Also includes Historic Archaeological Survey Report and Negative Archaeological Survey Report).	Outside
SJ-06005	Billat, L.	2006	New Tower ("NT") Submission Packet, FCC Form 620 Earth Touch, Inc., Maggio Cir. SC-13353A, San Joaquin County, CA	Outside
SJ-06123	Jackson, R. and P. Welsh	2006	Cultural Resources Inventory, Reynolds Ranch / Blue Shield Development Plan, City of Lodi, San Joaquin County, California.	Outside
SJ-06345	SWCA Environmental Consultants	2006	Cultural Resources Final Report of Monitoring and Findings for the QWest Network Construction Project, State of California. SWCA Project No. 10715-180.	Adjacent (between East and West sites)
SJ-07719	Jordan, Nichole	2012	Historic Property Survey Report, Harney Lane/ Union Pacific Railroad Grade Separation Lodi, San Joaquin County, California, Federal Aid Project No. STPL-5154 (041).	Outside

Report Number	Author	Year	Title	Proximity to Project Site
SJ-07719	Jordan, N.	2012	Archaeological Survey Report for the Harney Lane/Union Pacific Railroad Grade Separation Project, Lodi, San Joaquin County, California.	Outside
SJ-07719	Hibma, M.	2012	Historical Resources Evaluation Report for the Harney Lane/Union Pacific Grade Separation Project, Lodi, San Joaquin County, California Federal Project No. STPL 5154 (041).	Outside
SJ-08111	Jordan, N., and K. Smith	2015	Supplemental Historic Property Survey Report for the Harney Lane/Union Pacific Railroad Grade Separation Project, City of Lodi, San Joaquin County; California Federal Project No. STPL 554 (041), Caltrans District 10.	Outside
SJ-08111	Jordan, N. and Smith, K.	2015	Supplemental Archaeological Survey Report for the Harney Lane/Union Pacific Railroad Grade Separation Project, City of Lodi, San Joaquin County, California; Federal Aid Project No. STPL 5154 (041), Caltrans District 10.	Outside
SJ-08642	Vallaire, K.	2016	Supplemental Historic Property Survey Report, 10-SJ-STPL 5154(040). City of Lodi Department of Public Works, New Fur-Lane Bridge Structure for Harney Lane over the Union Pacific Railroad Tracks. San Joaquin County, California	Outside
SJ-08642	Vallaire, K., and M. Falke	2015	Second Supplemental Archaeological Survey Report, Harney Lane/Union Pacific Railroad Grade Separation Project, City of Lodi, San Joaquin County, California, Federal Aid Project STPL 5154(040), Caltrans District 10	Outside

Source: CCIC, April 2019

4.1.2 Previously Recorded Resources

The CCIC records search identified three cultural resources previously recorded within a 0.5-mile radius of the project site (Table 2). One of the resources (P-39-000002) is an unrecorded segment of the historic period Southern Pacific San Joaquin Valley Mainline – now the Union Pacific Railroad – which is adjacent and between the Century East and West project site loci. The other two resources are historic period buildings at least 0.25 mile from the project site.

Table 2. Previously Recorded Cultural Resources within 0.5-Mile of the Project Site

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-000002	CA-SJO-000250H	Southern Pacific Railroad in San Joaquin County	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	25 instances between 1993 and 2012	Adjacent between two loci
P-39-005072	n/a	Barron (Mable) and Beckman Schools	Insufficient information	1991 (San Joaquin County Superintendent of Schools)	Approximately 0.25 mile northwest

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-005144	n/a	Agricultural Shop/ Garage	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	2012 (Hibma, Michael, LSA Associates, Inc.)	Approximately 0.5 mile south

Source: CCIC, April 2019

4.2 NATIVE AMERICAN SCOPING

K.S. Dunbar & Associates, Inc. requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission. The NAHC sent a response on March 11, 2019, stating that a search of the SLF was completed with negative results (i.e., no sacred lands or resources important to Native Americans identified in the search; Appendix B). The NAHC provided a list of seven Native American contacts that may have knowledge regarding Native American cultural resources within or near the project site.

K.S. Dunbar & Associates, Inc. mailed letters and sent emails dated March 12, 2019, to the seven Native American contacts describing the Lodi projects and asking if they had knowledge regarding cultural resources of Native American origin within or near the project sites (Appendix B). The Northern Valley Yokut responded via email on April 2, 2019, requesting that NCPA conduct a SLF search and CCIC records search. The United Auburn Indian Community responded via email on April 24, 2019 and requested formal AB 52 consultation for this project and provided recommended mitigation measures. Consultation between NCPA and United Auburn Indian Community was formally initiated in a letter dated April 24, 2019. No additional responses have been received as of April 30, 2019.

5. FIELDWORK

5.1 SURVEY METHODS

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt conducted a pedestrian survey of the project site on April 25, 2019. Mr. Hunt surveyed the project site using transects spaced 5 to 10 meters apart and oriented north-south. The entire project site was surveyed.

Mr. Hunt examined all exposed ground surface for artifacts (e.g., flaked stone tools and tool-manufacture debris, ground stone tools, ceramic sherds, fire-affected rock), ecofacts (marine shell, bone), soil discoloration that could indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramic sherds, cut bone). Ground disturbances such as burrows and drainages were visually inspected. Photographs documenting the project site and survey are maintained in cloud storage online.

5.2 RESULTS

The project site is highly disturbed with gravel and unkept grasses on the eastern portion (Photographs 1-2) and dense grass and an asphalt basketball court on the western portion (Photograph 3). The project site is bisected by the railroad with discrete fenced portions to the east and west. Ground visibility in the eastern site was poor to fair (approximately 20-50 percent) and spoil piles present indicate previous ground disturbance. The western site has well maintained grass and decomposing asphalt resulting in poor ground visibility (approximately 0 to 15 percent) The survey was negative; that is, no cultural (i.e., archaeological, historic built, or tribal cultural) resources were identified within the project site.

Photograph 1. Overview of Century East project site, facing west.

Photograph 2. View of middle of Century East project site, facing south.

Photograph 3. View of Century West project site, facing west.

6. MANAGEMENT RECOMMENDATIONS

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the project site. No further cultural resources study is recommended; however, the following standard measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project related ground disturbing activities.

6.1 CULTURAL RESOURCES WORKER SENSITIVITY TRAINING

Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.

6.2 UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

6.3 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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Appendix A:
Records Search Summary

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 4/16/2018

Records Search File No.: 11043L
Access Agreement: #540
Project: NCPA Lodi Century Solar PV Project; W. Century Blvd., east of Church St. and E. Century Blvd., west of S. Stockton Street

Kevin Hunt
Anza Resource Consultants
603 Seagaze Drive #1018
Oceanside, CA 92054

kevin@anzaresourceconsultants.com

Dear Mr. Hunt:

The Central California Information Center received your Priority Response record search request for the project area/radius referenced above, located on the Lodi South 7.5' quadrangle in San Joaquin County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☒ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Summary Data:

Resources within project area:	1 immediately on/adjacent: Unrecorded segment of P-39-000002, Southern Pacific RR
Resources within 1/2 mi radius:	2: P-39-005072 and P-39-005144 Please note: The historic building inventory for the City of Lodi has not been mapped in GIS; please refer to the attached OHP Historic Property Data File address list provided your for use in determining if any of the properties listed fall within the ½-mile radius.
Reports within project area:	2 immediately on/adjacent: SJ-03995 and SJ-06345
Reports within 1/2 mi radius:	7: SJ-04094, 4508, 6005, 6123, 7719, 8111, 8642

Resource Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details): ☐ enclosed ☒ not requested ☐ nothing listed

Report Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Resource Record Copies: ☒ enclosed ☐ not requested ☐ nothing listed

Report Copies: ☒ enclosed ☐ not requested ☐ nothing listed

OHP Historic Properties Directory: ☒ enclosed ☐ not requested ☐ nothing listed

City of Lodi listing (see CCaIC 11042L file)

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed

Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps: (see CCaIC 11042L file) ☒ enclosed ☐ not requested ☐ nothing listed

Map Number One, *History of San Joaquin County, California, with Illustrations* (1889; 1968 reprint)
Map of the County of San Joaquin, California (1883)
Lodi 1:62500-scale (1939)
Lodi South 7.5' (1953)

Local Inventories: ☐ enclosed ☐ not requested ☒ nothing listed

GLO and/or Rancho Plat Maps: ☒ enclosed ☐ not requested ☐ nothing listed

T3N R6E, Sheet 41-202 (1853-1865)

Shipwreck Inventory: ☒ not available at CCIC; please go to

http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Note: Billing will be transmitted separately via email by our Financial Services office *($594.23), payable within 60 days of receipt of the invoice.

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: Laurie Marroquin CSU Stanislaus Financial Services
lamarroquin@csustan.edu

Appendix B:
Native American Scoping

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

March 11, 2019

Keith S. Dunbar
K.S. Dunbar & Associates, Inc.

VIA Email to: ksdpe67@gmail.com

RE: NCPA Solar Project 1 – Lodi Sites, San Joaquin County

Dear Mr. Dunbar:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez
for

Katy Sanchez
Associate Environmental Planner

Attachment

Native American Heritage Commission
Native American Contacts List
3/11/2019

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk / Miwok
Sacramento ,CA 95811
rhonda@buenavistatribe.com
(916) 491-0011 Office
(916) 491-0012 Fax

California Valley Miwok Tribe
4620 Shippee Lane — Miwok
Stockton ,CA 95212
(209) 931-4567 Office
(209) 931-4333 Fax

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of Ca
P.O. Box 395 — Miwok
West Point ,CA 95255
l.ewilson@yahoo.com
(209) 293-4179 Office

Ione Band of Miwok Indians
Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699 — Miwok
Plymouth ,CA 95669
sara@ionemiwok.org
(209) 245-5800 Office
(209) 245-6377 Fax

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden ,CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn ,CA 95603 — Miwok
bguth@auburnrancheria.com
(530) 883-2390 Office
(530) 883-2380 Fax

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove ,CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office
(916) 683-6015 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
NCPA Solar Project 1 – Lodi Sites, San Joaquin County.

Fwd: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites

Keith Dunbar <ksdpe67@gmail.com>
Tue 4/2/2019 9:56 AM
To: Kevin Hunt <kevin@anzaresourceconsultants.com>

Kevin,

Good morning!

FYI!

Have a great day,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, CA 92590-4314
(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

---------- Forwarded message ---------
From: **canutes** <canutes@verizon.net>
Date: Tue, Apr 2, 2019 at 9:41 AM
Subject: Re: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites
To: Keith Dunbar <ksdpe67@gmail.com>

Mr. Dunbar,
The tribe has reviewed the information. The tribe is requesting that the NCPA request a record search from the Native American Heritage Commission and the information center as the area of the proposed project is in an area of sensitivity.

Nototomne Cultural Preservation
Northern Valley Yokut
Katherine
Perez
P.O Box 717
Linden, CA 95236
Cell: 209.649.8972
Email: canutes@verizon.net

Sent from my iPad

On Mar 12, 2019, at 11:54 AM, Keith Dunbar <ksdpe67@gmail.com> wrote:

Katherine Erolinda Perez, Chairperson,

An AB 52 Notification of the Northern California Power Agency's NCPA Solar Project 1 - Lodi Sites is attached in accordance with recommendations of the Native American Heritage Commission.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.

Environmental Engineering

45375 Vista Del Mar

Temecula, CA 92590-4314

(951) 699-2082

Cell: (949) 412-2634

ksdpe67@gmail.com

<AB 52 Tribal Consultation Notification N Valley Yokuts.pdf>

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Consultation for the NCPA Solar Project 1 - Lodi Sites

1 message

Cherilyn Neider <cneider@auburnrancheria.com> Wed, Apr 24, 2019 at 9:25 AM
To: "ksdpe67@gmail.com" <ksdpe67@gmail.com>

Dear Keith S. Dunbar,

Thank you for your letter received notifying us of the NCPA Solar Project 1. I am contacting you in order to request:

- Consultation for this project;
- All existing cultural resource assessments;
- Requests for and results of records searches.

Attached you will find mitigation measures recommended for this project. These measures address inadvertent discoveries and a tribal cultural resources awareness training as part of the Worker Environmental Awareness and Protection training. Please confirm that the attached mitigation measures will be included in the environmental document and the adopted mitigation, monitoring and reporting program. Thank you for involving UAIC in the planning process at an early stage. We ask that you make this correspondence a part of the project record and that you provide UAIC with a copy of the final environmental document and adopted mitigation, monitoring and reporting program.

Thank you,
Cherilyn

Cherilyn Neider
Tribal Historic Preservation
United Auburn Indian Community
530.883.2394

3 attachments

5_Mitigation_Measures_CEQA_Construction_Worker_Awareness_Training.docx
22K

Worker Awareness Brochure.pdf
858K

3_Mitigation_Measures_CEQA_Discoveries.docx
24K

If Human Remains are Found

The protocols for human remains discoveries are similar for other discoveries. **It is important to treat any human remains and the situation in which they are discovered with sensitivity, dignity, and respect.**

1. All work within 100 feet of the find will immediately stop. Work will also stop in areas where there is reason to believe additional human remains could be located (generally determined by a tribal monitor or qualified archaeologist).
2. UAIC and the on-site project/construction will be notified immediately.
3. **The location of any Native American Human remains must stay confidential.**

The United Auburn Indian Community

The United Auburn Indian Community is comprised of Miwok and Southern Maidu (Nisenan) people who are traditionally and culturally affiliated with this geographic area. The Tribe's area of geographic traditional and cultural affiliation encompasses all of Amador, El Dorado, Nevada, Placer, Sacramento, Sutter and Yuba counties, as well as portions of Butte, Plumas, San Joaquin, Sierra, Solano and Yolo counties; which includes the project area.

Contact us at

530-883-2394

https://www.auburnrancheria.com/

United Auburn Indian Community
of the Auburn Rancheria
10720 Indian Hill Road
Auburn CA, 95603

Respect on the Project for Native American Culture

Prepared by:
The United Auburn Indian Community
Preservation Department

Protection Measures and Protocols

The United Auburn Indian Community has developed the measures listed below to protect any unanticipated finds of tribal cultural resources and achieve compliance with federal and state cultural and environmental laws.

1. All work must stop IMMEDIATELY at that location and within 100 feet of the find. Work may be stopped by the tribal monitor or a qualified archaeologist. Work can continue on the rest of the project, as long as project activities stay at least 100 feet away.

2. The on-site project/construction manager will immediately be informed of the possible find and contact a qualified archeologist or tribal monitor of the find.

3. Under NO circumstances will any contractor or employee collect the archaeological material.

4. Over the next days or weeks following the discovery, a number of visitors may be present in order to investigate and evaluate the find. These may include: agency officials, the County Coroner, professional archaeologists, members of the tribe or the California Native American Heritage Commission, the California Office of Historic Preservation, and local representatives of the historical society (if the find is historic in nature). It is important for the integrity of the find and for culturally-appropriate treatment, and so that there is no violation issued, that reasonable methods be taken to ensure that there is no disturbance or damage (including theft) to the find and its context and surrounding areas.

5. It is important to respect the direction of the tribal monitor or other authorized tribal representative regarding identification and treatment of finds and to have some flexibility regarding where work might be able recommence outside of the find location area.

6. The location and nature of the discovery will be strictly confidential, shared only with individuals that need to know.

Cultural Resource Examples

There are many types of archaeological resources. The most common kind of artifacts, or markers of human activity that are found include stone tools, shell, beads, plant remains, animal bones, and a type of dark soil called midden. Archaeology from the historic era can also be found: these kinds of artifacts and features can include bottles, cans, ceramics, building foundations, bricks, and many more.

Tribal Cultural Resource – Awareness Training - Mitigation Measure

A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

Inadvertent Discoveries Mitigation Measure

If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR's to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

Initiation of AB 52 Tribal Consultation

Initiation Date:	April 24, 2019
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency
Consultation Coordinator:	Keith S. Dunbar, P.E., BCEE. Hon.D.WRE., F.ASCE
Tribe:	United Auburn Indian Community
Designated Contact:	Cherilyn Neider, Tribal Historic Preservation
Request Received:	April 24, 2019

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the United Auburn Indian Community.

In response to the AB 52 Tribal Consultation Notification sent to the tribe on February 26, 2019, the Northern California Power Agency (NCPA) has received your formal written request for tribal consultation pursuant to AB 52 for the above-named project.

Initiation of Consultation:

State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) requires the lead agency to begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation. **Please consider this notice as the official initiation of the AB 52 Tribal Consultation process between the Northern California Power Agency and Tribe.** As information becomes available on the proposed project, NCPA's consultation coordinator will schedule a face to face meeting with the tribe's designated contact if so requested

The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impact. The consultation coordinator may be reached by phone (951) 699-2082, or by email at ksdpe67@gmail.com. General comments may be submitted electronically, however, confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, be done by formal letter, in person, or over the telephone. If you wish to submit information in writing, correspondence may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined developable area of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts-direct current (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location		Developable Area (acres)	Estimated Capacity (MW_{dc})
	Latitude, Longitude	Section, Township, Range		
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	Sec 7, T 3 N, R 7 E, MDB&M	15.0	3.51
Lodi – Century Park East/West	38°06'26.66"N, 121°16'21.63"W	Sec 13, T 3 N, R 6 E, MDB&M	2.5	0.63
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	Sec 1, T 3 N, R 6 E, MDB&M	0.9	0.18

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century Park East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

CULTURAL RESOURCES SURVEY
FOR THE
NORTHERN CALIFORNIA POWER AGENCY
SOLAR PROJECT 1 – LODI PARKING GARAGE
SAN JOAQUIN COUNTY, CALIFORNIA

Prepared for
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USGS Quadrangle
Lodi North, California
Anza Project No. 19-0005

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EXECUTIVE SUMMARY

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California. This study regards the Lodi Parking Garage project site, which is located on the third-floor rooftop of an existing parking garage in downtown Lodi. The design intent for this project is to build a canopy racking structure across the total area of the garage rooftop to house solar photovoltaic (PV) modules with a total PV output of 150 kilowatt alternating current. The proposed project is subject to the California Environmental Quality Act (CEQA) with NCPA serving as lead agency. This study includes a cultural resources records search, incorporation of Native American scoping, survey of the project site, and preparation of this technical report in compliance with the cultural resources requirements of CEQA.

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within the project site; however, the NRHP-listed Mission Arch is located adjacent to the south of the project straddling East Pine Street. Construction of the project would not directly or indirectly impact the adjacent NRHP-listed Mission Arch. Anza recommends a finding of ***no impact to historical resources*** under CEQA. No further cultural resources work is recommended. The following standard measures are recommended in the case of the unanticipated discovery of cultural resources during project related ground disturbing activities, though little if any ground disturbance is anticipated.

UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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1. INTRODUCTION

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California (Figure 1). The NCPA Solar Project 1 includes the following projects: Century East/West, Pixley Basin, and Parking Structure, and is described below (Section 1.1). This study has been prepared in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines (Section 1.2). This cultural resources study includes a cultural resources records search, a summary of Native American scoping for the project, pedestrian survey, and the preparation of this report following the *Archaeological Resources Management Report (ARMR): Recommended Content and Format* guidelines (California Office of Historic Preservation 1990).

1.1 PROJECT DESCRIPTION

The objective of the NCPA Solar Project 1 is to develop a fleet of photovoltaic (PV) solar power plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by NCPA as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial five to seven years of operation, NCPA plans to purchase the plants.

NCPA has completed the site selection and screening portion of the project and the City of Lodi selected three sites for development: Century East/West, Pixley Basin, and Parking Garage sites. The Parking Garage project site is located on the third-floor rooftop of an existing parking garage in downtown Lodi. The project is bordered by East Elm Street to the north, East Pine Street to the south, the Union Pacific railroad to the east, and North Sacramento Street to the west. The design intent for this project is to build a canopy racking structure across the total area of the garage rooftop to house solar PV modules with a total PV output of 150 kilowatt alternating current.

1.2 REGULATORY SETTING

1.2.1 State

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, the probability is high that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Assembly Bill 52 of 2014 (AB 52) took effect July 1, 2015, and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." According to the legislative intent for AB 52, "tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource. See also PRC 21074 (a)(1)(A)-(B).

1.3 PERSONNEL

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt requested the records search, conducted the survey, and was the primary author of this report. Principal Investigator Katherine Collins, M.A., Registered Professional Archaeologist (RPA), coauthored this report and served as principal investigator for the study. Ms. Collins meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology (National Park Service 1983). GIS Specialist Spencer Bietz prepared all maps and figures.

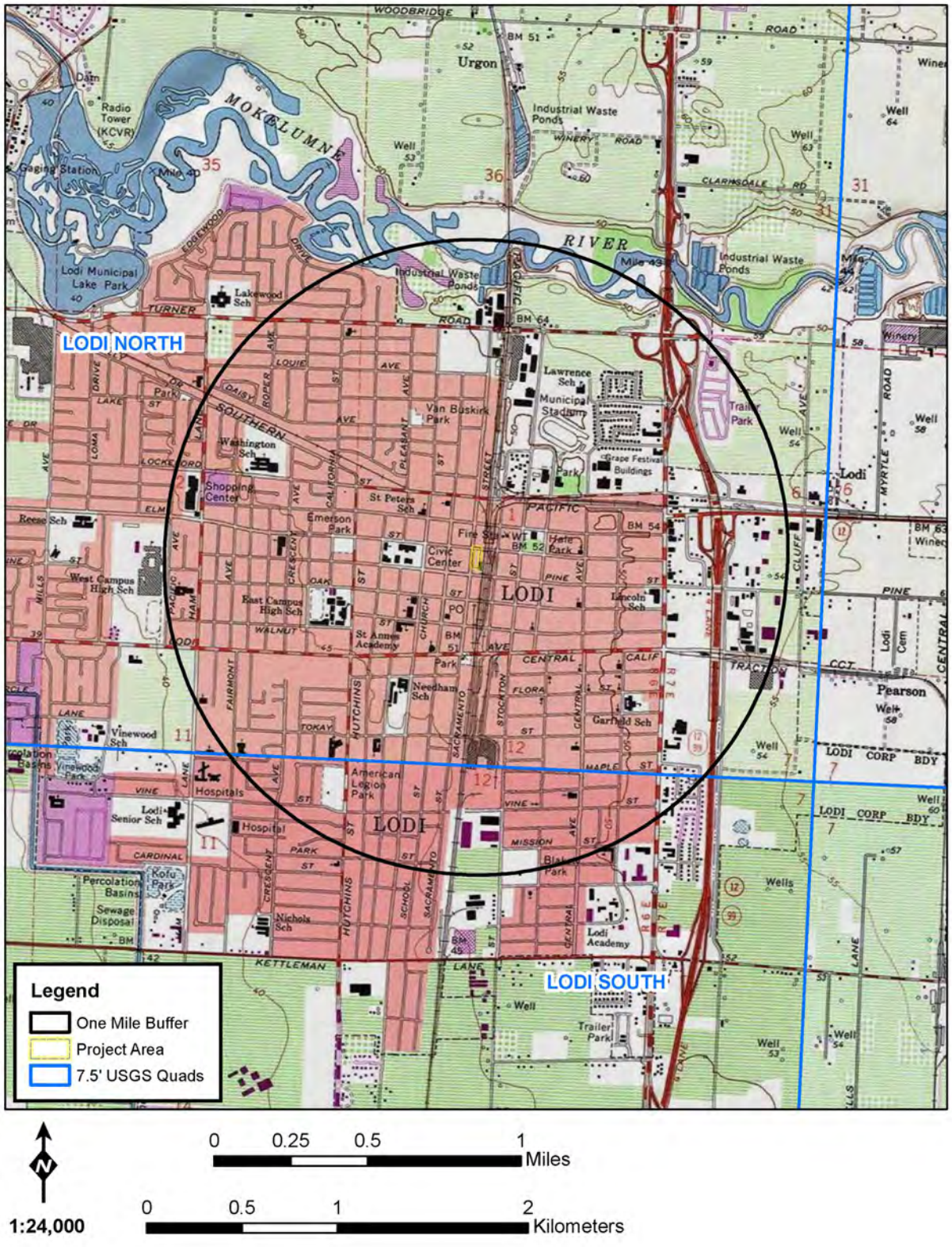

Figure 1. Project Location Map

2. ENVIRONMENTAL SETTING

The Lodi Parking Garage is located the northern San Joaquin Valley, famed for its agriculture. The project site is specifically located in an area that has been urbanized since the late-1800s and the immediate area around the site possesses only ornamental vegetation and faunal species adapted to urban environments. Characteristic vegetation communities in the region include agricultural habitats and annual grassland, with much smaller amounts of freshwater emergent wetland, lacustrine, water, and valley foothill riparian habitats (City of Lodi 2009:3.4-2). Agricultural lands support a broad variety of fauna including California ground squirrel, California vole, red-winged blackbird, northern harrier, white-tailed kite, and yellow-billed magpie. Urban areas support fauna such as American crow, rock dove, American robin, Brewer's blackbird, house finch, house sparrow, northern mockingbird, mourning dove, raccoon, Virginia opossum, and striped skunk.

Lodi averages 19 inches of rain annually. Lodi has a hot-summer Mediterranean climate including cool, wet winters, often with dense ground fog, and hot, dry summers. The project site is underlain by the upper member of the Pleistocene Quarternary Modesto formation, composed of undivided alluvium (Dawson 2009).

3. CULTURAL SETTING

3.1 PREHISTORIC OVERVIEW

The prehistory of the Central Valley is generally divided into three main periods: Paleoindian, Archaic, and Emergent. The Archaic is further divided into the Lower, Middle, and Upper (Fredrickson 1973, 1974). This chronological framework is used by researchers to understand how prehistoric cultures adapted and coped with environmental and social change. Within this framework researchers recognized certain sets of cultural and technological traits that appeared to span long periods of time and covered large areas. These sets of traits were referred to as either "horizons" or "patterns" in the literature. With smaller (local) units of patterns referred to as "aspects" and "phases" (Fredrickson 1974, Moratto 1984, Rosenthal et al. 2007). Below is a brief overview of prehistoric occupation history in the San Joaquin Valley portion of the Central Valley.

The **Paleoindian Period** (11,550 to 8550 cal B.C.) was characterized by the arrival of small, high-mobile hunter-gathered groups. A characteristic element of this period is the use of fluted points to bring down large game animals. Evidence of Paleoindian occupation in the San Joaquin Valley have been found at Tracy Lake, Wolfson mound (CA-MER-215) in Merced County, and the Tulare Lake basin (Moratto 1984, Rosenthal et al. 2007).

During the **Archaic Period** (8550 cal B.C. to A.D. 1100) climatic changes preceiptated the drying of pluvial lakes resulting in changes in substance strategies employed by the native populations. By the Middle Archaic (5550 to 550 cal B.C.) a set of cultural traits known as the Windmiller Pattern emerged at several sites in the San Joaquin Valley (Rosenthal et al. 2007). The presence of milling stones such as manos and metates often characterize Windmiller sites, although mortar and pestles have also been found, indicating that acorns and/or various seeds formed an important part of the diet (Moratto 1984, Rosenthal et al 2007). A variety of faunal remains have been documented at Windmiller Pattern sites including Tule elk, mule deer, and pronghorn, as well as smaller game such as rabbit, water birds, raptors, and rodents (Rosenthal et al. 2007). Also, the presence of angling hooks and baked clay artifacts possibly used as net or line sinkers, along with the remains of sturgeon, salmon, and smaller fishes, indicate that fishing was an additional source of food (Fredrickson 1973; Heizer 1949; Ragir 1972). Items such as net sinkers, pipes, and discoids, as well as cooking "stones" were made of baked clay. Ground and polished charmstones, impressions of twined basketry, shell beads, and bone tools also have been found at Windmiller Pattern sites. Some items, such as shell beads, obsidian tools, and quartz crystals, were obtained by trade.

The archaeological record at Windmiller Pattern sites indicates people practiced a mixed procurement strategy of both game and wild plants, with the addition of acorns and/or seeds. The mixed exploitation of a wide range of natural resources ties into a seasonal foraging strategy. Populations likely occupied the lower elevations of the Sacramento Valley in the winter months and shifted to higher elevations during the summer (Moratto 1984:206). Characteristic Windmiller mortuary practices included ventrally and dorsally extended burials, accompanied by grave goods, in cemeteries that were separate from the habitation sites (Ragir 1972, Rosenthal et al. 2007). Recent research suggests the Windmiller culture persisted into the Upper Archaic (550 cal B.C. to A.D. 1100) in the San Joaquin Valley and was not replaced by the Berkeley Pattern, as it had in other places. Several sites in San Joaquin and Merced Counties (CA-SJO-17, SJO-87, SJO-106, SJO-154, SJO-246, MER-3, MER-215, and MER-323) continued the characteristic Windmiller mortuary practice of extended burials until sometime between 800 and 1,000 years ago (Rosenthal el al. 2007:156).

During the **Emergent Period** (cal A.D. 1100 to Historic) a new set of cultural traits emerged in the Central Valley known as the Augustine Pattern, although there is sporadic evidence of this cultural pattern in the San Joaquin Valley (Moratto 1984, Rosenthal et al. 2007:157). The Pacheco Complex on the western edge of the valley is the only well-defined example in this region. The Augustine Pattern is evidenced by a substantial increase in the intensity of subsistence exploitation, including fishing, hunting, and gathering (particularly the acorn (Moratto 1984:211–214). These changes begin to reflect the cultural pattern known from historic period Native American groups in the area. Augustine Pattern tools and cooking implements included shaped mortars and pestles, hopper mortars, bone awls used for producing coiled baskets, and the bow and arrow. Pottery vessels, known as Cosumnes brownware, are found in some parts of the Central Valley and most likely developed during this period from the prior baked clay industry.

During this period, an increase in sedentism led to the development of social stratification, accompanied by a shift to elaborate ceremonial and social organization. Exchange networks, with the use of clamshell disk beads as currency, also developed during the Augustine Pattern. Mortuary practices during this period included flexed burials and pre-interment burning of offerings in a grave pit, as well as cremation of high-status individuals (Fredrickson 1973:127–129; Moratto 1984:211). In the San Joaquin Valley villages and smaller communities developed along side-streams of the foothills, and river channels and sloughs in the valley. The introduction of the bow and arrow occurred during this time and one of California's most unique point types, the Stockton serrated edge, was developed in the region (Rosenthal el al. 2007).

3.2 ETHNOGRAPHIC OVERVIEW

The project site is located in the traditional territory of the Plains Miwok people. The Plains Miwok were one of six culture groups that spoke a Miwokan language in California. Other Miwok-speaking groups included the Bay Miwok (Saclan), Northern Sierra Miwok, Central Sierra Miwok, Southern Sierra Miwok, and Coast Miwok. Plains Miwok territory was centered in the Central Valley occupying an area between the lower reaches of the Mokelumne and Cosumnes Rivers and the banks of the Sacramento River, from Rio Vista to Freeport (Levy 1978). The word Miwok (miw·yk) generally means "people" in the Miwok language, which is a member of the Penutian language family (Kroeber 1925, Mithun 1999).

The primary sociopolitical unit among the Plains Miwok was the tribelet, comprising the residents of several base settlements and their associated seasonal camps. Each tribelet had a population of about 300 to 500 people and controlled specific territory and resources within it. Each settlement within a tribelet appeared to be the home of localized patrilineage. The tribelet as whole was led by a chieftain which was a hereditary position passed down from father to son. If there was no male heir, the position could be passed to the chief's daughter. The chief acted as an advisor, had the final say in interpersonal disputes, and determined the best time to gather resources (Levy 1978). Settlements typically contained a semi-subterranean earth lodge used for community ritual or social gatherings. Other structures include a semi-subterranean sweathouse, a menstrual hut, and a granary for storing acorns. Families lived in small earth-covered structures (Kroeber 1925, Levy 1978). Ethnohistoric research indicates a Miwok settlement called *Muquelemne* was located on the south bank of Mokelumne River near Lodi (Levy 1978).

The basic subsistence strategy of the Plains Miwok was seasonally mobile hunting and gathering. However, tobacco was cultivated and they also possessed domesticated dogs. Plant foods included acorns, buckeyes, laurel nuts, hazelnuts, seeds, roots, greens, and berries. Acorns, the primary staple, were gathered in the fall and stored through the winter. Seeds were gathered from May through August. Intentional, periodic burning in August ensured an ample supply of seed-bearing annuals and forage for game. The Miwok ate more meat in the winter, when the only plant resources available were those that

had been stored. Hunting was accomplished with the aid of the bow and arrow, traps, and snares. Animal foods consisted of deer; elk; antelope; rodents; waterfowl; quail, pigeons, flickers, and other birds; freshwater mussels and clams; land snails; fish; and insects. Salt was obtained from springs or through trade with people from the Mono Lake area (Bennyhoff 1977; Levy 1978).

The Plains Miwok used a variety of tools made from bone, stone, antler, wood, and textile. Bows were made of wood from a variety of tree species such as oak, ash, willow, pepperwood, maple, or hazel. Arrow heads were fashioned from stone materials such as obsidian obtained through trade, as well as local materials. Typical basketry items were seed beaters; cradles; sifters; rackets used in ball games; and baskets for storing, winnowing, parching, and carrying burdens. Other textiles included mats and cordage (Levy 1978).

Many Miwok groups were subject to missionization efforts during the late eighteenth and early nineteenth centuries. Christian baptisms of Plains Miwok occurred as early as 1811 and did not stop until 1833. During this time over 2,100 Plains Miwok were baptized. As a result of the missionization effort many Plains Miwok were removed from their traditional territory and sent to Mission San Jose located in the present-day city of Fremont. By the beginning of the nineteenth century the Miwok numbered some 19,500 people but by the early twentieth century this number was below one thousand people. Today there are about 3,500 people of Miwok descent, with many living on several reservations in California (White 2019).

3.3 HISTORIC OVERVIEW

The historic period for the state of California generally begins with the establishment of the first Spanish mission and presidio in San Diego in 1769. This marks the beginning of the Spanish period of California history which lasted until 1822 when news of Mexico's independence from Spain in 1821 finally reached California. The Spanish period saw the establishment of a permanent European presence in California in the form of 21 missions located along the coast between San Diego and Sonoma, four military presidios located in San Diego, Monterey, San Francisco and Santa Barbara, and three pueblos (towns) that later became the cities of Los Angeles, San Jose and Santa Cruz (Robinson 1948). The Spanish period ended with Mexican independence from the Spanish crown in 1822. The Mexican period of California history saw the seizure of lands once held by the missions through the Mexican Secularization Act of 1833 and the redistribution of those lands to individuals in the form of land grants known as "ranchos" (Robinson 1948). During this period the Mexican government in California issued about 700 land grants to Mexican citizens and foreign immigrants (Shumway 1988). The outbreak of war between the United States and Mexico and the signing of the Treaty of Guadalupe Hidalgo in 1848 ended the Mexican period and signaled the beginning of the American period of California history. The early American period is marked by the discovery of gold at Sutter's Mill in 1848, resulting in a gold rush that saw a massive influx of settlers from other parts of the United States and around the world, greatly impacting California's native population. In 1869 the transcontinental railroad was completed linking California with the rest of the United States. The gold rush and the establishment of the railroad played major roles in the development of California into a national and worldwide leader in agricultural and industrial production. These early developments also resulted in making California one of the most racially and ethnically diverse states in the Union.

3.3.1 San Joaquin County

The history of San Joaquin County begins in 1850 as one of the original 27 counties of the state of California. The county derives its name from the San Joaquin River, a major river that flows through the region from southern Sierra Nevada Mountains. Early European exploration through the region included

an expedition led by Gabriel Moraga, a Spanish army officer who named the San Joaquin River as well as other natural features as he made his way through the Central Valley. Between 1840 and 1846 the Mexican government in California issued five land grants – Arroyo Seco, Campo de Los Franceses, El Pescadero, Sanjon de los Moquelumnes, and Rancho del Estanislao (also known as Thompson's Rancho) – that encompassed major portions of San Joaquin County (Shumway 1988). The County's generally flat terrain made it a desirable location for building a railroad and in 1866 Congress authorized the Southern Pacific Railroad to build a transcontinental rail route between San Francisco and the Colorado River. By 1870 the Southern Pacific line made its way through San Joaquin County to the City of Modesto (Burns 2007). The establishment of the Southern Pacific and other rail lines through San Joaquin County provided the transportation backbone to move local agricultural produce to markets across the country. Today, agriculture remains an important component of the County's economy.

3.3.2 City of Lodi

The City of Lodi was established in 1869 along the southern banks of Mokelumne River. It was originally named Mokelunme but was changed to Lodi by an act of the California legislature in 1874. Two of Lodi's early residents, Charles Ivory and John Burt established a general store on the corner of Pine and Sacramento Streets. Their store became a magnet for attracting homesteaders and other businesses to the area. Since its inception, agriculture was the backbone of Lodi's economy growing such crops as wheat, watermelon, and grapes. In 1880 some 3.4 million bushels of wheat were grown in San Joaquin County, much of it grown in the Lodi area. Grape vineyards also dominated the area with over two million plants in production in 1899. By the early twentieth century grapes were so important to Lodi that in 1907 residents held the Tokay Carnival to "advertise the beauty and value of the Tokay grape." During the same year a mission-style arch was built at Pine and Sacramento Streets, in the historic core of Lodi, at a cost of $500. The arch still exists today and is a local landmark (Hoover et al. 2002, Lodi Historical Society 2016).

4. BACKGROUND RESEARCH

4.1 CALIFORNIA HISTORICAL RESOURCE INFORMATION SYSTEM

Anza conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Central California Information Center (CCIC) located at California State University, Stanislaus. The search was conducted by CCIC on April 17, 2019, to identify all previous cultural resources work and previously recorded cultural resources within a 0.5-mile radius of the project site (Appendix A). The CHRIS search included a review of the NRHP, CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15-, and 30-minute quadrangle maps.

4.1.1 Previous Studies

The CCIC records search identified 19 cultural resources studies that were conducted within a 0.5-mile radius of the project site, three of which are mapped within the project site, and one (SJ-02756) that had two sub-reports (Table 1).

Table 1. Previous Cultural Resource Studies within a 0.5-Mile Radius of the Project Site

Report Number	Author	Year	Title	Proximity to Project Site
SJ-02756	Dougherty, John W.	1995	Historic Properties Survey Report Lodi Multimodal Station Study Project Number STPLE-5929 (15)	**Within**
SJ-02756	Harris, D.	1995	Historical Architectural Survey Report for a Proposed Multimodal Transportation Facility in the City of Lodi	**Within**
SJ-02756	Dougherty, J.	1995	Negative Archaeological Survey Report	**Within**
SJ-03379	Southern Pacific Transportation Co.	1994	Historic Report (49 C.F.R. 1105.8) Southern Pacific Transportation Company Proposed Abandonment In San Joaquin and Calaveras Counties, California ICC Docket No. AB-12 (Sub-No. 155X).	Outside
SJ-03995	Nelson, W. J.	2000	Cultural Resource Survey for the Level (3) Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield	Outside
SJ-04378	Dougherty, John	1999	Archaeological Monitoring of the Lodi Mulitmodal Project, Lodi, California.	**Within**
SJ-04379	Bakic, Tracy D.	1999	Reevaluation Report, Lodi Southern Pacific Passenger Depot, City of Lodi, San Joaquin County, California.	**Within**
SJ-04456	Brown, R. Keith	2000	Review of Environmental Screening: Proposed Mobile Radio Facility Downtown Lodi, Site No. CA-1572D, 401 North Stockton Street, Lodi, California.	Outside

Report Number	Author	Year	Title	Proximity to Project Site
SJ-04506	Egherman, Rachael	2001	Lodi Energy Center Cultural Resources (Archaeological and Historic Built Environment Resources) Technical Report.	Outside
SJ-04596	Jones & Stokes Associates	2000	Draft: Inventory and Evaluation of NRHP Eligibility of California Army National Guard Armories.	Outside
SJ-04977	Boda, J.	1989	Henderson Brothers Company, Incorporated, Ninety-Three Going on One Hundred.	Outside
SJ-05011	Leary, C. M.	1990	A Brief Review of Medicine in Lodi for the Past 80 Years.	Outside
SJ-05342	Wagers, J. C.	1975	The San Joaquin and Sierra Nevada Railroad. [journal article]	Outside
SJ-05910	Bonner, W.	2005	New Tower ("NT") Submission Packet FCC Form 620: Mountain Union Telecommunications, MUT-Downtown Lodi, San Joaquin County, CA	Outside
SJ-06023	Supernowicz, D.	2005	New Tower ("NT") Submission Packet, FCC Form 620 T-Mobile USA, Inc., Sacramento Street, SC-13338A, San Joaquin County, CA	Outside
SJ-06117	Jones, K.	2006	Letter Report: Archaeological Survey of the Proposed W. Lockeford Cingular Wireless Cell Site (CN-1235-02), San Joaquin County, California PL #1735-09	Outside
SJ-06345	SWCA Environmental Consultants	2006	Cultural Resources Final Report of Monitoring and Findings for the QWest Network Construction Project, State of California. SWCA Project No. 10715-180.	Outside
SJ-06546	Jones & Stokes	2007	Cultural Resources Sensitivity Assessment for Five Alternative Water Treatment Plant Sites and Associated Pipeline Routes, City of Lodi, San Joaquin County, California	Outside
SJ-07879	Cox, B., and E. Hammerle	2013	GPRP S. Sacramento and W. Locust, Lodi, San Joaquin County; PG&E Cultural Resources Constraints Report PM 30966786	Outside
SJ-07880	Russell, M.	2013	Archaeological Monitoring Summary Report for 30966786 GPRP S. Sacramento Street and W. Locust Street, San Joaquin County	Outside
SJ-08896	Peak, M.	2018	Historic Property Survey Report 10 San Joaquin CML-5154(043) Lockeford Street, Lodi, CA	Outside
SJ-08896	Peak, M.	2017	Historical Resources Evaluation Report for the Lockeford Street Improvement Project City of Lodi, California	Outside
SJ-08896	Peak, M.	2017	Archaeological Survey Report for the Lockeford Street Improvement Project City of Lodi, California	Outside

Source: CCIC, April 2019

4.1.1.1 SJ-02756

The 1995 Historic Properties Survey Report Lodi Multimodal Station Study Project Number STPLE-5929 (15) is a Caltrans-format report prepared in 1995 that's attachments include an archaeological report and historical architecture survey report (Table 1). This report identified and discussed the historic Southern Pacific [Railroad] Passenger Depot (P-39-00073 in Table 2) and was negative for archaeological resources. This report recommended the Southern Pacific Passenger Depot (P-39-00073) eligible for the NRHP under Criterion A (association with important events in history).

4.1.1.2 SJ-04378

This report describes archaeological monitoring conducted during the construction of the Lodi Multimodal Station Project in 1999. One post-1915 historic refuse deposit was noted in the report but not formally mapped or recorded as a resource. The report noted the deposit appeared to be smeared layers lacking stratification and not significant.

4.1.1.3 SJ-04379

The 1999 Reevaluation Report, Lodi Southern Pacific Passenger Depot, City of Lodi, San Joaquin County, California, reevaluated the Southern Pacific Passenger Depot (P-39-00073) and recommended that the depot was no longer eligible for NRHP listing under Criteria A or C due to its move to the multimodal facility resulting in significant changes in integrity to the resource.

4.1.2 Previously Recorded Resources

The CCIC records search identified 16 cultural resources previously recorded within a 0.5-mile radius of the project site, three of which are located adjacent to the project (Table 2). The Southern Pacific Passenger Depot (P-39-000073) was moved from the project site to south of East Pine Street but is still considered adjacent to the project. This historic railroad depot was moved from its original location and subsequently recommended ineligible for NRHP listing through survey re-evaluation (Report SJ-04379). The Southern Pacific San Joaquin Valley Mainline (P-39-000002) – now the Union Pacific Railroad – is adjacent to the project site to the east but has been found ineligible for NRHP, CRHR, or local register listing. The Mission Arch (P-39-000491) is adjacent to the south of the project site spanning East Pine Street and is listed on the NRHP and CRHR.

Table 2. Previously Recorded Cultural Resources within 0.5-Mile of the Project Site

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-000002	CA-SJO-000250H	Southern Pacific Railroad in San Joaquin County	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	25 instances between 1993 and 2012	**Adjacent to the east**
P-39-000069		Hotel Lodi	Individual property listed in NR by the Keeper. Listed in the CR. (Code 1S)	1994 (Eric W. Veerkamp)	Approximately 0.25 mile west

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-000073		Southern Pacific Passenger Depot	Recommended ineligible for NR designation through survey re-evaluation (Report SJ-04379)	1995 (Dennis E. Harris)	**Adjacent to south. Formerly at project site**
P-39-000491		Mission Arch	Individual property listed in NR by the Keeper. Listed in the CR. (Code 1S)	1980 (Paul Roddy)	**Adjacent to the south**
P-39-000506		Woman's Club of Lodi	Individual property listed in NR by the Keeper. Listed in the CR. (Code 1S)	1981 (J. Arbuckle)	Approximately 0.4 mile west
P-39-000666		Miyajima Hotel	Identified in reconnaissance level survey: Not evaluated. (Code 7R)	1988 (Maryln Bourne Lortie)	Approximately 0.1 mile east
P-39-004277		217 N. Central, Lodi; HUD000803G	Determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or Local Listing (Code 6Y)	1980 (Kay Fujita)	Approximately 0.4 mile southeast
P-39-004317		California Army National Guard Armory, Lodi	Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the CR. (Code 2S2)	2000 (Ove Juul)	Approximately 0.4 mile north
P-39-004926		Needham (Clyde) School	Insufficient information	2000 (Douglas A. Bryoccson)	Approximately 0.5 mile southwest
P-39-004931		Lodi High School	Insufficient information	1991 (San Joaquin County Superintendent of Schools)	Approximately 0.5 mile west
P-39-005076		Elmwood & Emerson Schools	Insufficient information	1991 (San Joaquin County Superintendent of Schools)	Approximately 0.5 mile west
P-39-005324		121 E. Lockeford Street - Site 3	Insufficient information	1991 (San Joaquin County Superintendent of Schools)	Approximately 0.3 mile north
P-39-005325		Lawrence Park - Site 5	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	2017 (Gerry, R., M. Peak)	Approximately 0.5 mile northeast

Primary Number	Trinomial	Description	NRHP/CRHR Eligibility Status	Recorded Year (By Whom)	Relationship to Project Site
P-39-005326		Lodi Grape Festival Grounds - Site 6	Found ineligible for NR, CR or Local designation through survey evaluation (Code 6Z)	2017 (Gerry, R., M. Peak)	Approximately 0.5 mile northeast
P-39-005328		322, 326, 334 E. Lockeford Street - Site 8A, 8B, 8C	Recommended not eligible for CRHR listing	2017 (Gerry, R., M. Peak)	Approximately 0.25 mile northeast
P-39-005329		224 N. Main Street - Site 9	Recommended not eligible for CRHR listing	2017 (Gerry, R., M. Peak)	Approximately 0.25 mile northeast

Source: CCIC, April 2019

4.2 NATIVE AMERICAN SCOPING

K.S. Dunbar & Associates, Inc. requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission. The NAHC sent a response on March 11, 2019, stating that a search of the SLF was completed with negative results (i.e., no sacred lands or resources important to Native Americans identified in the search; Appendix B). The NAHC provided a list of seven Native American contacts that may have knowledge regarding Native American cultural resources within or near the project site.

K.S. Dunbar & Associates, Inc. mailed letters and sent emails dated March 12, 2019, to the seven Native American contacts describing the Lodi projects and asking if they had knowledge regarding cultural resources of Native American origin within or near the project sites (Appendix B). The Northern Valley Yokut responded via email on April 2, 2019, requesting that NCPA conduct a SLF search and CCIC records search. The United Auburn Indian Community responded via email on April 24, 2019 and requested formal AB 52 consultation for this project and provided recommended mitigation measures. Consultation between NCPA and United Auburn Indian Community was formally initiated in a letter dated April 24, 2019. No additional responses have been received as of April 30, 2019.

5. FIELDWORK

5.1 SURVEY METHODS

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt conducted a windshield survey of the project site on April 25, 2019. Because the project site is atop an existing structure, pedestrian survey was not warranted. Only the ground near the project point-of-interconnection with the electrical utility was inspected on-foot.

Mr. Hunt examined all exposed ground surface for artifacts (e.g., flaked stone tools and tool-manufacture debris, ground stone tools, ceramic sherds, fire-affected rock), ecofacts (marine shell, bone), soil discoloration that could indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramic sherds, cut bone). Ground disturbances such as burrows and drainages were visually inspected. Photographs documenting the project site and survey are maintained by Anza in cloud storage online.

5.2 RESULTS

The project site is an extant modern three-story parking garage (Photographs 1-3). The NRHP-listed Mission Arch is located adjacent to the south of the project site (Photograph 2). The survey was negative; that is, no cultural (i.e., archaeological, historic built, or tribal cultural) resources were identified within the project site.

Photograph 1. Overview of east side of project site, facing northwest.

Photograph 2. View of south elevation of parking garage and Mission Arch, facing northwest.

Photograph 3. North elevation of parking garage, facing south-southeast.

6. DISCUSSION

The NCPA Solar Project 1 – Lodi Parking Garage project site intends to place PV solar panels atop a rack system above the roof of a modern three-story parking garage. The parking garage is at the former location of the Southern Pacific Passenger Depot. One NRHP-listed resource – the Mission Arch or Lodi Arch (P-39-000491) – is located adjacent to the south of the project site spanning East Pine Avenue. The modern parking garage was constructed adjacent to the Mission Arch and is taller than the arch. It is unlikely the solar panels would be visible to viewers of the arch from street level, and even if visible, their placement atop a modern parking structure would not further reduce the integrity of setting for the Mission Arch. Based on this analysis, installation of the proposed project atop the parking garage would not create a direct or indirect impact to the Mission Arch (P-39-000491). No archaeological resources were identified within the project site.

7. MANAGEMENT RECOMMENDATIONS

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within the project site. Construction of the project would not directly or indirectly impact the adjacent NRHP-listed Mission Arch. No further cultural resources work is recommended. The following standard measures are recommended in the case of the unanticipated discovery of cultural resources during project related ground disturbing activities, though little if any ground disturbance is anticipated.

7.1 UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

7.2 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

8. REFERENCES

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Appendix A:
Records Search Summary

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 4/17/2018

Records Search File No.: 11044L
Access Agreement: #540
Project: NCPA Lodi Parking Garage Solar PV Project; NE corner of N. Sacramento Street at E. Pine

Kevin Hunt
Anza Resource Consultants
603 Seagaze Drive #1018
Oceanside, CA 92054

kevin@anzaresourceconsultants.com

Dear Mr. Hunt:

The Central California Information Center received your Priority Response record search request for the project area/radius referenced above, located on the Lodi North 7.5' quadrangle in San Joaquin County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☒ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Summary Data:

Resources within project area:	1 immediately adjacent: P-39-000073, Southern Pacific RR Depot
Resources within 1/2 mi radius:	15: P-39-000002*, 69, 491, 506, 666, 4277, 4317, 4926, 4931, 5076, 5324, 5325. 5326, 5328, 5329 *for copy see CCaIC 11043L file Please note: The historic building inventory for the City of Lodi has not been mapped in GIS; please refer to the attached OHP Historic Property Data File address list provided your for use in determining if any of the properties listed fall within the ½-mile radius.
Reports within project area:	3: SJ-02756, 4378, 4379
Reports within 1/2 mi radius:	16: SJ-03379, 3995, 4456, 4506, 4596, 4977, 5011, 5342, 5910, 6023, 6117, 6345, 6546, 7879, 7880, 8896

Resource Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed

Resource Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details): ☐ enclosed ☒ not requested ☐ nothing listed

Report Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Resource Record Copies: ☒ enclosed ☐ not requested ☐ nothing listed

Report Copies: ☒ enclosed ☐ not requested ☐ nothing listed

OHP Historic Properties Directory: ☒ enclosed ☐ not requested ☐ nothing listed

See City of Lodi listing
Note: 7 resources listed that are in the radius are mapped in GIS:
P-39-000069, listed on the NRHP and California Register of Historical Resources (CRHR)
P-39-000073, NRS S 2S2, listed on the CRHR
P-39-000491, listed on the NRHP & CRHR
P-39-000506, listed on the NRHP & CRHR
P-39-000666, NRS 7R
P-39-004277, NRS 6Y
P-39-004317, NRS S 2S2, listed on the CRHR

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed

Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps: (see also CCaIC 11042L file*) ☒ enclosed ☐ not requested ☐ nothing listed

Map Number One, *History of San Joaquin County, California, with Illustrations* (1889; 1968 reprint)*
Map of the County of San Joaquin, California (1883)*
Lodi 1:62,500-scale (1939)*
Woodbridge 1:31,680-scale (1910; 1939 reprint)

Local Inventories: ☐ enclosed ☐ not requested ☒ nothing listed

GLO and/or Rancho Plat Maps: ☒ enclosed ☐ not requested ☐ nothing listed

T3N R6E, Sheet 41-202 (1853-1865)

Shipwreck Inventory: ☒ not available at CCIC; please go to

http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Note: Billing will be transmitted separately via email by our Financial Services office *($989.63), payable within 60 days of receipt of the invoice.

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: Laurie Marroquin CSU Stanislaus Financial Services
lamarroquin@csustan.edu

Appendix B:
Native American Scoping

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

March 11, 2019

Keith S. Dunbar
K.S. Dunbar & Associates, Inc.

VIA Email to: ksdpe67@gmail.com

RE: NCPA Solar Project 1 – Lodi Sites, San Joaquin County

Dear Mr. Dunbar:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

for

Katy Sanchez
Associate Environmental Planner

Attachment

Native American Heritage Commission
Native American Contacts List
3/11/2019

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk / Miwok
Sacramento ,CA 95811
rhonda@buenavistatribe.com
(916) 491-0011 Office
(916) 491-0012 Fax

California Valley Miwok Tribe
4620 Shippee Lane — Miwok
Stockton ,CA 95212
(209) 931-4567 Office
(209) 931-4333 Fax

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of Ca
P.O. Box 395 — Miwok
West Point ,CA 95255
l.ewilson@yahoo.com
(209) 293-4179 Office

Ione Band of Miwok Indians
Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699 — Miwok
Plymouth ,CA 95669
sara@ionemiwok.org
(209) 245-5800 Office
(209) 245-6377 Fax

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden ,CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn ,CA 95603 — Miwok
bguth@auburnrancheria.com
(530) 883-2390 Office
(530) 883-2380 Fax

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove ,CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office
(916) 683-6015 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
NCPA Solar Project 1 – Lodi Sites, San Joaquin County.

Fwd: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites

Keith Dunbar <ksdpe67@gmail.com>
Tue 4/2/2019 9:56 AM
To: Kevin Hunt <kevin@anzaresourceconsultants.com>

Kevin,

Good morning!

FYI!

Have a great day,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, CA 92590-4314
(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

---------- Forwarded message ---------
From: **canutes** <canutes@verizon.net>
Date: Tue, Apr 2, 2019 at 9:41 AM
Subject: Re: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites
To: Keith Dunbar <ksdpe67@gmail.com>

Mr. Dunbar,
The tribe has reviewed the information. The tribe is requesting that the NCPA request a record search from the Native American Heritage Commission and the information center as the area of the proposed project is in an area of sensitivity.

Nototomne Cultural Preservation
Northern Valley Yokut
Katherine
Perez
P.O Box 717
Linden, CA 95236
Cell: 209.649.8972
Email: canutes@verizon.net

Sent from my iPad

On Mar 12, 2019, at 11:54 AM, Keith Dunbar <ksdpe67@gmail.com> wrote:

Katherine Erolinda Perez, Chairperson,

An AB 52 Notification of the Northern California Power Agency's NCPA Solar Project 1 - Lodi Sites is attached in accordance with recommendations of the Native American Heritage Commission.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.

Environmental Engineering

45375 Vista Del Mar

Temecula, CA 92590-4314

(951) 699-2082

Cell: (949) 412-2634

ksdpe67@gmail.com

<AB 52 Tribal Consultation Notification N Valley Yokuts.pdf>

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Consultation for the NCPA Solar Project 1 - Lodi Sites

1 message

Cherilyn Neider <cneider@auburnrancheria.com> Wed, Apr 24, 2019 at 9:25 AM
To: "ksdpe67@gmail.com" <ksdpe67@gmail.com>

Dear Keith S. Dunbar,

Thank you for your letter received notifying us of the NCPA Solar Project 1. I am contacting you in order to request:

- Consultation for this project;
- All existing cultural resource assessments;
- Requests for and results of records searches.

Attached you will find mitigation measures recommended for this project. These measures address inadvertent discoveries and a tribal cultural resources awareness training as part of the Worker Environmental Awareness and Protection training. Please confirm that the attached mitigation measures will be included in the environmental document and the adopted mitigation, monitoring and reporting program. Thank you for involving UAIC in the planning process at an early stage. We ask that you make this correspondence a part of the project record and that you provide UAIC with a copy of the final environmental document and adopted mitigation, monitoring and reporting program.

Thank you,
Cherilyn

Cherilyn Neider
Tribal Historic Preservation
United Auburn Indian Community
530.883.2394

3 attachments

5_Mitigation_Measures_CEQA_Construction_Worker_Awareness_Training.docx
22K

Worker Awareness Brochure.pdf
858K

3_Mitigation_Measures_CEQA_Discoveries.docx
24K

If Human Remains are Found

The protocols for human remains discoveries are similar for other discoveries. **It is important to treat any human remains and the situation in which they are discovered with sensitivity, dignity, and respect.**

1. All work within 100 feet of the find will immediately stop. Work will also stop in areas where there is reason to believe additional human remains could be located (generally determined by a tribal monitor or qualified archaeologist).
2. UAIC and the on-site project/construction will be notified immediately.
3. **The location of any Native American Human remains must stay confidential.**

The United Auburn Indian Community

The United Auburn Indian Community is comprised of Miwok and Southern Maidu (Nisenan) people who are traditionally and culturally affiliated with this geographic area. The Tribe's area of geographic traditional and cultural affiliation encompasses all of Amador, El Dorado, Nevada, Placer, Sacramento, Sutter and Yuba counties, as well as portions of Butte, Plumas, San Joaquin, Sierra, Solano and Yolo counties; which includes the project area.

Contact us at

530-883-2394

https://www.auburnrancheria.com/

United Auburn Indian Community
of the Auburn Rancheria
10720 Indian Hill Road
Auburn CA, 95603

Respect on the Project for Native American Culture

Prepared by:
The United Auburn Indian Community
Preservation Department

Protection Measures and Protocols

The United Auburn Indian Community has developed the measures listed below to protect any unanticipated finds of tribal cultural resources and achieve compliance with federal and state cultural and environmental laws.

1. All work must stop IMMEDIATELY at that location and within 100 feet of the find. Work may be stopped by the tribal monitor or a qualified archaeologist. Work can continue on the rest of the project, as long as project activities stay at least 100 feet away.

2. The on-site project/construction manager will immediately be informed of the possible find and contact a qualified archeologist or tribal monitor of the find.

3. Under NO circumstances will any contractor or employee collect the archaeological material.

4. Over the next days or weeks following the discovery, a number of visitors may be present in order to investigate and evaluate the find. These may include: agency officials, the County Coroner, professional archaeologists, members of the tribe or the California Native American Heritage Commission, the California Office of Historic Preservation, and local representatives of the historical society (if the find is historic in nature). It is important for the integrity of the find and for culturally-appropriate treatment, and so that there is no violation issued, that reasonable methods be taken to ensure that there is no disturbance or damage (including theft) to the find and its context and surrounding areas.

5. It is important to respect the direction of the tribal monitor or other authorized tribal representative regarding identification and treatment of finds and to have some flexibility regarding where work might be able recommence outside of the find location area.

6. The location and nature of the discovery will be strictly confidential, shared only with individuals that need to know.

Cultural Resource Examples

There are many types of archaeological resources. The most common kind of artifacts, or markers of human activity that are found include stone tools, shell, beads, plant remains, animal bones, and a type of dark soil called midden. Archaeology from the historic era can also be found: these kinds of artifacts and features can include bottles, cans, ceramics, building foundations, bricks, and many more.

Tribal Cultural Resource – Awareness Training - Mitigation Measure

A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

Inadvertent Discoveries Mitigation Measure

If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR's to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

Initiation of AB 52 Tribal Consultation

Initiation Date:	April 24, 2019
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency
Consultation Coordinator:	Keith S. Dunbar, P.E., BCEE. Hon.D.WRE., F.ASCE
Tribe:	United Auburn Indian Community
Designated Contact:	Cherilyn Neider, Tribal Historic Preservation
Request Received:	April 24, 2019

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the United Auburn Indian Community.

In response to the AB 52 Tribal Consultation Notification sent to the tribe on February 26, 2019, the Northern California Power Agency (NCPA) has received your formal written request for tribal consultation pursuant to AB 52 for the above-named project.

Initiation of Consultation:

State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) requires the lead agency to begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation. Please consider this notice as the official initiation of the AB 52 Tribal Consultation process between the Northern California Power Agency and Tribe. As information becomes available on the proposed project, NCPA's consultation coordinator will schedule a face to face meeting with the tribe's designated contact if so requested

The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impact. The consultation coordinator may be reached by phone (951) 699-2082, or by email at ksdpe67@gmail.com. General comments may be submitted electronically, however, confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, be done by formal letter, in person, or over the telephone. If you wish to submit information in writing, correspondence may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined developable area of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts-direct current (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location		Developable Area (acres)	Estimated Capacity (MW_{dc})
	Latitude, Longitude	Section, Township, Range		
Lodi – Pixley Basin	38º07'18.06"N, 121º15'12.14"W	Sec 7, T 3 N, R 7 E, MDB&M	15.0	3.51
Lodi – Century Park East/West	38º06'26.66"N, 121º16'21.63"W	Sec 13, T 3 N, R 6 E, MDB&M	2.5	0.63
Lodi – Parking Structure	38º08'05.25"N, 121º16'18.58"W	Sec 1, T 3 N, R 6 E, MDB&M	0.9	0.18

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century Park East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

CULTURAL RESOURCES SURVEY
FOR THE
NORTHERN CALIFORNIA POWER AGENCY
SOLAR PROJECT 1 – LODI PIXLEY SITE
SAN JOAQUIN COUNTY, CALIFORNIA

Prepared for
K.S. Dunbar and Associates, Inc.
45375 Vista Del Mar
Temecula, CA 92590-4314

Prepared by
Anza Resource Consultants
603 Seagaze Drive, #1018
Oceanside, CA 92054
www.anzaresourceconsultants.com

USGS Quadrangle
Lodi South, California
Anza Project No. 19-0005

April 2019

EXECUTIVE SUMMARY

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California. This study regards the Lodi Pixley project site, which occupies approximately 27 acres located in an undeveloped park that serves as a stormwater detention and flood control basin. The Lodi Pixley project site is located north of Auto Center Drive at the intersection of Pixley Parkway. The proposed project is subject to the California Environmental Quality Act (CEQA) with NCPA serving as lead agency. This study includes a cultural resources records search, Sacred Lands File search and Native American scoping, a pedestrian survey of the project site, and preparation of this technical report in compliance with the cultural resources requirements of CEQA.

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the project site. Anza recommends a finding of ***no impact to historical resources*** under CEQA. No further cultural resources study is recommended; however, the following standard measures are recommended to avoid potential impacts from the unanticipated discovery of cultural resources during project related ground disturbing activities.

CULTURAL RESOURCES WORKER SENSITIVITY TRAINING

Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.

UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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APPENDICES

1. INTRODUCTION

Anza Resource Consultants (Anza) was retained by K.S. Dunbar & Associates, Inc. to conduct a Phase I cultural resources study for the Northern California Power Agency (NCPA) Solar Project 1 – Lodi Sites in the City of Lodi, San Joaquin County, California (Figure 1). The NCPA Solar Project 1 includes the following projects: Century East/West, Pixley Basin, and Parking Structure, and is described below (Section 1.1). This study has been prepared in accordance with the California Environmental Quality Act (CEQA) statutes and guidelines (Section 1.2). This cultural resources study includes a cultural resources records search, a summary of Native American scoping for the project, pedestrian survey, and the preparation of this report following the *Archaeological Resources Management Report (ARMR): Recommended Content and Format* guidelines (California Office of Historic Preservation 1990).

1.1 PROJECT DESCRIPTION

The objective of the NCPA Solar Project 1 is to develop a fleet of photovoltaic (PV) solar power plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by NCPA as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial five to seven years of operation, NCPA plans to purchase the plants.

NCPA has completed the site selection and screening portion of the project and the City of Lodi selected three sites for development: Century East/West, Pixley Basin, and Parking Structure sites. The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. It is estimated that approximately 8.3 acres of the site are developable, which would accommodate a project size of 1.4 megawatts.

1.2 REGULATORY SETTING

1.2.1 State

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and PRC, Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, the probability is high that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Assembly Bill 52 of 2014 (AB 52) took effect July 1, 2015, and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." According to the legislative intent for AB 52, "tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource. See also PRC 21074 (a)(1)(A)-(B).

1.3 PERSONNEL

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt requested the Sacred Lands File search, conducted the survey, and was the primary author of this report. Principal Investigator Katherine Collins, M.A., Registered Professional Archaeologist (RPA), coauthored this report and served as principal investigator for the study. Ms. Collins meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology (National Park Service 1983). GIS Specialist Spencer Bietz prepared all maps and figures.

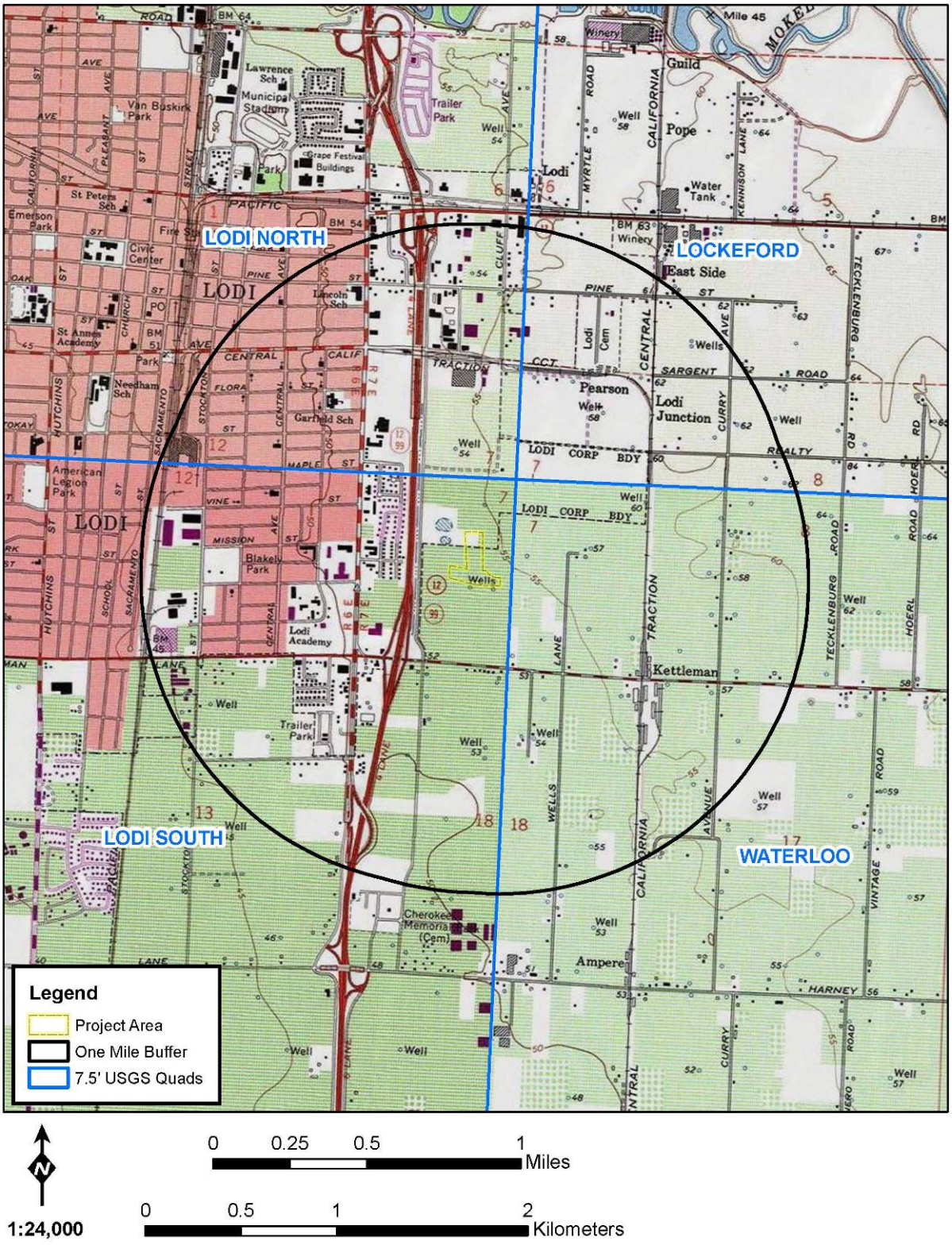

Figure 1. Project Location Map

2. ENVIRONMENTAL SETTING

The Lodi Pixley Site is located the northern San Joaquin Valley, famed for its agriculture. Characteristic vegetation communities in the region include agricultural habitats and annual grassland, with much smaller amounts of freshwater emergent wetland, lacustrine, water, and valley foothill riparian habitats (City of Lodi 2009:3.4-2). Agricultural lands support a broad variety of fauna including California ground squirrel, California vole, red-winged blackbird, northern harrier, white-tailed kite, and yellow-billed magpie. Urban areas support fauna such as American crow, rock dove, American robin, Brewer's blackbird, house finch, house sparrow, northern mockingbird, mourning dove, raccoon, Virginia opossum, and striped skunk. Prior to agricultural and urban development the San Joaquin Valley hosted a broad variety of additional species.

Lodi averages 19 inches of rain annually. Lodi has a hot-summer Mediterranean climate including cool, wet winters, often with dense ground fog, and hot, dry summers. The project site is underlain by the upper member of the Pleistocene Quarternary Modesto formation, composed of undivided alluvium (Dawson 2009).

3. CULTURAL SETTING

3.1 PREHISTORIC OVERVIEW

The prehistory of the Central Valley is generally divided into three main periods: Paleoindian, Archaic, and Emergent. The Archaic is further divided into the Lower, Middle, and Upper (Fredrickson 1973, 1974). This chronological framework is used by researchers to understand how prehistoric cultures adapted and coped with environmental and social change. Within this framework researchers recognized certain sets of cultural and technological traits that appeared to span long periods of time and covered large areas. These sets of traits were referred to as either "horizons" or "patterns" in the literature. With smaller (local) units of patterns referred to as "aspects" and "phases" (Fredrickson 1974, Moratto 1984, Rosenthal et al. 2007). Below is a brief overview of prehistoric occupation history in the San Joaquin Valley portion of the Central Valley.

The **Paleoindian Period** (11,550 to 8550 cal B.C.) was characterized by the arrival of small, high-mobile hunter-gathered groups. A characteristic element of this period is the use of fluted points to bring down large game animals. Evidence of Paleoindian occupation in the San Joaquin Valley have been found at Tracy Lake, Wolfson mound (CA-MER-215) in Merced County, and the Tulare Lake basin (Moratto 1984, Rosenthal et al. 2007).

During the **Archaic Period** (8550 cal B.C. to A.D. 1100) climatic changes preceiptated the drying of pluvial lakes resulting in changes in substance strategies employed by the native populations. By the Middle Archaic (5550 to 550 cal B.C.) a set of cultural traits known as the Windmiller Pattern emerged at several sites in the San Joaquin Valley (Rosethal et al. 2007). The presence of milling stones such as manos and metates often characterize Windmiller sites, although mortar and pestles have also been found, indicating that acorns and/or various seeds formed an important part of the diet (Moratto 1984, Rosenthal et al 2007). A variety of faunal remains have been documented at Windmiller Pattern sites including Tule elk, mule deer, and pronghorn, as well as smaller game such as rabbit, water birds, raptors, and rodents (Rosenthal et al. 2007). Also, the presence of angling hooks and baked clay artifacts possibly used as net or line sinkers, along with the remains of sturgeon, salmon, and smaller fishes, indicate that fishing was an additional source of food (Fredrickson 1973; Heizer 1949; Ragir 1972). Items such as net sinkers, pipes, and discoids, as well as cooking "stones" were made of baked clay. Ground and polished charmstones, impressions of twined basketry, shell beads, and bone tools also have been found at Windmiller Pattern sites. Some items, such as shell beads, obsidian tools, and quartz crystals, were obtained by trade.

The archaeological record at Windmiller Pattern sites indicates people practiced a mixed procurement strategy of both game and wild plants, with the addition of acorns and/or seeds. The mixed exploitation of a wide range of natural resources ties into a seasonal foraging strategy. Populations likely occupied the lower elevations of the Sacramento Valley in the winter months and shifted to higher elevations during the summer (Moratto 1984:206). Characteristic Windmiller mortuary practices included ventrally and dorsally extended burials, accompanied by grave goods, in cemeteries that were separate from the habitation sites (Ragir 1972, Rosenthal et al. 2007). Recent research suggests the Windmiller culture persisted into the Upper Archaic (550 cal B.C. to A.D. 1100) in the San Joaquin Valley and was not replaced by the Berkeley Pattern, as it had in other places. Several sites in San Joaquin and Merced Counties (CA-SJO-17, SJO-87, SJO-106, SJO-154, SJO-246, MER-3, MER-215, and MER-323) continued the characteristic Windmiller mortuary practice of extended burials until sometime between 800 and 1,000 years ago (Rosenthal el al. 2007:156).

During the **Emergent Period** (cal A.D. 1100 to Historic) a new set of cultural traits emerged in the Central Valley known as the Augustine Pattern, although there is sporadic evidence of this cultural pattern in the San Joaquin Valley (Moratto 1984, Rosenthal et al. 2007:157). The Pacheco Complex on the western edge of the valley is the only well-defined example in this region. The Augustine Pattern is evidenced by a substantial increase in the intensity of subsistence exploitation, including fishing, hunting, and gathering (particularly the acorn (Moratto 1984:211–214). These changes begin to reflect the cultural pattern known from historic period Native American groups in the area. Augustine Pattern tools and cooking implements included shaped mortars and pestles, hopper mortars, bone awls used for producing coiled baskets, and the bow and arrow. Pottery vessels, known as Cosumnes brownware, are found in some parts of the Central Valley and most likely developed during this period from the prior baked clay industry.

During this period, an increase in sedentism led to the development of social stratification, accompanied by a shift to elaborate ceremonial and social organization. Exchange networks, with the use of clamshell disk beads as currency, also developed during the Augustine Pattern. Mortuary practices during this period included flexed burials and pre-interment burning of offerings in a grave pit, as well as cremation of high-status individuals (Fredrickson 1973:127–129; Moratto 1984:211). In the San Joaquin Valley villages and smaller communities developed along side-streams of the foothills, and river channels and sloughs in the valley. The introduction of the bow and arrow occurred during this time and one of California's most unique point types, the Stockton serrated edge, was developed in the region (Rosenthal el al. 2007).

3.2 ETHNOGRAPHIC OVERVIEW

The project site is located in the traditional territory of the Plains Miwok people. The Plains Miwok were one of six culture groups that spoke a Miwokan language in California. Other Miwok-speaking groups included the Bay Miwok (Saclan), Northern Sierra Miwok, Central Sierra Miwok, Southern Sierra Miwok, and Coast Miwok. Plains Miwok territory was centered in the Central Valley occupying an area between the lower reaches of the Mokelumne and Cosumnes Rivers and the banks of the Sacramento River, from Rio Vista to Freeport (Levy 1978). The word Miwok (miw·yk) generally means "people" in the Miwok language, which is a member of the Penutian language family (Kroeber 1925, Mithun 1999).

The primary sociopolitical unit among the Plains Miwok was the tribelet, comprising the residents of several base settlements and their associated seasonal camps. Each tribelet had a population of about 300 to 500 people and controlled specific territory and resources within it. Each settlement within a tribelet appeared to be the home of localized patrilineage. The tribelet as whole was led by a chieftain which was a hereditary position passed down from father to son. If there was no male heir, the position could be passed to the chief's daughter. The chief acted as an advisor, had the final say in interpersonal disputes, and determined the best time to gather resources (Levy 1978). Settlements typically contained a semi-subterranean earth lodge used for community ritual or social gatherings. Other structures include a semi-subterranean sweathouse, a menstrual hut, and a granary for storing acorns. Families lived in small earth-covered structures (Kroeber 1925, Levy 1978). Ethnohistoric research indicates a Miwok settlement called *Muquelemne* was located on the south bank of Mokelumne River near Lodi (Levy 1978).

The basic subsistence strategy of the Plains Miwok was seasonally mobile hunting and gathering. However, tobacco was cultivated and they also possessed domesticated dogs. Plant foods included acorns, buckeyes, laurel nuts, hazelnuts, seeds, roots, greens, and berries. Acorns, the primary staple, were gathered in the fall and stored through the winter. Seeds were gathered from May through August. Intentional, periodic burning in August ensured an ample supply of seed-bearing annuals and forage for game. The Miwok ate more meat in the winter, when the only plant resources available were those that

had been stored. Hunting was accomplished with the aid of the bow and arrow, traps, and snares. Animal foods consisted of deer; elk; antelope; rodents; waterfowl; quail, pigeons, flickers, and other birds; freshwater mussels and clams; land snails; fish; and insects. Salt was obtained from springs or through trade with people from the Mono Lake area (Bennyhoff 1977; Levy 1978).

The Plains Miwok used a variety of tools made from bone, stone, antler, wood, and textile. Bows were made of wood from a variety of tree species such as oak, ash, willow, pepperwood, maple, or hazel. Arrow heads were fashioned from stone materials such as obsidian obtained through trade, as well as local materials. Typical basketry items were seed beaters; cradles; sifters; rackets used in ball games; and baskets for storing, winnowing, parching, and carrying burdens. Other textiles included mats and cordage (Levy 1978).

Many Miwok groups were subject to missionization efforts during the late eighteenth and early nineteenth centuries. Christian baptisms of Plains Miwok occurred as early as 1811 and did not stop until 1833. During this time over 2,100 Plains Miwok were baptized. As a result of the missionization effort many Plains Miwok were removed from their traditional territory and sent to Mission San Jose located in the present-day city of Fremont. By the beginning of the nineteenth century the Miwok numbered some 19,500 people but by the early twentieth century this number was below one thousand people. Today there are about 3,500 people of Miwok descent, with many living on several reservations in California (White 2019).

3.3 HISTORIC OVERVIEW

The historic period for the state of California generally begins with the establishment of the first Spanish mission and presidio in San Diego in 1769. This marks the beginning of the Spanish period of California history which lasted until 1822 when news of Mexico's independence from Spain in 1821 finally reached California. The Spanish period saw the establishment of a permanent European presence in California in the form of 21 missions located along the coast between San Diego and Sonoma, four military presidios located in San Diego, Monterey, San Francisco and Santa Barbara, and three pueblos (towns) that later became the cities of Los Angeles, San Jose and Santa Cruz (Robinson 1948). The Spanish period ended with Mexican independence from the Spanish crown in 1822. The Mexican period of California history saw the seizure of lands once held by the missions through the Mexican Secularization Act of 1833 and the redistribution of those lands to individuals in the form of land grants known as "ranchos" (Robinson 1948). During this period the Mexican government in California issued about 700 land grants to Mexican citizens and foreign immigrants (Shumway 1988). The outbreak of war between the United States and Mexico and the signing of the Treaty of Guadalupe Hidalgo in 1848 ended the Mexican period and signaled the beginning of the American period of California history. The early American period is marked by the discovery of gold at Sutter's Mill in 1848, resulting in a gold rush that saw a massive influx of settlers from other parts of the United States and around the world, greatly impacting California's native population. In 1869 the transcontinental railroad was completed linking California with the rest of the United States. The gold rush and the establishment of the railroad played major roles in the development of California into a national and worldwide leader in agricultural and industrial production. These early developments also resulted in making California one of the most racially and ethnically diverse states in the Union.

3.3.1 San Joaquin County

The history of San Joaquin County begins in 1850 as one of the original 27 counties of the state of California. The county derives its name from the San Joaquin River, a major river that flows through the region from southern Sierra Nevada Mountains. Early European exploration through the region included

an expedition led by Gabriel Moraga, a Spanish army officer who named the San Joaquin River as well as other natural features as he made his way through the Central Valley. Between 1840 and 1846 the Mexican government in California issued five land grants – Arroyo Seco, Campo de Los Franceses, El Pescadero, Sanjon de los Moquelumnes, and Rancho del Estanislao (also known as Thompson's Rancho) – that encompassed major portions of San Joaquin County (Shumway 1988). The County's generally flat terrain made it a desirable location for building a railroad and in 1866 Congress authorized the Southern Pacific Railroad to build a transcontinental rail route between San Francisco and the Colorado River. By 1870 the Southern Pacific line made its way through San Joaquin County to the City of Modesto (Burns 2007). The establishment of the Southern Pacific and other rail lines through San Joaquin County provided the transportation backbone to move local agricultural produce to markets across the country. Today, agriculture remains an important component of the County's economy.

3.3.2 City of Lodi

The City of Lodi was established in 1869 along the southern banks of Mokelumne River. It was originally named Mokelunme but was changed to Lodi by an act of the California legislature in 1874. Two of Lodi's early residents, Charles Ivory and John Burt established a general store on the corner of Pine and Sacramento Streets. Their store became a magnet for attracting homesteaders and other businesses to the area. Since its inception, agriculture was the backbone of Lodi's economy growing such crops as wheat, watermelon, and grapes. In 1880 some 3.4 million bushels of wheat were grown in San Joaquin County, much of it grown in the Lodi area. Grape vineyards also dominated the area with over two million plants in production in 1899. By the early twentieth century grapes were so important to Lodi that in 1907 residents held the Tokay Carnival to "advertise the beauty and value of the Tokay grape." During the same year a mission-style arch was built at Pine and Sacramento Streets, in the historic core of Lodi, at a cost of $500. The arch still exists today and is a local landmark (Hoover et al. 2002, Lodi Historical Society 2016).

4. BACKGROUND RESEARCH

4.1 CALIFORNIA HISTORICAL RESOURCE INFORMATION SYSTEM

Anza conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Central California Information Center (CCIC) located at California State University, Stanislaus. The search was conducted by CCIC on April 16, 2019, to identify all previous cultural resources work and previously recorded cultural resources within a 0.5-mile radius of the project site (Appendix A). The CHRIS search included a review of the NRHP, CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5-, 15-, and 30-minute quadrangle maps.

4.1.1 Previous Studies

The CCIC records search identified two cultural resources studies that were conducted within a 0.5-mile radius of the project site, neither of which are mapped within the project site (Table 1).

Table 1. Previous Cultural Resource Studies within a 0.5-Mile Radius of the Project Site

Report Number	Author	Year	Title	Proximity to Project Site
SJ-00821	Peak, A.	1978	Cultural Resource Assessment of the Proposed City of Lodi C-2 Basin Project San Joaquin County, California	Outside
SJ-04508	Jones and Stokes Associates, Inc.	2001	Historic Property Survey Report, 10-SJO-12, P.M. 15.2/18.0, Charge Unit 173, E.A. OG5700: Kettleman Lane, Route 12 Widening Project	Outside

Source: CCIC, April 2019

4.1.2 Previously Recorded Resources

No cultural resources were recorded within 0.5 mile of the project site (Appendix A).

4.2 NATIVE AMERICAN SCOPING

K.S. Dunbar & Associates, Inc. requested a review of the Sacred Lands File (SLF) by the Native American Heritage Commission. The NAHC sent a response on March 11, 2019, stating that a search of the SLF was completed with negative results (i.e., no sacred lands or resources important to Native Americans identified in the search; Appendix B). The NAHC provided a list of seven Native American contacts that may have knowledge regarding Native American cultural resources within or near the project site.

K.S. Dunbar & Associates, Inc. mailed letters and sent emails dated March 12, 2019, to the seven Native American contacts describing the Lodi projects and asking if they had knowledge regarding cultural resources of Native American origin within or near the project sites (Appendix B). The Northern Valley Yokut responded via email on April 2, 2019, requesting that NCPA conduct a SLF search and CCIC records search. The United Auburn Indian Community responded via email on April 24, 2019 and requested formal AB 52 consultation for this project and provided recommended mitigation measures.

Consultation between NCPA and United Auburn Indian Community was formally initiated in a letter dated April 24, 2019. No additional responses have been received as of April 30, 2019.

5. FIELDWORK

5.1 SURVEY METHODS

Anza Principal and Senior Cultural Resources Specialist Kevin Hunt conducted a pedestrian survey of the project site on April 25, 2019. Mr. Hunt surveyed the project site using transects spaced 5 to 10 meters apart and oriented north-south. The entire project site was surveyed.

Mr. Hunt examined all exposed ground surface for artifacts (e.g., flaked stone tools and tool-manufacture debris, ground stone tools, ceramic sherds, fire-affected rock), ecofacts (marine shell, bone), soil discoloration that could indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramic sherds, cut bone). Ground disturbances such as burrows and drainages were visually inspected. Photographs documenting the project site and survey are maintained by Anza in cloud storage online.

5.2 RESULTS

The project site is highly disturbed with a water retention basin, contoured embankments, and berms near the project margins (Photographs 1-3). The water retention basin was full and provided zero ground visibility (Photograph 2). The remainder of the project site was covered by dense mixed grasses and occasional plants with odd bare patches resulting in poor ground visibility (approximately 5-15 percent). The survey was negative; that is, no cultural (i.e., archaeological, historic built, or tribal cultural) resources were identified within the project site.

Photograph 1. Overview of project site towards water retention basin, facing northeast.

Photograph 2. View of west side of water retention basin, facing northeast.

Photograph 3. Overview of project site, facing south.

6. MANAGEMENT RECOMMENDATIONS

The cultural resource records search, Native American scoping, and pedestrian survey identified no cultural resources within or adjacent to the project site. No further cultural resources work is recommended. The following measures are recommended in the case of the unanticipated discovery of cultural resources during project related ground disturbing activities.

6.1 UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

6.2 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

7. REFERENCES

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Appendix A:
Records Search Summary

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 4/16/2018

Records Search File No.: 11042L
Access Agreement: #540
Project: NCPA Lodi Pixley Solar PV
Project; north side of Auto Center Drive at Pixley Way

Kevin Hunt
Anza Resource
Consultants
603 Seagaze Drive #1018
Oceanside, CA 92054

kevin@anzaresourceconsultants.com

Dear Mr. Hunt:

The Central California Information Center received your Priority Response record search request for the project area/radius referenced above, located on the Lockeford, Lodi North, Lodi South and Waterloo 7.5' quadrangles in San Joaquin County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☒ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Summary Data:

Resources within project area:	None formally reported to the Information Center.
Resources within 1/2 mi radius:	None formally reported to the Information Center. Please note: The historic building inventory for the City of Lodi has not been mapped in GIS; please refer to the attached OHP Historic Property Data File address list provided your for use in determining if any of the properties listed fall within the ½-mile radius.
Reports within project area:	None formally reported to the Information Center.
Reports within 1/2 mi radius:	2: SJ-00821 and SJ-04508

Resource Database Printout (list): ☐ enclosed ☐ not requested ☐ nothing listed

Resource Database Printout (details): ☐ enclosed ☐ not requested ☒ nothing listed

Resource Digital Database Records: ☐ enclosed ☐ not requested ☒ nothing listed

Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed

Report Database Printout (details): ☐ enclosed ☒ not requested ☐ nothing listed

Report Digital Database Records: ☒ enclosed ☐ not requested ☐ nothing listed

Resource Record Copies: ☐ enclosed ☐ not requested ☒ nothing listed

Report Copies: ☐ enclosed ☒ not requested ☐ nothing listed

OHP Historic Properties Directory: ☒ enclosed ☐ not requested ☐ nothing listed

City of Lodi listing

Archaeological Determinations of Eligibility: ☐ enclosed ☐ not requested ☒ nothing listed

CA Inventory of Historic Resources (1976): ☐ enclosed ☐ not requested ☒ nothing listed

Caltrans Bridge Survey: ☐ enclosed ☒ not requested ☐ nothing listed

Ethnographic Information: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Literature: ☐ enclosed ☒ not requested ☐ nothing listed

Historical Maps: ☒ enclosed ☐ not requested ☐ nothing listed

Map Number One, *History of San Joaquin County, California, with Illustrations* (1889; 1968 reprint)
Map of the County of San Joaquin, California (1883)
Lodi 1:62500-scale (1939)
Lodi South 7.5' (1953)

Local Inventories: ☐ enclosed ☐ not requested ☒ nothing listed

GLO and/or Rancho Plat Maps: ☒ enclosed ☐ not requested ☐ nothing listed

T3N R7E, Sheet 41-203 (1953-1865)

Shipwreck Inventory: ☒ not available at CCIC; please go to

http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Note: Billing will be transmitted separately via email by our Financial Services office *($978.45), payable within 60 days of receipt of the invoice.

Sincerely,

E. A. Greathouse

E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: Laurie Marroquin CSU Stanislaus Financial Services
lamarroquin@csustan.edu

Appendix B:
Native American Scoping

STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

March 11, 2019

Keith S. Dunbar
K.S. Dunbar & Associates, Inc.

VIA Email to: ksdpe67@gmail.com

RE: NCPA Solar Project 1 – Lodi Sites, San Joaquin County

Dear Mr. Dunbar:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez
for

Katy Sanchez
Associate Environmental Planner

Attachment

Native American Heritage Commission
Native American Contacts List
3/11/2019

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk / Miwok
Sacramento ,CA 95811
rhonda@buenavistatribe.com
(916) 491-0011 Office
(916) 491-0012 Fax

California Valley Miwok Tribe
4620 Shippee Lane — Miwok
Stockton ,CA 95212
(209) 931-4567 Office
(209) 931-4333 Fax

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of Ca
P.O. Box 395 — Miwok
West Point ,CA 95255
l.ewilson@yahoo.com
(209) 293-4179 Office

Ione Band of Miwok Indians
Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699 — Miwok
Plymouth ,CA 95669
sara@ionemiwok.org
(209) 245-5800 Office
(209) 245-6377 Fax

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden ,CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn ,CA 95603 — Miwok
bguth@auburnrancheria.com
(530) 883-2390 Office
(530) 883-2380 Fax

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove ,CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office
(916) 683-6015 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
NCPA Solar Project 1 – Lodi Sites, San Joaquin County.

Fwd: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites

Keith Dunbar <ksdpe67@gmail.com>
Tue 4/2/2019 9:56 AM
To: Kevin Hunt <kevin@anzaresourceconsultants.com>

Kevin,

Good morning!

FYI!

Have a great day,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, CA 92590-4314
(951) 699-2082
Cell: (949) 412-2634
ksdpe67@gmail.com

---------- Forwarded message ---------
From: **canutes** <canutes@verizon.net>
Date: Tue, Apr 2, 2019 at 9:41 AM
Subject: Re: AB 52 Notification - NCPA Solar Project 1 - Lodi Sites
To: Keith Dunbar <ksdpe67@gmail.com>

Mr. Dunbar,
The tribe has reviewed the information. The tribe is requesting that the NCPA request a record search from the Native American Heritage Commission and the information center as the area of the proposed project is in an area of sensitivity.

Nototomne Cultural Preservation
Northern Valley Yokut
Katherine
Perez
P.O Box 717
Linden, CA 95236
Cell: 209.649.8972
Email: canutes@verizon.net

Sent from my iPad

On Mar 12, 2019, at 11:54 AM, Keith Dunbar <ksdpe67@gmail.com> wrote:

Katherine Erolinda Perez, Chairperson,

An AB 52 Notification of the Northern California Power Agency's NCPA Solar Project 1 - Lodi Sites is attached in accordance with recommendations of the Native American Heritage Commission.

Thank you,

Keith

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE, F. ASCE

K.S.Dunbar & Associates, Inc.

Environmental Engineering

45375 Vista Del Mar

Temecula, CA 92590-4314

(951) 699-2082

Cell: (949) 412-2634

ksdpe67@gmail.com

<AB 52 Tribal Consultation Notification N Valley Yokuts.pdf>

Gmail Keith Dunbar <ksdpe67@gmail.com>

AB 52 Consultation for the NCPA Solar Project 1 - Lodi Sites

1 message

Cherilyn Neider <cneider@auburnrancheria.com> Wed, Apr 24, 2019 at 9:25 AM
To: "ksdpe67@gmail.com" <ksdpe67@gmail.com>

Dear Keith S. Dunbar,

Thank you for your letter received notifying us of the NCPA Solar Project 1. I am contacting you in order to request:

- Consultation for this project;
- All existing cultural resource assessments;
- Requests for and results of records searches.

Attached you will find mitigation measures recommended for this project. These measures address inadvertent discoveries and a tribal cultural resources awareness training as part of the Worker Environmental Awareness and Protection training. Please confirm that the attached mitigation measures will be included in the environmental document and the adopted mitigation, monitoring and reporting program. Thank you for involving UAIC in the planning process at an early stage. We ask that you make this correspondence a part of the project record and that you provide UAIC with a copy of the final environmental document and adopted mitigation, monitoring and reporting program.

Thank you,
Cherilyn

Cherilyn Neider
Tribal Historic Preservation
United Auburn Indian Community
530.883.2394

3 attachments

5_Mitigation_Measures_CEQA_Construction_Worker_Awareness_Training.docx
22K

Worker Awareness Brochure.pdf
858K

3_Mitigation_Measures_CEQA_Discoveries.docx
24K

If Human Remains are Found

The protocols for human remains discoveries are similar for other discoveries. **It is important to treat any human remains and the situation in which they are discovered with sensitivity, dignity, and respect.**

1. All work within 100 feet of the find will immediately stop. Work will also stop in areas where there is reason to believe additional human remains could be located (generally determined by a tribal monitor or qualified archaeologist).
2. UAIC and the on-site project/construction will be notified immediately.
3. **The location of any Native American Human remains must stay confidential.**

The United Auburn Indian Community

The United Auburn Indian Community is comprised of Miwok and Southern Maidu (Nisenan) people who are traditionally and culturally affiliated with this geographic area. The Tribe's area of geographic traditional and cultural affiliation encompasses all of Amador, El Dorado, Nevada, Placer, Sacramento, Sutter and Yuba counties, as well as portions of Butte, Plumas, San Joaquin, Sierra, Solano and Yolo counties; which includes the project area.

Contact us at

530-883-2394

https://www.auburnrancheria.com/

United Auburn Indian Community
of the Auburn Rancheria
10720 Indian Hill Road
Auburn CA, 95603

Respect on the Project for Native American Culture

Prepared by:
The United Auburn Indian Community
Preservation Department

Protection Measures and Protocols

The United Auburn Indian Community has developed the measures listed below to protect any unanticipated finds of tribal cultural resources and achieve compliance with federal and state cultural and environmental laws.

1. All work must stop IMMEDIATELY at that location and within 100 feet of the find. Work may be stopped by the tribal monitor or a qualified archaeologist. Work can continue on the rest of the project, as long as project activities stay at least 100 feet away.

2. The on-site project/construction manager will immediately be informed of the possible find and contact a qualified archeologist or tribal monitor of the find.

3. Under NO circumstances will any contractor or employee collect the archaeological material.

4. Over the next days or weeks following the discovery, a number of visitors may be present in order to investigate and evaluate the find. These may include: agency officials, the County Coroner, professional archaeologists, members of the tribe or the California Native American Heritage Commission, the California Office of Historic Preservation, and local representatives of the historical society (if the find is historic in nature). It is important for the integrity of the find and for culturally-appropriate treatment, and so that there is no violation issued, that reasonable methods be taken to ensure that there is no disturbance or damage (including theft) to the find and its context and surrounding areas.

5. It is important to respect the direction of the tribal monitor or other authorized tribal representative regarding identification and treatment of finds and to have some flexibility regarding where work might be able recommence outside of the find location area.

6. The location and nature of the discovery will be strictly confidential, shared only with individuals that need to know.

Cultural Resource Examples

There are many types of archaeological resources. The most common kind of artifacts, or markers of human activity that are found include stone tools, shell, beads, plant remains, animal bones, and a type of dark soil called midden. Archaeology from the historic era can also be found: these kinds of artifacts and features can include bottles, cans, ceramics, building foundations, bricks, and many more.

Tribal Cultural Resource – Awareness Training - Mitigation Measure

A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

Inadvertent Discoveries Mitigation Measure

If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR's to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678

Initiation of AB 52 Tribal Consultation

Initiation Date:	April 24, 2019
Project Name:	NCPA Solar Project 1 – Lodi Sites
Lead Agency:	Northern California Power Agency
Consultation Coordinator:	Keith S. Dunbar, P.E., BCEE. Hon.D.WRE., F.ASCE
Tribe:	United Auburn Indian Community
Designated Contact:	Cherilyn Neider, Tribal Historic Preservation
Request Received:	April 24, 2019

Introduction:

The Northern California Power Agency (NCPA) is proposing the NCPA Solar Project 1 – Lodi Sites Project which may be located in a geographical area that is traditionally and culturally affiliated with the United Auburn Indian Community.

In response to the AB 52 Tribal Consultation Notification sent to the tribe on February 26, 2019, the Northern California Power Agency (NCPA) has received your formal written request for tribal consultation pursuant to AB 52 for the above-named project.

Initiation of Consultation:

State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) requires the lead agency to begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation. **Please consider this notice as the official initiation of the AB 52 Tribal Consultation process between the Northern California Power Agency and Tribe.** As information becomes available on the proposed project, NCPA's consultation coordinator will schedule a face to face meeting with the tribe's designated contact if so requested

The consultation may include discussion concerning the type of environmental review necessary for the project, the significance of tribal cultural resources discovered, the significance of the project's impacts on tribal cultural resources, and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The consultation does not limit the ability of the tribe to submit information to NCPA regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any measures the tribe feels are appropriate to mitigate the potential impact. The consultation coordinator may be reached by phone (951) 699-2082, or by email at ksdpe67@gmail.com. General comments may be submitted electronically, however, confidential information transmitted electronically cannot be ensured. NCPA recommends that transmittal of confidential information, such as the specific location of a cultural resource, be done by formal letter, in person, or over the telephone. If you wish to submit information in writing, correspondence may be sent to:

Keith S. Dunbar, P.E., BCEE, Hon.D.WRE., F. ASCE
K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
(951) 699-2082
E-Mail: ksddpe67@gmail.com

Overview of the Proposed Project:

The objective of the NCPA Solar Project 1 is to develop a fleet of Photovoltaic (PV) Solar Power Plants throughout participating member service territories to be completed and placed in service by the end of 2019. The plants will be managed by the Northern California Power Agency (NCPA) as a single project to be owned and operated by a third-party provider through a power purchase agreement (PPA). After the initial 5 – 7 years of operation, NCPA plans to purchase the plants.

The project will be executed in three phases:

- Phase 1 – Determine member interest and requirements and identify potential sites.
- Phase 2 – Site selection and screening, plan development and selection of a third-party provider to fulfill design, construction and operation through a PPA.
- Phase 3 – Construction and operation per the PPA.

NCPA has now completed Phase 1 and the site selection and screening portion of Phase 2. Burns & McDonnell was retained by NCPA to complete Phase 2 Site Screening, Plan Development, and Procurement services for each site selected by the member agencies. The City of Lodi selected three sites for development: Century East/West, Pixley Basin and Parking Structure sites. Those three sites are the subject of this Notification.

The Century East site is located on a City easement bordered by an industrial park to the north, recreational fields to the south, residences to the east and the Union Pacific railroad to the west. The Century West site is directly across the railroad tracks from the Century East site. It is bordered on the north, south and west by residential development. The combined developable area of these sites is 2.5 acres which would accommodate a project size of 0.63 megawatts-direct current (MW_{dc}).

The Pixley Basin site contains approximately 27 acres and is located in an undeveloped park that serves as a stormwater detention and flood control basin. The site is surrounded by industrial and commercial uses. Residential areas do exist approximately 0.25 miles west of the site; however, Highway 99 separates the commercial areas from the residential areas and the project site is out of the viewshed of the residences. In its October 5, 2018 report, Burns & McDonnell estimated the developable portion of the site to be approximately 15 acres which would accommodate a project size of 3.51 MW_{dc}.

The parking structure is located at the northeast corner of the intersection of E. Pine and N. Sacramento Streets in a mixed commercial and industrial area. This site contains a developable area of 0.9 acres which would accommodate a project size of 0.18 MW_{dc}.

Location of the Proposed Project

All three proposed sites are within the City of Lodi, San Joaquin County, California. Exact locations are shown below as well as on Figure 1. Individual sites are shown on Figures 2, 3 and 4.

Site	Location		Developable Area (acres)	Estimated Capacity (MW_{dc})
	Latitude, Longitude	Section, Township, Range		
Lodi – Pixley Basin	38°07'18.06"N, 121°15'12.14"W	Sec 7, T 3 N, R 7 E, MDB&M	15.0	3.51
Lodi – Century Park East/West	38°06'26.66"N, 121°16'21.63"W	Sec 13, T 3 N, R 6 E, MDB&M	2.5	0.63
Lodi – Parking Structure	38°08'05.25"N, 121°16'18.58"W	Sec 1, T 3 N, R 6 E, MDB&M	0.9	0.18

Figure 1 NCPA Solar Project 1 – Proposed Sites in the City of Lodi

Figure 2 Century Park East/West Site

Figure 3 Pixley Basin Site

Figure 4 Parking Garage Site

Appendix F

MMRP

Northern California Power Agency
651 Commerce Drive
Roseville, California 95678-6420

Mitigation Monitoring & Reporting Program

NCPA Solar Project 1 – Lodi Sites

Photo Courtesy of SunPower Corporation

Prepared by:

K.S. Dunbar & Associates, Inc.
Environmental Engineering
45375 Vista Del Mar
Temecula, California 92590-4314
951-699-2082
Email: ksdpe67@gmail.com

July 2019

Mitigation Monitoring and Reporting Program

NCPA Solar Project – Lodi Sites

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring program. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring program must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, the following MITIGATION MONITORING AND REPORTING CHECKLIST has been prepared for the NCPA Solar Project 1 – Lodi Sites Project. This Mitigation Monitoring and Reporting Checklist is intended to provide verification that all applicable Conditions of Approval relative to significant environmental impacts are monitored and reported. Monitoring will include: 1) verification that each mitigation measure has been implemented, 2) recordation of the actions taken to implement each mitigation, and 3) retention of records in the NCPA Solar Project 1 – Lodi Sites Project file.

This Mitigation Monitoring and Reporting Program delineates responsibilities for monitoring the Project, but also allows the Northern California Power Agency (NCPA) flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented.

Reporting consists of establishing a record that a mitigation measure is being implemented and generally involves the following steps:

- NCPA distributes reporting forms to the appropriate persons for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Environmental Impact Report or Initial Study and Mitigated Negative Declaration, which provides general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance will be addressed to NCPA as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- Responsible parties provide NCPA with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- NCPA or Applicant prepares a reporting form periodically during the construction phase and an annual reporting summarizing all project mitigation monitoring efforts.
- Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the Mitigation Monitoring and Reporting Program, if required, would be made in accordance with CEQA and would be permitted after further review and approval by NCPA. Such changes could include reassignment of monitoring and reporting responsibilities, program redesign to make any appropriate improvements, and/or modification, substitution or deletion of mitigation measures subject to conditions described in CEQA Guidelines Section 15162. No change will be permitted unless the Mitigation Monitoring and Reporting Program continues to satisfy the requirements of Public Resources Code Section 21081.6.

Mitigation Monitoring and Reporting Program Checklist

NCPA Solar Project 1 – Lodi Sites

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
Air Quality				
NCPA shall appoint a construction relations officer to act as a community liaison concerning on-site construction activities including resolution of issues related to PM_{10} generation. Additionally, best management practices shall be included in contract documents for this project.	Project Records.	Prior To Construction.	Project Manager.	By: Date:
Standard Construction Practices/Design Features NCPA's contract documents for this project will include the following: The contractor shall: ❖ Utilize electricity from power poles instead of from temporary diesel or gasoline power generators, when feasible. ❖ Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the contractor shall use trucks that meet EPA 2007 model year NO_x emissions requirements. ❖ Require that all on-site construction equipment meet EPA Tier 3 or higher emissions standards according to the following: ➢ All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. ➢ A copy of each unit's certified tier specification, BACT documentation, and CARB or SJVAPCD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. ❖ Maintain construction equipment engines by keeping them properly tuned and maintained according to manufacturer's specifications. ❖ Use alternative fuels or clean and low-sulfur fuel for equipment. ❖ Idle trucks in accordance with the Airborne Toxic Control Measure (ACTM) to Limit Diesel	Project Records.	Prior To Construction.	Project Manager.	By: Date:

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
Fueled Commercial Motor Vehicle Idling and other applicable laws. ❖ Spread soil binders on site, where appropriate, unpaved roads and staging areas. ❖ Water site and equipment as necessary to control dust. ❖ Sweep all streets at least once per day in accordance with SJVAPCD Rule 8041. ❖ Conduct operations in accordance with SJVAPCD Rule 8021 requirements. ❖ If necessary, wash off trucks leaving the site. ❖ Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114.				
Biological Resources				
Standard Construction Practices/Design Features NCPA's contract documents for this project will include the following: ❖ If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds shall be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a no-disturbance buffer. The size of the no-disturbance buffer (generally 300 feet for migratory and non-migratory song birds and 500 feet for raptors and special-status species) will be determined by the wildlife biologist, in coordination with the CDFW, and will depend on the level of noise and/or surrounding disturbances, line of sight between the nest and the construction activity, ambient noise, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.	Project Records.	Prior To Construction.	Project Manager.	By: Date:

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
Cultural Resources				
Prior to the start of construction, NCPA shall hold a pre-grading meeting. The Project Archaeologist shall attend the pre-grading meeting with NCPA's Project Administrator, Field Engineering Inspector and any contractors to conduct a Cultural Resources Worker Sensitivity Training for all construction personnel working on the proposed Project. The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols.	Project Records.	Prior To Construction.	Project Manager.	By: Date:
Standard Construction Practices/Design Features NCPA's contract documents for this project will include the following: ❖ In the unlikely event that potentially significant archaeological materials are encountered during construction activities, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery, access the significance of the archaeological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of cultural material that might be discovered during excavation shall be in accordance with applicable laws and regulations.	Project Records.	Prior To Construction.	Project Manager.	By: Date:
❖ All sacred items, should they be encountered within the Project sites, shall be avoided and preserved as the preferred mitigation, if feasible. All cultural materials that are collected during excavation and other earth disturbing activities on the Project sites, with the exception of sacred items, burial goods and human remains which will be addressed in any required Treatment Agreement, shall be tribally curated according to the current repository standards. The collections and associated records shall be transferred, including title, to the closet tribe to the Project site.				
❖ In the event of an accidental discovery or recognition of any human remains, the County Coroner shall be notified and construction activities at the affected work site shall be halted. If the coroner determines the remains to be Native American: (1) the coroner shall contact the Native American Heritage Commission (NAHC) within 24-hours, and (2) the NAHC shall identify the person or persons it believes to be the most likely descended from the deceased Native American. The treatment and disposition of human remains that might be discovered during excavation shall be in accordance with applicable laws and regulations.				

Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
Geology and Soils				
Standard Construction Practices/Design Features NCPA's contract documents for this project will include the following: ❖ In the unlikely event that potentially significant paleontological materials (e.g., fossils) are encountered during construction of the project, all work shall be halted in the vicinity of the paleontological discovery until a qualified paleontologist can visit the site of discovery, assess the significance of the paleontological resource, and provide proper management recommendations. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted. The treatment and disposition of paleontological material that might be discovered during excavation shall be in accordance with applicable laws and regulations.	Project Records	Prior to Construction	Project Manager	By: Date:
Hazards and Hazardous Materials				
Standard Construction Practices/Design Features EMWD's contract documents for this project will include the following: ❖ During project construction, the construction contractor shall implement the following measures to address the potential environmental constraints associated with the presence of hazardous materials at the project sites to the satisfaction of NCPA: ✓ The contractor shall prepare a Health and Safety Plan in compliance with the requirements of Chapter 6.95, Division 20 of the Health and Safety Code (§25500 – 25532). The plan shall include measures to be taken in the event of an accidental spill. ✓ The contractor shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains. In addition, the contractor shall store all reserve fuel supplies only within the confines of designated construction staging areas; refuel equipment only with the designated construction staging areas; and regularly inspect all construction equipment for leaks. ✓ The construction staging area shall be designed to contain contaminants such as oil, grease, and fuel products to ensure that they do not drain towards receiving waters or storm drain inlets.	Project Records.	Prior To Construction.	Project Manager.	By: Date:
Hydrology and Water Quality				
Standard Construction Practices/Design Features All site grading and excavation activities associated with the construction of the Project facilities would be subject to the provisions of the National Pollutant Discharge Elimination System (NPDES) Construction Permit for Storm Water Discharges Associated with Construction	Project Records.	Prior To Construction.	Project Manager.	By: Date:

and Land Disturbance Activities [NPDES No. CAS000002 (State Water Resources Control Board Order No. 2009-0009-DWQ)]. Compliance with the provisions of that Order would require NCPA to obtain coverage before the onset of construction activities. Construction activities would comply with the conditions of these permits that include preparation of storm water pollution prevention plans (SWPPP), implementation of BMP's, and monitoring to insure impacts to water quality are minimized. As part of this process, multiple BMP's should be implemented to provide effective erosion and sediment control. These BMP's should be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMP's to be implemented may include, but not be limited to, the following: ✓ Temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover shall be employed for disturbed areas. ✓ Storm drain inlets on the site and in downstream offsite areas shall be protected from sediment with the use of BMP's acceptable to NCPA, local jurisdictions and the California Regional Water Quality Control Board, Central Valley Region. ✓ Dirt and debris shall be swept from paved streets in the construction zone on a regular basis, particularly before predicted rainfall events. ✓ No disturbed surfaces shall be left without erosion control measures in place. NCPA, or its Construction Contractor, shall file a Notice of Intent with the Regional Board and require the preparation of a pollution prevention plan prior to commencement of construction. NCPA shall routinely inspect the construction site to verify that the BMP's specified in the pollution prevention plan are properly installed and maintained. NCPA shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance. The SWPPP will also identify the method of final stabilization of the site to ensure no post-construction erosion and impacts to water quality will occur. The Notice of Termination (NOT) and release of the Project from the provisions of the Construction General Permit coverage will be granted by the California Regional Water Quality Control Board, Central Valley Region once it is satisfied that no impacts to water quality will occur.				