DRAFT

Environmental Assessment/ Initial Study

ALTA MESA WIND PROJECT

Prepared for

County of Riverside

Technical Support Provided by

Aspen environmental group

December 2020

Contents

Tables

Figures

Appendices

COUNTY OF RIVERSIDE

ENVIRONMENTAL ASSESSMENT FORM: INITIAL STUDY

Environmental Assessment (CEQ / EA) Number: CEQ 200004

Project Case Type(s) and Number(s): Commercial WECS Permit No. 71R10 / Variance Case No. 200001

Commercial WECS Permit No. 71R10, Revised Permit No. 10 proposes to install up to seven (7) new commercial wind turbines up to 499 feet in height with a total project generating capacity of 27 MW. These 7 new turbines would replace the 159 turbines currently on the site which are scheduled for decommissioning Q1 2021 under existing permits, including demolition permits issued by the County. The project also includes associated equipment such as existing on-site substation, temporary construction yard, and existing 220 kV transmission line. No work is proposed on existing interconnection line, and the project would use an existing access road from Haugen-Lehmann Way. Variance Case No. 200001 proposes to eliminate the setbacks along the western and northern lot lines as required by Zoning Ordinance No. 348.

Lead Agency Name: Riverside County Planning Department

Address: P.O. Box 1409, Riverside, CA 92502-1409

Contact Person: Jay Olivas, Project Planner

Telephone Number: 760.863.7050

Applicant's Name: Brookfield Renewable

Applicant's Address: 6703 Oak Creek Road, Mojave, California 93501

I. PROJECT INFORMATION

Project Description:

Alta Mesa 640 LLC (Alta Mesa), a subsidiary of Brookfield Renewable Energy (Brookfield), as owner of the Alta Mesa Wind Project (Alta Mesa Wind), is planning to repower the existing wind project located in Riverside County, approximately 11 miles northwest of the City of Palm Springs. Alta Mesa is an existing 27 megawatt (MW) wind project with 159 turbines located on land zoned Wind Energy (W-E). W-E zoning allows the development of wind energy subject to approval of a Commercial WECS application. The existing turbines heights range from 114 to 145 feet. The existing 159 turbines will be removed first quarter 2021 under existing permits.[1]

Alta Mesa proposes to construct the Alta Mesa Wind Project (herein, "Project"" or "project"), which would include constructing, operating, maintaining, and decommissioning 7 new WTGs. The Project would produce 27 MW of wind energy. The new facilities would be decommissioned at the end of their estimated 30-year useful life. Figure 1 illustrates the project location. Alta Mesa is planning to construct the Project in tandem with the adjacent Mesa wind repowering project that is situated on BLM lands and is currently going through a separate but similar permitting process. Concurrent repowering of the two projects (as opposed to two separate construction projects) would provide efficiencies and minimize total ground

[1] Brookfield secured required demolition and hazardous material approvals from the Riverside County Building Department.

disturbance, traffic, and temporary impacts on environmental resources. The layout of the two projects is also being considered as one to minimize the viewshed impact while producing the most green energy.

The proposed locations for 7 WTGs are shown in Figures 2a and 2b. The nearest sensitive receptors to the new WTGs are rural residences in Bonnie Bell, the closest of which are 4,500 and 4,900 feet east of the Project.

The Project will necessitate ground disturbance for access roads and WTG construction pads (see Figure 2b). In most cases the new access roads will follow existing roads and new disturbance will be kept to a minimum. However, some roads will need to be widened, and some of the new turbines will be located away from existing disturbances. The total estimated disturbed area for the Project would be a total of up to 67.3 acres, of which 18.8 acres is already disturbed and 48.5 acres would be new disturbance. Of the 67.3 acres, less than 25 acres would be permanent, and 42.3 would be temporary. Of the 42.3 acres of temporary impacts, 32.4 acres would be a buffer area where vegetation removal is not anticipated but there may be some need for drive and crush due to trucks backing up or other unanticipated construction work. Plus, an additional 13.2 acres of ground disturbance would occur along the main access road to the Project site and an additional 13 acres of ground disturbance would occur in the temporary construction yard, both within the Mesa Wind Project ROW project area (see Figure 2b). Both the main access road and construction yard would be shared by the Alta Mesa Wind Project and the Mesa Wind Project Repower which are being permitted concurrently. Ground disturbance is associated with turbine siting, cut/fill, temporary construction yards, and widening of access roads. The Project would use existing disturbed areas and would avoid steep slopes whenever possible. The estimated ground disturbance is shown in Table 1.

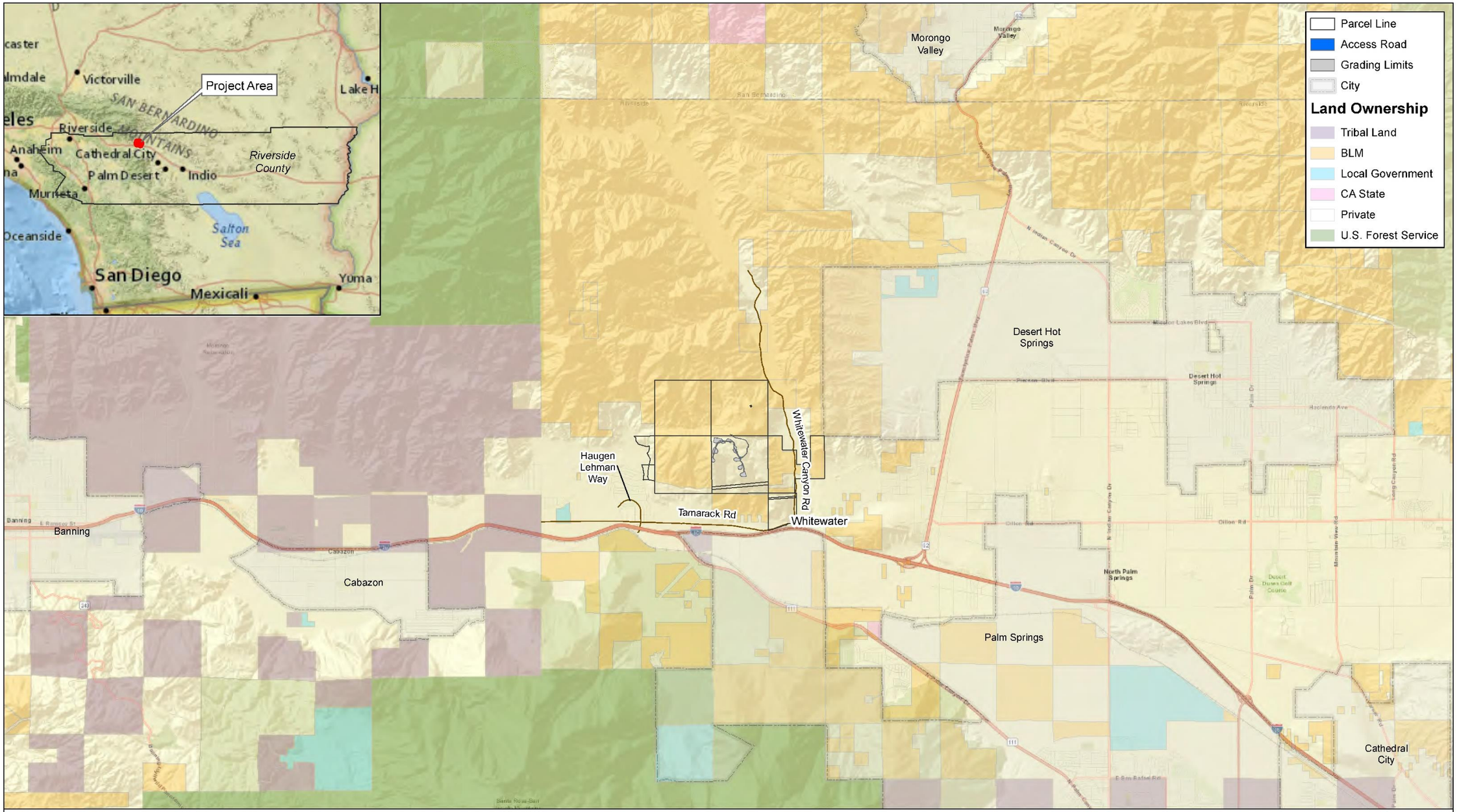
Table 1. Alta Mesa Wind Project Estimated Disturbance (acres)

	New Disturbance (acres)	Existing Disturbance (acres)	Total (acres)
Onsite Components			
Turbines, turbine pads, grading and fill	18.5	6.1	24.6
Access roads within Alta Mesa Wind site	5.3	3.7	9.0
Temporary laydown yard	0.9	0.4	1.3
Buffer area	23.8	8.6	32.4
Onsite Subtotal	**48.5**	**18.8**	**67.3**
Offsite Components			
Main access road within Mesa Wind Project Repower	13.2	-	13.2
Temporary laydown yard within Mesa Wind Project Repower	13.0	-	13.0
Offsite Subtotal	**26.2**	**-**	**26.2**
Total Disturbance	**74.7**	**18.8**	**93.5**

Project Location

The Alta Mesa Wind infrastructure is located on 640 acres in Riverside County, 11 miles northwest of the City of Palm Springs in southern California (see Figure 1). The project would modify an existing unnamed access road (associated with BLM ROW CACA-13980) that enters from the west and crosses the Mesa Wind Project ROW to reach the Project site (see Figure 2a). The exiting access road crosses BLM land and is being permitted as part of the adjacent Mesa Project for which an amended ROW Grant is being issued by BLM in January 2021. The Project area is rural, open space that is sparsely populated. Local land uses

include existing wind farms and off-highway vehicle trails. The Pacific Crest Trail (PCT) runs north and west of the Project.



B

Figure 1.

Vicinity Map

This page intentionally blank.

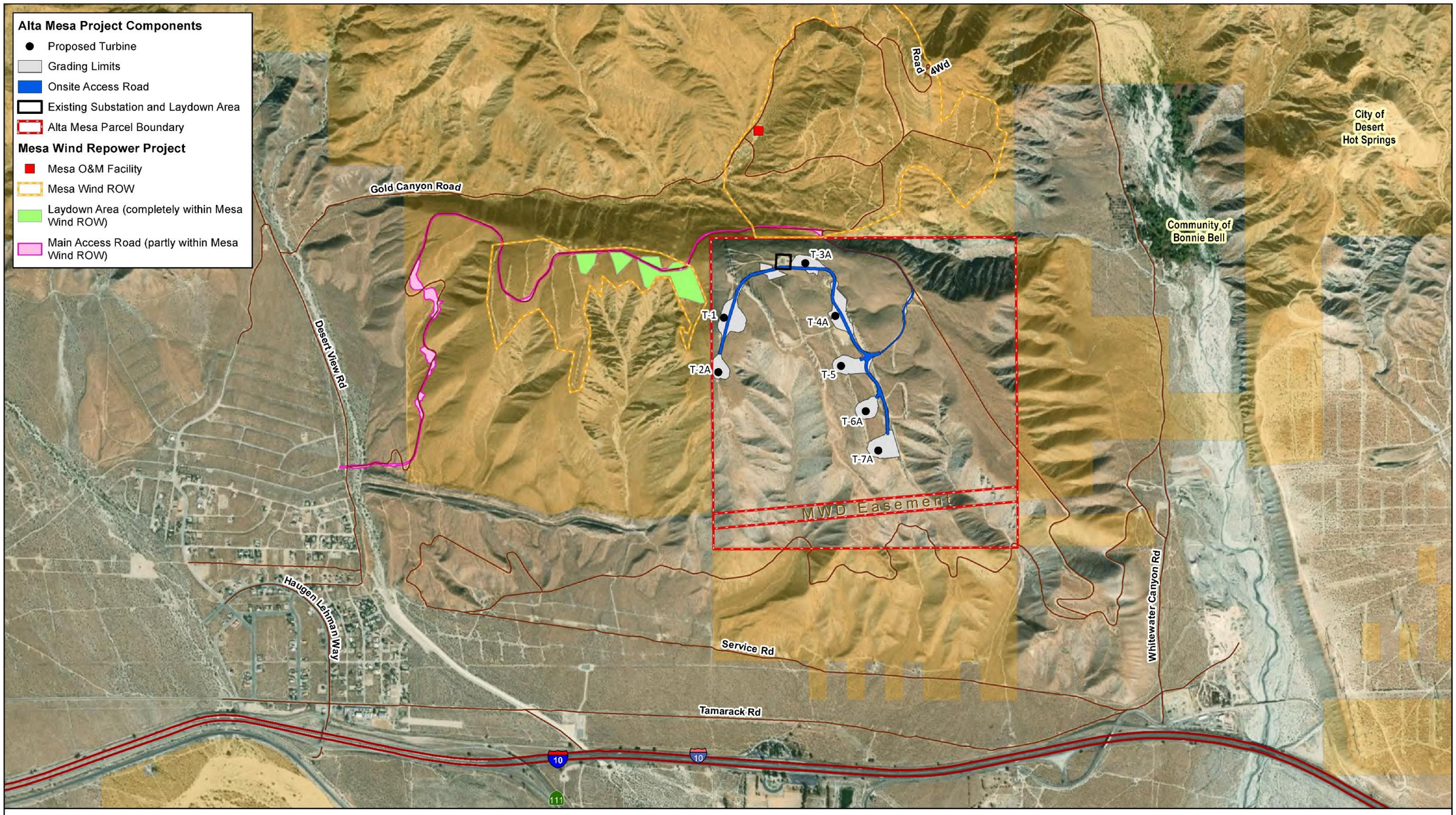


Exhibit 2a

Site Plan

This page intentionally blank.

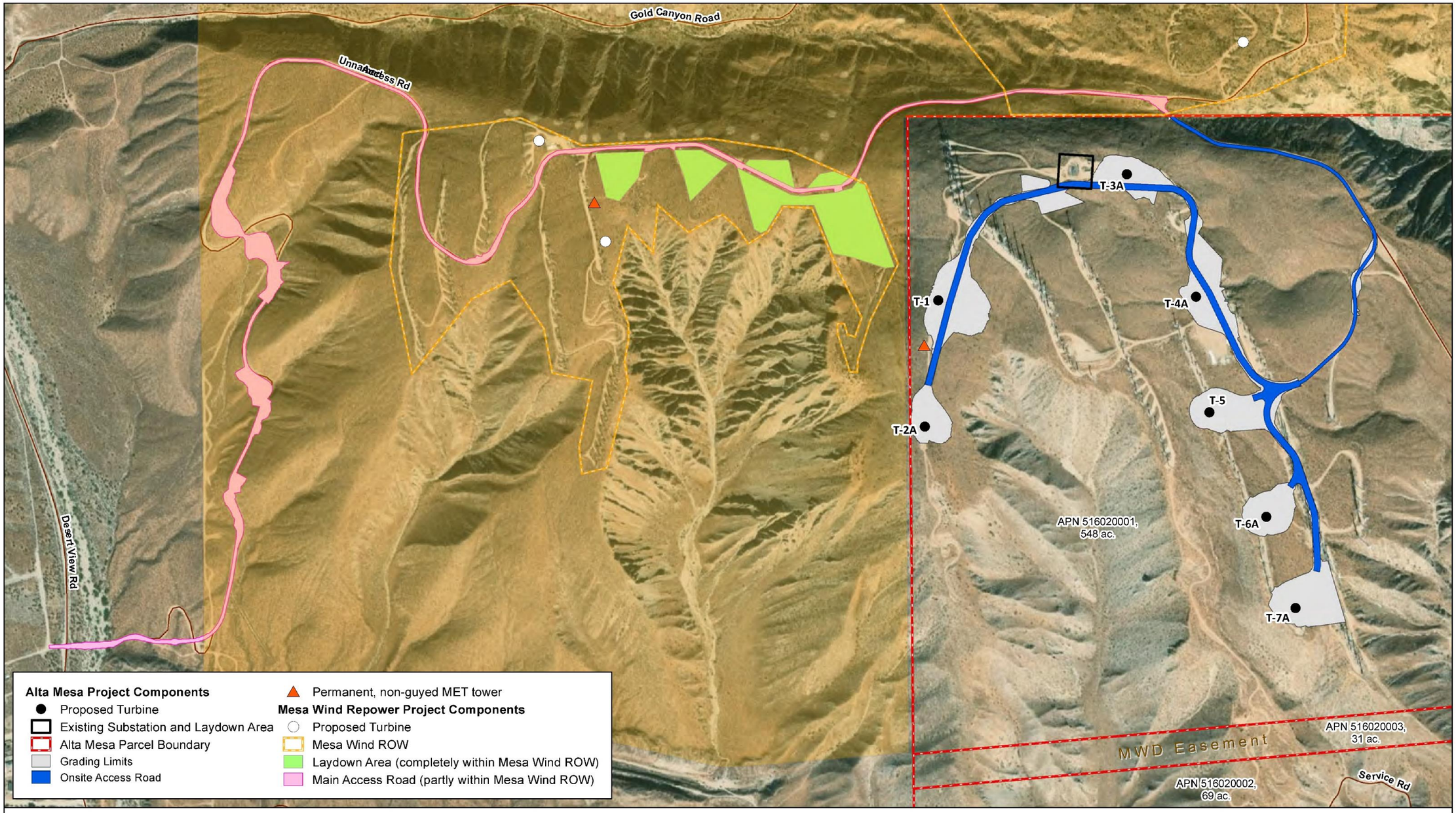


Figure 2b

Site Plan Detail

This page intentionally blank.

Project Components

Decommissioning of Existing Wind Turbines

The existing 159 turbines will be removed first quarter 2021 under existing permits for which Brookfield secured required demolition and hazardous material approvals from the Riverside County Building Department.

Underground power cables and communication lines to the existing turbines will be decommissioned in place. Underground cables will be cut off at ground surface. Transformers will be removed from the site for disposal or recycling.

The existing turbine concrete foundations will be left in place to minimize ground disturbance except those that need to be removed to build new foundations for the new turbines. At the time of decommissioning of the new 7 WTGs, all remaining existing foundations would be removed to 3 feet below the ground surface.

New Wind Turbines

The Project would consist of 7 new WTGs, each of which would be mounted on a reinforced concrete foundation. The new WTGs would be approximately 3.6 MW and 4.2 MW capacity per turbine and would be up to 499 feet tall, from top of foundation to blade tip at apex. Each WTG consists of the tower, nacelle, hub, and three blades. The tower portion consists of a tubular steel monopole and connects to the nacelle, hub, and three-bladed rotor, and would include internal access ladders and man lifts for maintenance. The nacelle would be an aerodynamic steel and fiberglass structure atop the tower, which would contain the inner mechanical workings of the new WTGs, including its power generating components. The hub is the fixture for attaching the blades to the main drive shaft and is covered by a fiberglass nose cone structure to streamline the airflow and protect the equipment. The blades and rotor have a diameter of up to 384 feet (117 meters), and each rotor is equipped with a braking system.

Additional features help the turbines operate safely. The controller is a microprocessor that automatically regulates the operation of the new WTGs, including startup, shutdown, pitch control (technology used to operate and control the angle of the blades), yaw control (mechanism used to turn the wind turbine rotor against the wind) and safety monitoring. This information would be communicated to the Operations and Maintenance (O&M) facility from the controller via fiber optic cables. A central Supervisory Control and Data Acquisition (SCADA) system would monitor data input from the controller to streamline centralized O&M, in some cases, the system can even analyze the data and take corrective measures. At each turbine, there would be a transformer inside the unit to increase the output voltage to transmit the power from the turbine to the collector substation, which is already in place. Safety lighting would be installed on the outside of the nacelles in order to comply with the Federal Aviation Administration (FAA) rules. Project specific requirements, including safety lighting, would be developed in conjunction with the FAA based on final design. The Riverside County Airport Land Use Commission will also review and approve WTG lighting. Lightning protection systems would be installed on each new WTG and connected to an underground grounding arrangement. All equipment, cables, and structures that make up the new WTGs would be connected to a metallic site-wide grounding network.

Ancillary Facilities / Electrical Collection System

The new WTGs would have new underground or overhead collector lines that would connect to the existing substation. New overhead lines would be placed on existing poles. The underground collector lines would be located in existing roads. The existing Alta Mesa Substation would be upgraded to replace the existing 12 kV/115 kV transformer with a 34.5 kV/115 kV transformer.

Interconnection to the Electrical Grid

Currently, generated electricity feeds into the onsite Alta Mesa Wind Substation and from there into Southern California Edison's (SCE) switchyard, which is the point of interconnection with SCE's 115 kV distribution system; see Figure 3. The repower would not change this interconnection nor require a repowered interconnection line.

Access Roads, Buildings, Parking Lots

The Project has two existing main access roads, an unnamed access road that enters from the west and crosses the Mesa Wind Project ROW (associated with BLM ROW CACA-13980) and a second unnamed access road that enters into the site from the east off of Whitewater Canyon Road. An estimated 1,000 feet of the unnamed access road that enters from the west is on private land where the Mesa Wind Project has existing easements. The access road crossing the Mesa Wind Project ROW would be improved and/or widened up to 24 feet with some areas widened up to 40 feet wide for appropriate turning radius. Up to 8 inches of locally sourced, imported weed-free gravel would be placed over compacted native material. Drainage ditches and culverts may also be installed in the road. BLM will be issuing an amended ROW Grant for CACA-13980 which includes this main access road in January 2021. The second unnamed access road that enters the site from the east off of Whitewater Canyon Road would not be improved and will likely not be used for any traffic during construction.

In most cases, onsite access roads will follow existing roads and new disturbance will be kept to a minimum; however, some roads will need to be widened. Permanent access roads would be 16 feet wide. Access roads would require periodic grading or replacement of gravel to maintain road quality for facility operations.

Project Construction

Construction Schedule

Prior to construction, permitting and surveying activities, and decommissioning of existing turbines will be completed. Construction of the new Project would take approximately 12 months, followed by restoration of temporary disturbance areas as provided in the timeline presented below:

- Pre-construction activity: March 2021 to June 2021
- Construction of repowered plant: July 2021 to June 2022
- Restoration of temporary disturbance: July 2022 to March 2023

Temporary Construction Yards

During construction, the Alta Mesa project would use a 13-acre temporary construction yard located on the Mesa Project site and a 1.3-acre temporary work area adjacent to the existing Alta Mesa Project substation.

The temporary construction yards may include the following facilities:

- Temporary offices
- Tool sheds and containers
- Self-contained chemical toilets
- Additional parking for construction equipment and vehicles.

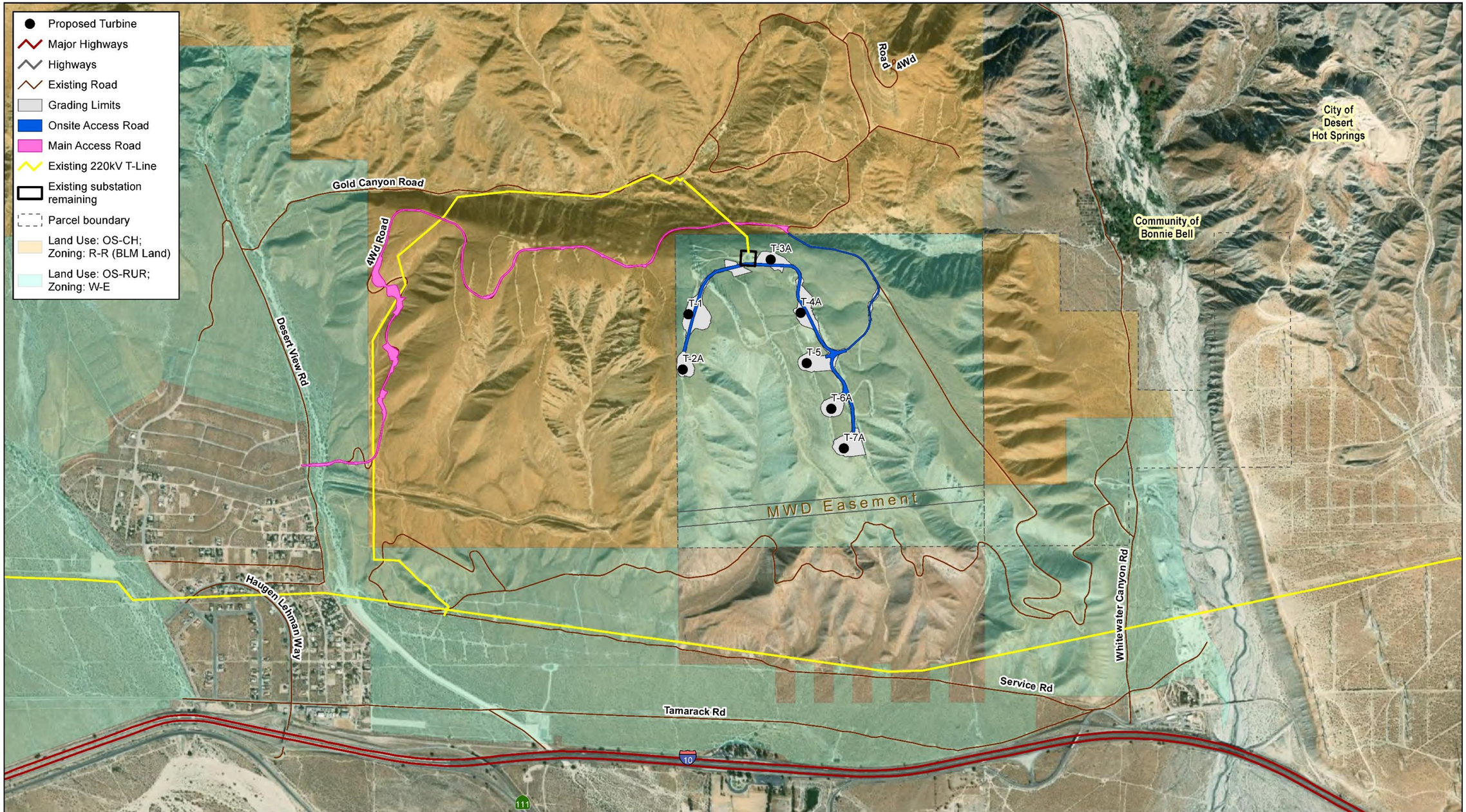


Figure 3.

Interconnection Lines

This page intentionally blank.

Construction Workforces and Transportation

The on-site construction workforce would consist of skilled and unskilled laborers, craftsmen, supervisory personnel, safety personnel, support personnel, construction management personnel, electricians, equipment operators, ironworkers, millwrights, carpenters, general laborers, and truck drivers. The largest construction vehicle traffic would likely be associated with construction workers, followed by deliveries of new WTG components, steel, aggregate, water, electrical equipment, and other general deliveries. The construction workforce would be expected to average 150 with a peak at around 170.

A variety of construction equipment would be required during construction. This would include component trucks to transport the wind turbines and main erector crane, concrete trucks for pouring foundations, trucks used to transport aggregate and general construction and material delivery trucks. Additional construction equipment includes the main erector crane and RT cranes. An average of 180 trucks would be used per week over a 6 month period of the most active construction. Much fewer trucks would be needed throughout the rest of the construction period.

Water Use (Construction)

Construction of the repower would require an additional estimated 11.6 million gallons of water (35 acre feet). Water would be used primarily for earthwork compaction and for dust control and vegetation. Concrete would be obtained from permitted commercial or municipal sources or local batch plants located within the same watershed as the Project, or an onsite batch plant.

Operations and Maintenance

Operation and maintenance activities at the facility would include maintenance of new WTGs, access roads, and electrical equipment.

WTG

Each new WTG would be continuously monitored through the SCADA system that links the facility to Brookfield's National System Control Center. The SCADA system could also be used to remotely shut down a new WTG if necessary.

On average, each new WTG would require 40 to 50 hours of scheduled mechanical and electrical maintenance per year. O&M personnel would perform routine maintenance including replacing lubricating fluids, checking parts for wear, and downloading data from recording chips in anemometers.

Project Substation and Collector System

Similar to the WTGs, a periodic inspection and maintenance program would be established for the project substation and collector system based on Brookfield's experience operating wind farms and good utility practices. Such inspection and maintenance would be performed by a combination of project staff and subcontractors.

Access Roads

In addition to WTGs and electrical equipment, project staff would regularly inspect and maintain all onsite access roads, pads, and trenched areas to minimize erosion. During normal operation and maintenance, travel to and on the site would create minimal traffic. It is expected that road maintenance will be required twice a year, but more frequent maintenance would be done if needed to maintain road conditions acceptable to the County.

Access roads would require periodic grading or replacement of gravel to maintain road quality for facility operations. The existing Mesa O&M facility would continue to be used during ongoing operations and includes the building and graveled area for equipment, construction, storage and parking (see Figure 2a). The facility may require upgrades, dependent on ultimate decision of WTG manufacturer, but any size increase in facility would remain within the existing disturbed area.

Water Use (Operations)

Following construction, the Project would use up to 7,300 gallons per year, primarily at the O&M building.

Other Permits and Approvals

Various permits and approvals from other agencies may also need to be obtained by Brookfield for the Project. Table 2 summarizes the permits from other federal, State, and local agencies that may be needed for the project.

Table 2. Permits that May Be Required for the Alta Mesa Wind Project

Permit, Approval or Report	Regulatory Authority	Permit Description
Federal		
SF 299 – Application for Transportation and Utility Systems and Facilities on Federal Lands (ROW authorization permit)	BLM	Application provided to the BLM that serves the off-site access road. SF 299 has been filed for the off-site access road. Amended ROW Grant CACA-13980 being issued by BLM January 2021.
Form 7460 – Notice of Proposed Construction or Alteration (14 CFR Part 77.9)	Federal Aviation Administration	Required for erecting structures in excess of 200 feet tall.
National Pollutant Discharge Elimination System (NPDES) Construction Activities Storm Water General Permit	State Water Resources Control Board	Required for land disturbance of greater than 5 acres. Permit application needs applicant information; Project description, including size of area to be affected; and other environmental permits associated with the Project.
Clean Water Act Section 401/404 Permit(s)	U.S. Army Corps of Engineers	Applies if the Project involves the removal or placement of fill (i.e., soil, sediment, or most other material) in or near water bodies of the U.S. If a nationwide permit applies, no permit application is required.
Migratory Bird Treaty Act – Bird and Bat Conservation Strategy (BBCS)	USFWS	The USFWS recommends that electric utilities and utility-scale renewable energy project developers prepare and implement Bird and Bat Conservation Strategy to minimize the incidental take of migratory birds and bats.
Bald and Golden Eagle Protection Act (16 U.S.C. 668a–d)	USFWS	The Eagle Act allows the USFWS to authorize bald eagle and golden eagle programmatic take (take that is recurring, is not caused solely by indirect effects, and that occurs over the long term in a location that cannot be specifically identified). Such take must be incidental to actions that are otherwise lawful. An Eagle Permit Application includes an Eagle Conser-vation Plan for a 30-year programmatic take permit for golden eagles. This permit requires NEPA review.

Table 2. Permits that May Be Required for the Alta Mesa Wind Project

Permit, Approval or Report	Regulatory Authority	Permit Description
State		
Hazardous Materials Business Plan (California Health and Safety Code, Division 20, Chapter 6.95)	Riverside, Certified Unified Program Agency, (delegated from Cal EPA)	Identifies all hazardous materials and their location at the facility.
Hauling Truck and Other Overload Permits	California Department of Transportation	Required for construction hauling
Storm Water Discharge Permit	State Water Quality Control Board	Required for construction site over 5 acres. Authorization to be covered under the NPDES Construction Permit and approval of a Storm Water Pollution Prevention Plan.
Local		
Joint Project Review	Coachella Valley Conservation Commission	Because the Project is within the Coachella Valley MSHCP permit area, it would require a Joint Project Review for any potential impacts to endangered species. The Joint Project Review would ensure that the project complies with the MSHCP.
ALUC Review	Riverside County Airport Land Use Commission (ALUC)	The project requires review by the Airport Land Use Commission since turbines exceed 200-feet in height.
Air Quality Permit	South Coast Air Quality Management District	Management of particulates generated by construction at the site is required. Typically, Best Management Practices are employed and will be documented in the permit application.

A. Type of Project: Site Specific ☒; Countywide ☐; Community ☐; Policy ☐.

B. Total Project Area: Approximately 640 acres (permanent disturbed acreage = 25 acres and temporary disturbed acreage = 42.3 acres, including 32.4-acre buffer area)

Residential Acres:	**Lots:**	**Units:**	**Projected No. of Residents:**
Commercial Acres:	**Lots:**	**Sq.Ft. of Bldg. Area:**	**Est. No. of Employees:**
Industrial Acres:	**Lots:**	**Sq.Ft. of Bldg. Area:**	**Est. No. of Employees:**

Other: 7 new turbines

C. Assessor's Parcel No(s): 516020001, 516020002, 516020003

Street References: North of Interstate 10/Tamarack Road, east of Haugen-Lehmann Way, and west of Whitewater Canyon Road

Section, Township & Range Description or reference/attach a Legal Description: Turbines: T3S, R3E, N3/4 of Section 3; Access Road (permitted through Alta Mesa and shared with Mesa): T3S R3, N3/4 of Section 3, N1/4 and W1/4 of Section 4, NE1/4 of SE1/4 of Section 5; T2S R3E, S1/2 of SW1/4 and SE1/4 of SE1/4 of Section 33, S1/2 of SW1/4 of Section 34.

D. Brief description of the existing environmental setting of the project site and its surroundings: The Project site an existing wind energy project site with 159 wind turbines and vacant mountainous land, with surrounding vacant mountainous desert lands, other existing wind turbines and various utility uses within the property boundary. The areas around the Project site consist of vacant desert land or existing wind farms. The Project site is over 4,500 feet away from the nearest residential site, in the unincorporated community of Bonnie Bell. The project is located within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) and is more specifically located within the Stubbe and Cottonwood Canyons Conservation Area. The project was reviewed by the County of Riverside Environmental Programs Division in conjunction with the Coachella Valley Conservation Commission (CVCC) to address the CVMSHCP as discussed under Checklist Item 5.

II. APPLICABLE GENERAL PLAN AND ZONING REGULATIONS

A. General Plan Elements/Policies:

1. Land Use:

Circulation: The Project would be consistent with the following policies related to the Project and included within the County's General Plan Circulation Element:

C2.4 The direct project related traffic impacts of new development proposals shall be mitigated via conditions of approval requiring the construction of any improvements identified as necessary to meet level of service targets.

***Consistency Analysis: Consistent*.** The Project would modify an unnamed existing access road to the west of the Project. This road would be improved to a width of up to 24 feet for construction, with some areas widened up to 40 feet wide for appropriate turning radius and would be graded and compacted in compliance with the approved geotechnical/soils report, and BLM and Riverside County Fire Department standards. Upon completion of construction, the permanent access road would be returned to a 16-foot width.

Multipurpose Open Space: The Project would be consistent with the following policies related to wind energy resources and included within the County's General Plan Multipurpose Open Space Element:

OS 10.1 Provide for orderly and efficient wind energy development in a manner that maximizes beneficial uses of wind resources and minimizes detrimental effects to the residents and the environment of the county.

***Consistency Analysis: Consistent*.** The Project would improve the overall efficiency of energy production on the Project site by deploying new, modern, and high-efficiency wind turbines. Because state-of-the-art turbine technology would be used, the Project would be capable of generating more electric energy, more reliably and with fewer turbines, reducing the visual clutter that currently affects the site.

OS 10.2 Continue the County's Wind Implementation Monitoring Program (WIMP) in order to study the evolution of wind energy technology, identify means to solve environmental and community impacts, and provide for an ability to respond with changes in the County's regulatory structure.

***Consistency Analysis: Consistent*.** The Project would be conditioned to pay WIMP fees.

Safety: The Project would be consistent with the following policies related to the Project and included within the County's General Plan Safety Element:

S 2.1 Minimize fault rupture hazards through enforcement of Alquist-Priolo Earthquake Fault Zoning Act provisions and the following policies:

a. Require geologic studies or analyses for critical structures, and lifeline, high-occupancy, schools, and high-risk structures, within 0.5 miles of all Quaternary to historic faults shown on the Earthquake Fault Studies Zones map.

b. Require geologic trenching studies within all designated Earthquake Fault Studies Zones, unless adequate evidence, as determined and accepted by the Riverside County Engineering Geologist, is presented. The County of Riverside may require geologic trenching of non-zoned faults for especially critical or vulnerable structures or lifelines.

S 2.2 Require geological and geotechnical investigations in areas with potential for earthquake-induced liquefaction, landsliding or settlement, for any building proposed for human occupancy and any structure whose damage would cause harm, except for accessory buildings.

***Consistency Analysis: Consistent*.** Consistent with Mitigation Measure (MM) GEO-1, the site design and engineering shall be conducted in conformance with all recommendations as specified in a Geotechnical/Geologic Feasibility Study as well as those applicable recommendation specified in any subsequently prepared geotechnical/soils reports for the Project. The Applicant is planning to conduct geotechnical boring at each turbine location in the fall of 2020 by a geotechnical professional to confirm that, with the incorporation of Project-specific engineering considerations, the Project can be constructed and operated on-site without posing a risk to life or property.

Noise: The Project would be consistent with the following policies related to wind energy resources and included within the County's General Plan Noise Element:

N 5.1 Enforce the Wind Implementation Monitoring Program (WIMP).

***Consistency Analysis: Consistent*.** The Project would be conditioned to pay WIMP fees in accordance with Planning-6 – WIMP Fees.

N 5.2 Encourage the replacement of outdated technology with more efficient technology with less noise impacts.

***Consistency Analysis: Consistent*.** The wind turbines would be of the newest technology available.

Housing: The County's General Plan Housing Element does not contain any policies related to wind energy resources or the Project.

***Consistency Analysis*:** While no policies outlined in the Housing Element apply, the Project would not conflict with the County's General Plan Housing policies.

Air Quality: The Project would be consistent with the following policies related to wind energy resources and included within the County's General Plan Air Quality Element:

AQ 20.19 Facilitate development and sitting of renewable energy facilities and transmission lines in appropriate locations.

Consistency Analysis: Consistent. The Project would be situated on an existing commercial wind energy facility. The nearest residence is more than 4,500 feet away from the nearest proposed turbine location.

AQ 26.1 The County shall implement programs and requirements to achieve the following objectives related to reducing greenhouse gas emissions derived from energy generation:

a. Encourage the installation of solar panels and other energy-efficient improvements.

b. Facilitate residential and commercial renewable energy facilities (solar array installations, individual wind energy generators, etc.).

c. Facilitate development of renewable energy facilities and transmission lines in appropriate locations.

d. Facilitate renewable energy facilities and transmission line siting.

e. Provide incentives for development of local green technology businesses and locally produced green products.

f. Provide incentives for investment in residential and commercial energy efficiency improvements.

g. Identify lands suitable for wind power generation or geothermal production and encourage development of these alternative energy sources.

***Consistency Analysis: Consistent*.** The Project would improve the overall efficiency of energy production on the Project site by deploying new, modern, and high-efficiency wind turbines. Because state-of-the-art turbine technology would be used, the Project would be capable of generating renewable electric energy and thereby reducing greenhouse gas emissions.

Healthy Communities: The County's General Plan Healthy Communities Element does not contain any policies related to wind energy resources or the Project.

***Consistency Analysis*:** While no policies outlined in the Healthy Communities Element apply, the Project would not conflict with the County's General Plan Health Community policies.

Environmental Justice (After Element is Adopted): Not applicable

B. General Plan Area Plan(s): Western Coachella Valley Plan Area

C. Foundation Component(s): Open Space (unincorporated Riverside County)

D. Land Use Designation(s): Open Space Rural (OS-RUR), Open Space Recreation (OS-R)

E. Overlay(s), if any: Not applicable

F. Policy Area(s), if any: San Gorgonio Pass Wind Energy Policy Area

G. Adjacent and Surrounding:

1. General Plan Area Plan(s): Western Coachella Valley Area Plan; The Pass Area Plan

2. Foundation Component(s): Rural, Open Space, Rural Community
3. Land Use Designation(s): Rural Desert, Conservation Habitat, Estate Density Residential
4. Overlay(s), if any: San Gorgonio Pass Wind Energy Policy Area
5. Policy Area(s), if any: San Gorgonio Pass Wind Energy Policy Area

H. Adopted Specific Plan Information

1. Name and Number of Specific Plan, if any: None
2. Specific Plan Planning Area, and Policies, if any: None

I. Existing Zoning: Wind Energy Resource (W-E) Zone

J. Proposed Zoning, if any: W-E (no change from existing)

K. Adjacent and Surrounding Zoning: R-R, W-2-5, W-2-10, R-1, and W-E

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (x) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

IV. DETERMINATION

On the basis of this initial evaluation:

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS NOT PREPARED
☐ 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, described in this document, have been made 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.
A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS PREPARED
☐ I find that although the proposed project could have a significant effect on the environment, **NO NEW ENVIRONMENTAL DOCUMENTATION IS REQUIRED** because (a) all potentially significant effects of the proposed project have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, (b) all potentially significant effects of the proposed project have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, (c) the proposed project will not result in any new significant environmental effects not identified in the earlier EIR or Negative Declaration, (d) the proposed project will not substantially increase the severity of the environmental effects identified in the earlier EIR or Negative Declaration, (e) no considerably different mitigation measures have been identified and (f) no mitigation measures found infeasible have become feasible.

☐ I find that although all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, some changes or additions are necessary but none of the conditions described in California Code of Regulations, Section 15162 exist. An **ADDENDUM** to a previously-certified EIR or Negative Declaration has been prepared and will be considered by the approving body or bodies.
☐ I find that at least one of the conditions described in California Code of Regulations, Section 15162 exist, but I further find that only minor additions or changes are necessary to make the previous EIR adequately apply to the project in the changed situation; therefore a **SUPPLEMENT TO THE ENVIRONMENTAL IMPACT REPORT** is required that need only contain the information necessary to make the previous EIR adequate for the project as revised.
☐ I find that at least one of the following conditions described in California Code of Regulations, Section 15162, exist and **a SUBSEQUENT ENVIRONMENTAL IMPACT REPORT** is required: (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) Substantial changes have occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any the following: (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration; (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration; (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects of the project on the environment, but the project proponents decline to adopt the mitigation measures or alternatives.

JAY TOLIVAS
Signature

December 22, 2020
Date

For: John Earle Hildebrand III
TLMA Deputy Director - Interim
Planning Director

Jay Olivas, Project Planner
Printed Name

V. ENVIRONMENTAL ISSUES ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the proposed project to determine any potential significant impacts upon the environment that would result from construction and implementation of the project. In accordance with California Code of Regulations, Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the County of Riverside, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the proposed project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed project.

Aesthetics

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1. Scenic Resources				
a) Have a substantial effect upon a scenic highway corridor within which it is located?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

Source(s): Riverside County General Plan Figure C-8, "Scenic Highways", Visual Resources Study (Appendix A).

Findings of Fact: Impacts on scenic resources will be less than significant.

Currently, the Project site includes a commercial wind energy facility with existing wind turbine generators (WTGs) and related appurtenances and facilities, including access roads, electric collection lines, and a substation. The existing 159 existing WTGs range in height from 114 to 145 feet above ground level and would be removed. The wind generation facility would be repowered by the installation of seven WTGs, up to 499 feet in height above ground level. The main access road to the site would be improved and/or widened up to 24 feet with some areas widened up to 40 feet wide for appropriate turning radius. Onsite access roads would use existing roads in most cases which would be improved as necessary. Up to 8 inches of imported weed-free gravel would be placed over compacted native material on some roads. Gravel would be locally sourced and would therefore blend in with the existing landscape. Main and onsite access roads would be returned to a 16-foot width upon the completion of construction. Appendix A provides an

assessment of potential aesthetic impacts of the proposed Project by comparing existing conditions to future conditions from a variety of key observation points (KOPs). (**Note**: All figures referenced in this Aesthetics section are found in Appendix A.) The areas in the general Project vicinity from which the new WTGs may be visible are shown in Appendix A, Figure 1. The appendix also provides existing views and visual simulations of the Project as seen from seven KOPs as show in Appendix A, Figure 2. The existing and simulated future views from these KOPs that include proposed wind turbines are paired for comparison in Appendix A as Figures 3a through 9b. The Mesa Wind Project is adjacent to the Alta Wind Project and is proposed for repower. Appendix A, Figures 10a, 10b, and 10c illustrate the cumulative effect of both projects if the repowers are completed.

a) State Route (SR)-62, an officially designated state scenic highway, and SR-111, an eligible state scenic highway, are in the Project vicinity. Whitewater Canyon Road and Interstate 10 (I-10) east of SR-62 are county eligible scenic roadways. These and other local roads and highways offer scenic views of the Coachella Valley landscape and the dominant surrounding mountains.

The new wind turbines on the Project site would be 3.5 miles west of SR-62, at their nearest. They would not affect the existing long views of the Coachella Valley available to the southeast and east. Owing to the location of the Project site relative to San Jacinto Peak and SR-62, the new wind turbines would not be viewed by southbound motorists on SR-62 as being in line with San Jacinto Peak, a prominent visual element in the region. The northern terminus of SR-111 is at Interstate 10 (I-10) near Whitewater, approximately 1.5 mile south of the nearest Project turbine. As viewed from SR-111, new wind turbines on the Project site would be compatible with existing wind energy facilities found in northwestern Coachella Valley, including along SR-111. Because wind turbines are established, widespread elements in the existing viewshed, which also includes existing transmission lines and substations, the Project would not have a substantial effect upon a scenic highway corridor within which the Project is located.

b) The original visual landscape throughout the Project vicinity has been extensively altered by the development of commercial wind facilities (including turbines on and near the Project site), substations, transmission lines, and roadways. As such, large wind turbines are a commonly occurring visual elements in the area and are part of the existing visual and recreational experience. The Project would not substantially alter this experience. No trees, rock outcroppings or unique or landmark features would be affected, existing scenic vistas would not be substantially altered, and the Project would not create an aesthetically offensive site open to public view.

c) The Project site is in the Western Coachella Valley Plan Area which is overlain by the San Gorgonio Pass Wind Energy Policy Area at this location. The proposed repower project will require a Wind Energy Conversion System (WECS) permit.

To the east of the Project site are residential properties in the Bonnie Bell area along Whitewater Canyon Road (KOP 1) approximately 1 mile east of the nearest proposed wind turbine. Portions of six turbine tower sections, hubs, and blades would be visible from Whitewater Canyon Road. (See Appendix A Figures 3a and 3b.) For those residents living west of the Project site (KOP 2), the massing and scale of the new wind turbines would be noticeably larger than the existing wind turbines and similar to the views of other wind projects to the east. (See Appendix A Figures 4a and 4b.) In views from the south along SR-111 (KOP 6), the new wind turbine structures would be noticeably larger against the sky than the existing wind turbine structures visible on the ridge line north of I-10 (See Appendix A Figures 8a and 8b.)

The new wind turbines would generally display a massing and scale similar to other modern wind turbine development in the Project vicinity. Large modern wind turbines dot the landscape in this designated wind energy area, as do more extensive older wind turbine developments. As a result, the anticipated massing

and scale contrast between the existing smaller wind turbines on the Project site and the new larger wind turbines would be tempered by the presence of other existing modern wind turbine development in the Project area.

Overall, while visible, the new wind turbines would not substantially obstruct or interrupt existing views to mountain peaks available to highway motorists and would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view. The installation of 7 new wind turbines on a Project site currently developed with approximately 159 wind turbines (which will be removed from the site), within a region that has been previously developed with wind turbines, would not result in substantial damage to existing scenic resources. Additionally, the project proposes light grey turbine finish and is conditioned to provide color and finish samples prior to building permit issuance as indicated by Condition of Approval (COA) 80.Planning. 2 Color and Finish. Therefore, impacts of the Project with regard to scenic resources would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. Mt. Palomar Observatory				
a) Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?	☐	☐	☒	☐

Source(s): GIS database, Ord. No. 655 (Regulating Light Pollution)

Findings of Fact: Impacts will be less than significant.

a) The Project site is approximately 42 miles north-northeast of the Palomar Observatory in San Diego County. The Project site is located within Zone B as identified by the Mt. Palomar Lighting Ordinance No. 655 (Zone B extends to a 45-mile radius around the observatory). Due to the presence of intervening natural topography between the observatory and the Project site, the Project site is not within the immediate viewshed of the observatory. However, the Project would still be required to comply with Ordinance No. 655 including as outlined under the Advisory Notification Document (AND) Planning. 13-Mt. Palomar Lighting Area.

Nighttime lighting associated with the Project would be limited to FAA-required obstruction lighting, which would consist of slowly pulsing red lights affixed to the top of the new wind turbines and such lighting would be intermittent. Note that the FAA made the determination for the need for safety lighting for the new wind turbines. Based on the distance between the Project site and Palomar Observatory, no adverse effects on the observatory are expected. Therefore, impacts would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3. Other Lighting Issues				
a) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
b) Expose residential property to unacceptable light levels?	☐	☐	☒	☐

Source(s): On-site Inspection, Project Application Description

Findings of Fact: Impacts will be less than significant.

a-b) Due to their proposed height, the new wind turbines and met tower constructed on the Project site would have FAA obstruction lighting installed. Obstruction lights alert aircraft pilots to the presence of particularly tall objects. The addition of slowly pulsing red lights affixed atop some of the new wind turbines would represent an increased nighttime color contrast when compared to existing conditions. Obstruction lighting would also be a regular source of nighttime lighting in the area that could be perceived at nearby residences, the closest of which is located approximately 1 mile from the nearest wind turbine proposed on the Project site.

Wind energy development is prevalent in the Project area along the I-10 corridor and the southern end of the SR-62 corridor and includes obstruction lighting. Therefore, the addition of the new wind turbines with obstruction lights would not represent a substantial new, previously unrepresented source of nighttime lighting in the Project area.

In terms of glare, the wind turbines would be a non-glare neutral color and any support poles associated with overhead transmission within the Project site would be constructed of wood. These conditions would be similar to other facilities in the area and would not introduce a source of daytime glare in the Project area. In addition, the Project will comply with Ordinance 655 regarding lighting and any FAA lighting requirements as outlined under AND Planning.7-FAA Rules Compliance. Therefore, impacts associated with nighttime lighting and daytime glare would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Agriculture & Forest Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
4. Agriculture				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve?	☐	☐	☐	☒
c) Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm")?	☐	☐	☐	☒
d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure OS-2, "Agricultural Resources," Western Coachella Valley Area Plan, California Department of Conservation Riverside County Important Farmland Data Sheet 1 of 3, GIS database, Project Application Materials

Findings of Fact: There will be no impacts.

a-d) The Project site is currently used as a commercial wind energy facility and is zoned as Wind Energy Resource under the Riverside County Zoning and designated as Open Space Rural (OS-RUR), Open Space Recreation in the Riverside County General Plan. The Project site is not located on or adjacent to any lands identified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland, as defined by the U.S. Department of Agriculture. This area is also not recognized by the Riverside County General Plan as an area of Important Farmland, and there are no areas of farmland or agriculture on or near the site. The Project site is not under a Williamson Act contract. The Project site would continue to support a commercial wind energy facility. The operations on this site would not impact any distant agricultural operations or resources. Therefore, no impacts to agricultural resources would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
5. Forest				
a) 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 Govt. Code section 51104(g))?	☐	☐	☐	☒
b) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure OS-3a, "Forestry Resources Western Riverside County Parks, Forests, and Recreation Areas," Figure OS-3b, "Forestry Resources Eastern Riverside County Parks, Forests, and Recreation Areas," Project Application Materials

Findings of Fact: There will be no impacts.

a-c) The Project site is currently used as a commercial wind energy facility zone and is zoned as Wind Energy Resource under the Riverside County Zoning and designated as Open Space Rural (OS-RUR), Open Space Recreation in the Riverside County General Plan. The Project site is not located on or adjacent to any lands identified as forestland or timberland. The Project would not impact forestland or the ability of distant timberland businesses to operate. Therefore, no impacts to forestland or timberland resources would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Air Quality

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
6. Air Quality Impacts				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors, which are located within one (1) mile of the project site, to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

Source(s): Riverside County General Plan, Riverside County Climate Action Plan ("CAP"), SCAQMD CEQA Air Quality Handbook

Findings of Fact: Impacts will be less than significant with the incorporated mitigation

a) The Project is located within the Salton Sea Air Basin (SSAB) and is within the Jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD has established rules that protect the air quality, such as Rule 219, Rule 402 and Rule 403. SCAQMD Rule 219 subjects equipment such as generators, compressors, pumps and concrete batch plants to permit requirements.

SCAQMD Rule 402 (Nuisance). This rule requires dust suppression techniques to prevent particles from becoming a nuisance off site. Rule 403 (Fugitive Dust) prohibits creation of dust plumes that are visible beyond the property line of the emission source. This rule requires all active operations to implement applicable best available control measures, and if the project is considered a "large operation" under this rule, enhanced dust control requirements may apply. A "large operation" is one that contains 50 or more acres of disturbed surface area.

The Riverside County General Plan's Air Quality Element was adopted in 2015. The air quality element includes policies supporting regional cooperation with other jurisdictions to improve air quality; requiring compliance with federal, state and regional air quality regulations; encouraging programs to reduce vehicle miles traveled; encouraging energy conservation in urban land uses; and encouraging development patterns that improve the County's jobs/housing balance. The Air Quality Element contains one policy that is relevant to the proposed Project, which is Policy AQ 20.19. This policy facilitates development and siting of renewable energy facilities and transmission lines in appropriate locations (Alta Mesa AQ Tech Report 2020).

Based on these considerations, the Project would not conflict with or obstruct implementation of the Air Quality Plan.

b) The Project is located in an area that is State and Federally designated as non-attainment for ozone and PM10. Construction-phase emissions would be intermittent and variable due to the phased activities of construction. Emission sources such as machinery would be dispersed over the project site, and would not be used continuously or at the same time. Substantial or adverse levels of localized ground-level concentrations of criteria pollutants and toxic air contaminants would not be likely to occur with construction because the pollutants would be emitted from several pieces of equipment dispersed over the Project site. Dust control and engine exhaust would be subject to rules and regulations by the SCAQMD, and by Mitigation Measures to avoid adverse levels of air pollutant concentrations.

Table 3 summarizes the overall construction emissions per phase without controls, and Table 4 shows overall construction emissions per phase with implementation of the two Mitigation Measures, detailed below, to control fugitive dust and on-site off-road equipment emissions. In Table 3, the maximum daily emissions without controls could exceed thresholds for NOx, PM10, and PM2.5. With implementation of the Mitigation Measures, the maximum daily emissions would not exceed thresholds set by the SCAQMD (see Table 4). Construction emissions would not exceed the federal General Conformity *de minimis* levels. Therefore, Project construction would not result in a cumulatively considerable net increase in any criteria pollutant, and this impact would be less than significant with mitigation.

Project grading shall also occur in compliance with an approved PM10 Dust Control Plan dated December 2019 and as indicated by Dust Control Plan Summarization Sheet dated November 14, 2019.

During operation, the emissions would be the same as the baseline emissions. Operation and maintenance would remain the same, or yield very similar emissions to the existing condition. Therefore, there would be no impact.

Table 3. Proposed Project Construction Phase Air Pollutant Emission Rates, without Mitigation

	Project, per phase (lb/day)					
Construction Activity	**VOC**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Year 2021: Roadway Improvements, and Installing New WTGs	10.7	124.1	80.1	0.3	804.0	87.8
Year 2022: Installing New WTGs, and Restoration, Revegetation	7.1	62.1	63.3	0.2	710.1	73.8
Year 2023: Restoration, Revegetation	0.9	5.9	10.2	0.0	121.5	12.5
Year 2053: Decommissioning of New WTGs	1.4	5.6	15.4	0.0	120.9	12.3
Maximum Daily Emissions, without Mitigation	**10.7**	**124.1**	**80.1**	**0.3**	**804.0**	**87.8**

Sources: CalEEMod Output.

Table 4. Proposed Project Construction Phase Air Pollutant Emission Rates, with Mitigation

	Project, per phase (lb/day)					
Construction Activity	**VOC**	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Year 2021: Roadway Improvements, and Installing New WTGs	5.9	99.3	94.1	0.3	141.6	19.6
Year 2022: Installing New WTGs, and Restoration, Revegetation	4.4	57.2	74.5	0.2	120.4	15.1
Year 2023: Restoration, Revegetation	0.6	6.9	11.0	0.0	20.8	2.6
Year 2053: Decommissioning of New WTGs	0.8	15.6	20.2	0.0	20.9	3.0
Maximum Daily Emissions including Mitigation	**5.9**	**99.3**	**94.1**	**0.3**	**141.6**	**19.6**
SCAQMD Daily Thresholds (Construction)	**75**	**100**	**550**	**150**	**150**	**55**
Annual Proposed Action Emissions (tons per year)	**0.39**	**5.41**	**6.71**	**0.02**	**10.69**	**1.35**
General Conformity *de minimis* Levels (tons per year)	**25**	**25**	**None**	**None**	**70**	**None**

Sources: CalEEMod Output.

c) During construction, the SCAQMD recommends using Localized Significance Thresholds for determining near-field impacts as a result of emissions from a small development site (up to 5 acres). The Project is located on 640 acres of private lands, so the localized thresholds would not be directly applicable. The closest residence or inhabitable dwelling to the Project's construction would be 4,500 feet away and there are no sensitive receptors within 4,500 feet of the site. Therefore, there would be no potential to expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

During operation of the project, the closest residence or inhabitable dwelling to the Project is over 4,500 feet away. There are no sensitive receptors within 4,500 feet of the Project. Therefore, there would be no impact.

d) During construction, there would be no other emissions or odors that would adversely affect a substantial number of people. The closest residential use to the project is over 4,500 feet away. The Project site is also relatively remote, and there is not a substantial number of people near the project. Therefore, there would be no impact. During operation, there would be no change in emissions from the baseline scenario. Operation and maintenance would remain the same or very similar to the existing condition. Therefore, there would be no impact.

Mitigation:

MM-AQ-1 **Fugitive Dust Control Plan**. The Project would mitigate the particulate matter impact caused by dust emissions during construction by implementing a suite of effective dust control practices, such as using soil stabilizers or watering exposed areas (2 times/day or as needed) throughout construction and by limiting vehicle travel speeds to no more than 15 miles per hour on unpaved areas within the construction site. Visible speed limit signs would be posted at site entrance.

MM-AQ-2 **Control On-Site Off-Road Equipment Emissions.** The Project would mitigate the NOx, PM10, and PM2.5 in diesel exhaust emissions by requiring use of the off-road equipment achieving Tier 3 engine emissions standards. To implement this standard, the Project owner, when entering into construction contracts or when procuring off-road equipment or vehicles for on-site construction activities, shall ensure that only 2008-or-newer model year equipment or vehicles are obtained. All construction equipment using diesel engines

shall either be registered under California Air Resources Board's Statewide Portable Equipment Registration Program or shall meet the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1). All diesel-fueled engines used in the construction of the facility shall have clearly visible tags showing that the engine meets the standards of this measure.

Monitoring: Monitoring would ensure dust emissions are limited and speed limit signs are posted.

Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
7. Wildlife & Vegetation				
a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?	☐	☐	☐	☒
b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	☐	☒	☐	☐
c) 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. Wildlife Service?	☐	☒	☐	☐
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) 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 Game or U. S. Fish and Wildlife Service?	☐	☐	☐	☒
f) 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?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

Source(s): BRTR (Appendix XX) and references therein; California Natural Diversity Data Base (CNDDB); California Native Plant Society (CNPS) On-line Electronic Inventory; CVMSHCP.

Findings of Fact: Impacts will be less than significant with the incorporated mitigation

This section of the IS describes biological resources at the Project site and evaluates the Project's potential impacts to biological resources, including jurisdictional waters. With implementation of Mitigation Measures (below) none of the Project's potential impacts to biological resources would be significant. The analysis is based on a Biological Resources Technical Report (BRTR) and a Jurisdictional Delineation (JD), prepared by Aspen Environmental Group (Aspen) in April and September 2020, respectively (Appendices Band C1/2). The BRTR includes a literature review of special-status biological resources reported by the CNDDB; the CNPS On-line Electronic Inventory; the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP); and environmental documents previously prepared for the Alta Mesa 640 Windfarm, Whitewater, Riverside County, California including the Biological Resources Assessment, Focused Burrowing Owl Survey, Desert Tortoise Protocol Survey, Jurisdictional Delineation, and CVMSHCP Consistency Analysis (Jericho Systems, Inc., 2018).

Focused concurrent field surveys were conducted during 2019 (May and July), and provided 100 percent visual coverage of all safely accessible areas within the Project footprint. The field surveys conformed to full coverage desert tortoise protocol surveys (USFWS, 2010). The botanical surveys were conducted in conformance with California Department of Fish and Wildlife guidelines (CDFW, 2018a). The Project site is on private lands within the CVMSHCP boundaries.

a) **Coachella Valley Multiple Species Habitat Conservation Plan.** The Coachella Valley Association of Governments (CVAG) prepared, on behalf of its member agencies, the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP), which provides a regional vision for balanced growth to meet the requirements of federal and state endangered species laws, while promoting enhanced opportunities for recreation, tourism and job growth (CVAG, 2016). The CVMSHCP complies with the ESA and CESA for land in the Coachella Valley under a single permit. By providing comprehensive compliance with federal and state endangered species laws, the Plan protects the desert's natural heritage and allows for more timely construction of infrastructure projects within the Plan boundaries. Overall management of the Plan is provided by the Coachella Valley Conservation Commission (CVCC), a joint powers authority of elected representatives.

The CVMSHCP covers 27 species of plants and animals including listed threatened or endangered species and other non-listed special-status species. It conserves between 200,000 and 250,000 acres of privately owned land through general plan land use designations, zoning/development standards and an aggressive acquisition program for a total conservation area of between 700,000 and 750,000 acres. The CVMSHCP was adopted by the plan participants in 2007 and 2008 and permits were issued by the Wildlife Agencies in late 2008.

The Project site is located within the CVMSHCP boundaries and will conform to the CVMSHCP requirements and in turn, the Western Coachella Valley Area Plan. The CVMSHCP includes mapped "modeled

habitat" for certain covered species. Modeled habitat for the following three species is located within the Alta Mesa Wind Project Area:

- Coachella Valley milk-vetch: 4.3 acres (of 41,098 acres of modeled habitat in the MSHCP area; field survey confirms the modeled habitat is not suitable)
- Coachella Valley Jerusalem cricket: 4.3 acres (of 27,446 acres of modeled habitat in the MSHCP area; field survey confirms the modeled habitat is not suitable)
- Desert tortoise: 640 acres (i.e., the entire project area; of 587,926 acres of modeled habitat in the MSHCP area)

The entire main access road would be within the CVMSHCP area on modeled desert tortoise habitat. However, a small portion of the access road would cross two private land parcels (parcels 517030009 and 517030003) covered under the CVMSHCP and subject to applicable fees (Figure 4.4-1). The parcels include 1.04 acres of disturbance for the existing access road. New disturbance on these parcels associated with the Project would total 0.43 acres. Approximately 0.56 acres of existing disturbance along this portion of the access road would be restored post construction for a net reduction of 0.1 acres of disturbance on the private parcels.

The total access road footprint within the modeled habitat in the MSHCP covered area would include:

- Desert tortoise: 0.91 acres (0.48 include existing disturbance)
- LeConte's Thrasher: 0.87 acres (0.47 include existing disturbance)
- Sand source: 0.034 acres (0.004 include existing disturbance)
- Sand transport: 0.87 acres (0.47 include existing disturbance)
- Linkage: 0.91 acres (0.48 include existing disturbance)
- Desert dry wash woodland: 0.43 acres (0.27 include existing disturbance)

The Project, including the 0.43 acres of disturbance along the access road, would undergo a CVCC Joint Project Review and would conform to any conditions specified in CVCC's authorization.

The CVMSHCP identifies several Conservation Areas within its coverage area. The entire site is within the Stubbe and Cottonwood Canyons Conservation Area and the Whitewater Canyon Conservation Area of the CVMSHCP. Within each Conservation Area, the CVMSHCP specifies acreage caps on various habitat categories such as core habitat for desert tortoise and desert dry wash woodland. For projects located on private lands within the MSHCP area, the CVMSHCP provides state and federal Endangered Species Act coverage for several listed species as well as mitigation coverage for multiple other special-status plants and animals. The applicant prepared and submitted a status summary of all habitat impacts, by conservation area and category, to support the MSHCP consistency review.

The portion of the site within the Stubbe and Cottonwood Canyons Conservation Area lacks modeled habitat for many of the covered species with the exception of desert tortoise, Le Conte's thrasher and burrowing owl. In the portion of the site within Whitewater Canyon Conservation Area, modeled habitat for covered species is absent, with the exception of Le Conte's thrasher and desert tortoise.

By conforming to the CVMSHCP requirements, the Project would have no conflict and there would be no impact.

Additionally, the project is conditioned for CVMSHCP fees in accordance with Ordinance No. 875 since 7-new commercial wind turbines are proposed to be constructed on a portion of a 640-acre site as outlined with COA 90.Planning.2-Ord. No. 875 CVMSHCP Fees.

b) **Federal Endangered Species Act.** The Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.) establishes legal requirements for the conservation of endangered and threatened species and the ecosystems upon which they depend.

Section 9. Section 9 of the ESA lists those actions that are prohibited under the ESA, including take (i.e., to harass, harm, pursue, hunt, wound, or kill) of listed species without special exemption. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or shelter. "Harass" is further defined as actions that create the likelihood of injury to listed species to an extent as to significantly disrupt normal behavior patterns which include breeding, feeding, and shelter.

Section 10. Section 10 allows for the "incidental take" of endangered and threatened species by non-federal entities. Incidental take is defined by the ESA as take that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." Section 10 requires an applicant for an incidental take permit to submit a Habitat Conservation Plan that specifies, among other things, the impacts that are likely to result from the taking and the measures the applicant will undertake to minimize and mitigate such impacts. The CVMSHCP (Impact a, above) is an approved Habitat Conservation Plan and provides for Section 10 incidental take authorization for conforming projects. The Alta Mesa Wind Project will conform to the CVMSHCP as described above.

Critical Habitat. Designation of an area as critical habitat provides a means by which the habitat of an endangered or threatened species can be protected from adverse changes or destruction resulting from federal activities or projects. A critical habitat designation does not set up a reserve or refuge and usually applies only when federal funding, permits, or projects are involved. The Project site is not located within designated critical habitat for any species.

California Endangered Species Act. The California Endangered Species Act (CESA) (Fish and Game Code 2050 et seq.) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that state agencies not-approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. The CVMSHCP (below) provides for CESA incidental take authorization for conforming projects.

Title 14 of the California Code of Regulations (Sections 670.1) and Fish and Game Code Sections 2050 outline the criteria and process for listing a species as candidate, threatened, or endangered. As a candidate for listing, the species is temporarily afforded the same protections as a state-listed endangered or threatened species.

Fully Protected Designations – California Fish and Game Code Sections 3511, 4700, 5515, and 5050. Prior to enactment of CESA and the federal ESA, California enacted laws to "fully protect" designated wildlife species from take, including hunting, harvesting, and other activities. Unlike the subsequent CESA and ESA, there was no provision for authorized take of designated fully protected species. Currently, 36 fish and wildlife species are designated as fully protected in California, including golden eagle and desert bighorn sheep. California Senate Bill 618 (signed by Governor Brown in October 2011) authorizes take of fully protected species, where pursuant to a Natural Conservation Community Plan, approved by CDFW. The legislation gives fully protected species the same level of protection as is provided under the Natural Community Conservation Planning Act for endangered and threatened species.

The Project may adversely affect several listed threatened or endangered plant and wildlife species that have a potential to occur within the Project site. If present on the Project site, the Project would have potential to cause disturbance to one or more of these species. With CVMSHCP conformance and implementation of BIO Mitigation Measures, impacts to listed threatened and endangered species would be less than significant.

Threatened and Endangered (T&E) Plants

Triple-ribbed milk-vetch (FE): Triple-ribbed milk-vetch is a federally listed endangered plant found in arroyos, canyons, and hillsides between about 1,400 and 4,000 feet elevation. It grows in Whitewater Canyon east of the Project site and in nearby canyons, hills, and mountains to the east including Morongo Canyon and Mission Canyon and one disjunct site some 40 miles south at Agua Alta Canyon. It is very rare, and several known locations consist of only a single plant. Triple-ribbed milk-vetch is covered under the CVMSHCP. There is no CVMSHCP-modeled habitat on the site and triple-ribbed milk-vetch was not located during full-coverage field surveys conducted by Aspen Environmental Group and Leatherman Bioconsulting in May 2019 (see Appendix B, Biological Resources Technical Report). Potentially suitable habitat is present, however there is a low potential for occurrence in the study area due to negative results of field surveys.

Coachella Valley milk-vetch (FE): Coachella Valley milk-vetch is an annual or short-lived perennial endemic to the Coachella Valley. It is primarily found on loose aeolian (wind transported) or, less-often, in alluvial (water transported) sands, on dunes or flats and along disturbed margins of sandy washes. There is no designated critical habitat for Coachella Valley milk-vetch on the Project site. It is covered under the CVMSCHP, and a small area of CVMSHCP-modeled habitat for Coachella Valley milk-vetch is within the Project site (see BRTR Figure 4). The site was examined in the field; no Coachella Valley milk-vetch and no windblown or fluvial sand deposits are present in this area or elsewhere on the site. Vegetation in that location is predominantly brittlebush and creosote bush. The area is not suitable habitat for Coachella Valley milk-vetch or other species requiring windblown sand. Based on the results of field surveys, Coachella Valley milk-vetch is not expected to occur on the site.

Summary of impacts to T&E plants. No Project impacts to T&E plants are anticipated, although there is a low probability that triple-ribbed milk-vetch could occur on the site. As a covered species under the CVMSHCP, any potential impacts would be covered through the USFWS authorization and offset through regional habitat conservation and management, supported in part through the Project applicant's participation in the MSHCP, as required by Riverside County.

Threatened and Endangered (T&E) Wildlife

Two listed threatened or endangered species, the desert tortoise and Swainson's hawk, are known from the immediate vicinity of the Project area. One listed threatened species, the coastal California gnatcatcher, has moderate potential for occurrence as the Project site is on the margin of its range. Other listed species of the region are either limited to riparian and aquatic habitats (e.g., southwestern willow flycatcher, least Bell's vireo and western yellow-billed cuckoo) or aeolian sands (e.g., Coachella Valley fringe-toed lizard) that do not occur within the Project area. These federally listed birds are not expected to occur on the site except during migration flyover or stopover.

Reptiles

Desert tortoise (FT, CT). The desert tortoise is listed as threatened under CESA, and the Mojave population (i.e., west of the Colorado River) is listed as threatened under the federal ESA. East of the Colorado River, the desert tortoise's range extends into the Arizona deserts, and south through Sonora (Mexico). The

listed Mojave population is now recognized as a distinct species (*Gopherus agassizii*) from the Sonoran desert tortoise (*G. morafkai*). All wild desert tortoises in California are part of the state and federally listed Mojave population.

Focused surveys at the Project site for desert tortoise detected two old burrows and one old piece of scat. No live tortoises were observed during the survey; however, they are known from within about 0.1 miles of the site and have a high potential to be present within the site[2]. A total of 199 concrete foundations were inspected for potential tortoise burrows. One of these had a suitable desert tortoise burrow beneath it, however, based on visual inspection the burrow was not occupied by desert tortoise at the time of the survey. The burrow was revisited and by that date it had partially collapsed and appeared to be inactive. Visual inspection indicated that no desert tortoise was present.

The Project site is not within USFWS designated critical habitat for the desert tortoise (USFWS, 1994). Desert tortoise is covered under the CVMSHCP.

Summary of impacts to T&E reptiles. The project would impact approximately 48.5 acres of suitable and potentially occupied desert tortoise habitat (unvegetated/ruderal, brittlebush scrub, California juniper woodland, California sagebrush-buckwheat scrub, Creosote bush–brittle bush scrub). As part of the decommissioning of the existing turbines, it would also restore currently disturbed habitat. None of the project components would introduce new barriers to desert tortoise movement except on a very localized scale.

Without minimization or avoidance measures, the Project could cause mortality or injury to desert tortoises during decommissioning of legacy turbines, construction, or O&M activities. Desert tortoises or eggs could be harmed during clearing or grading activities, or tortoises could become entrapped within open trenches and pipes. The Project could also cause mortality or injury to tortoises or eggs from vehicle strikes. Other effects could include individual tortoises or eggs being crushed or entombed in their burrows, disruption of tortoise behavior during construction or operation of facilities, and disturbance by noise or vibrations from heavy equipment. Desert tortoises may be attracted to the construction area by shade beneath vehicles, equipment, or materials, or the application of water to control dust, placing them at higher risk of injury or mortality. These impacts to desert tortoises would be minimized or avoided through Mitigation Measures.

Without minimization and avoidance measures the Project construction and operation could create "subsidies" such as food, water, or nest sites, for common ravens or other predators. Ravens prey on juvenile desert tortoises, contributing to the overall decline in tortoise recruitment. However, the repower also would remove existing tubular steel legacy turbine towers, including towers supporting non-operable legacy turbines which provide nest and perch site subsidies for common ravens. Other effects could include the introduction and spread of invasive weeds and increased human presence. These effects to desert tortoise would be avoided or minimized through Mitigation Measures.

The Project would avoid or minimize impacts to desert tortoise on-site by implementing the Mitigation Measures listed below:

[2] Desert tortoises at the Mesa Wind site, located to the north of the Project site have been studied extensively. Researchers conducted focused desert tortoise surveys of the Mesa Wind Project in 1997, 1998, 1999, 2000, 2009, and 2010. The number of tortoises encountered increased with each survey (31, 42, 49, 59, 63, and 69 tortoises, respectively) (Lovich et al., 2011).

- MM BIO-1: Wildlife Relocation. Specifies methods to move wildlife, including desert tortoise that may be located in work areas, from harm's way.
- MM BIO-2: Biological Monitoring. Requires on-site monitors during work where tortoises could occur, to ensure activities are halted or relocated to avoid tortoises, and to ensure worker compliance with avoidance areas and related requirements.
- MM BIO-3: Worker Environmental Awareness Program Training. Requires worker education to ensure familiarity with various protection measures for desert tortoises and other resources.
- MM BIO-4: Minimization of Vegetation and Habitat Impacts. Requires flagging to delimit approved work areas and prohibits ground disturbance outside specified areas.
- MM BIO-5: Wildlife Protection. Specifies multiple requirements to prevent harm to wildlife such as vehicle speed limits, pre-construction surveys in work areas, and various requirements to prevent attracting wildlife to work areas (e.g., managing water sources and trash) to prevent inadvertent harm to wildlife.
- MM BIO-6: Desert Tortoise Protection. Identifies multiple additional tortoise-specific measures to protect desert tortoises, such as checking beneath vehicles or equipment before moving them.
- MM BIO-7: Integrated Weed Management Plan. Requires actions to prevent introductions of weed seeds onto the site, and management measures to control invasive weeds, to prevent habitat degradation.
- MM BIO-8: Monitoring and Reporting Schedule. Specifies timing of monitoring activities and requirements for reporting to regulatory agencies.
- MM BIO-9: Trash Management. Minimizes potential attractants to tortoise predators (common ravens, coyotes, feral dogs) by preventing availability of food waste.
- MM BIO-10: Raven Management Plan. Requires monitoring for raven activity and follow-up agency coordination as needed.
- MM BIO-11: Revegetation. Requires revegetation of temporarily disturbed areas to maximize post-construction habitat value for desert tortoise and other wildlife, and to minimize erosion, weed invasion, and dust source.

With implementation of the measures identified above, and conformance with the CVMSHCP, the Project's potential impacts to desert tortoise would be less than significant and any potential take would be authorized.

Birds

Coastal California gnatcatcher (FT). The coastal California gnatcatcher is listed as threatened under the ESA. The gnatcatcher and several shrubs that are characteristic of its habitat reach their inland range margins in the San Gorgonio Pass area. It has been reported by BLM staff along the PCT, north of the Project site. There is a low possibility that coastal California gnatcatcher may occur on the Project site and, if so, most likely outside the breeding season during the dispersal phase of its life cycle. Coastal California gnatcatcher is not covered under the CVMSHCP.

Swainson's Hawk (CT). Swainson's hawk is listed as threatened under the CESA. In California, it nests in the San Joaquin Valley, western Antelope Valley, and Owens Valley. The Project site is well outside of the breeding range but Swainson's hawk may migrate over the site biannually. Swainson's hawks are regularly observed migrating through the San Gorgonio Pass and there are several records within about 2 miles of the site. Swainson's hawks have a high potential to migrate over the site and could use the site briefly during migratory stopovers, but otherwise would not be expected to occur. Swainson's hawk is not covered under the CVMSHCP.

Riparian birds. Threatened or endangered riparian birds, including least Bell's vireo, southwestern willow flycatcher (both SE/FE, CVMSHCP covered), and western yellow-billed cuckoo (SE, FT) could occur in

riparian habitat along the Whitewater River east of the Project site, either during nesting season (least Bell's vireo have been documented nesting there) or during migratory "stopover" periods (willow flycatcher and yellow-billed cuckoo have been documented in the region briefly during migration, but not during breeding season). Any of these species could infrequently fly over the site but would not nest or overwinter there.

Summary of impacts to T&E birds. The primary Project risk to T&E birds would be collision with the turbines or other infrastructure during operation of the Project. The San Gorgonio Pass, located south of the Project area, is a high-use nocturnal flyway for migratory songbirds (studies summarized in the BRTR). Most of these migratory birds flew higher than the existing or proposed turbines, but about 11 percent were at altitudes within the blade-swept areas of the proposed turbines.

As a repower project, the potential net effect of future project operation would be the difference, either positive or negative, between the risk to these species under the existing use compared with the potential future risk under the proposed Project. A portion of this risk is due to rotor swept area (i.e., size of rotors X number of turbines). Table 5 compares the rotor swept area of the existing Alta Mesa Wind Project WTGs and the proposed repower WTGs.

Table 5. Rotor Swept Area Comparison.

WTG Configuration	Number of Turbines	Radius	Rotor Swept Area (each)	Rotor Swept Area (total)
Existing Alta Mesa Wind Project (Danwin)	117	11.5	415 m^2	48,586 m^2
Existing Alta Mesa Wind Project (Vestas V-27)	42	13.5	572 m^2	24,035 m^2
Total Existing Alta Mesa Wind Project	159	n/a	n/a	72,621 m^2
Proposed Alta Mesa Wind Project Repower	7	58.5 m	10,746 m^2	75,221 m^2 (3.6% increase)

However, because repower projects are still relatively new, there is limited information about the overall effects of a repower on birds. The few published studies have been contradictory in their findings regarding the effects of increased turbine height or increased MW capacity on fatality rates of birds and further analysis is needed (Allison et al., 2019). Fatality rates due to increased turbine height may also vary by species; for raptors, repowering at Altamont Pass, where smaller turbines have been replaced by fewer, taller turbines, may decrease fatalities in this group (Allison et al., 2019).

There is a low risk to T&E birds during Project construction, when they could strike construction equipment (e.g., cranes). Other impacts of construction such as noise or lighting could dissuade the birds from using surrounding habitat for nesting, roosting, or as a migratory stopover site. In addition, lighting on structures may attract migrating birds in flight, leading to collision with structures. Grading during construction may remove vegetation and potential nesting and roosting habitat. If construction is performed during nesting season, nests, eggs, or young could also be destroyed.

With implementation of the following Mitigation Measures, potential impacts to threatened and endangered birds would be less than significant. No take of listed bird species is anticipated, and any potential take of listed birds covered under the CVMSHCP (southwestern willow flycatcher, least Bell's vireo) would be authorized through conformance with the CVMSHCP.

- MM BIO-2: Biological Monitoring. Requires on-site monitors during work where tortoises could occur, to ensure activities are halted or relocated to avoid tortoises, and to ensure worker compliance with avoidance areas and related requirements.
- MM BIO-3: Worker Environmental Awareness Program Training. Requires worker education to ensure familiarity with various protection measures for desert tortoises and other resources.
- MM BIO-4: Minimization of Vegetation and Habitat Impacts. Requires flagging to delimit approved work areas and prohibits ground disturbance outside specified areas.
- MM BIO-5: Wildlife Protection. Specifies multiple requirements to prevent harm to wildlife such as vehicle speed limits, pre-construction surveys in work areas, and various requirements to prevent attracting wildlife to work areas (e.g., managing water sources and trash) to prevent inadvertent harm to wildlife.
- MM BIO-7: Integrated Weed Management Plan. Requires actions to prevent introductions of weed seeds onto the site, and management measures to control invasive weeds, to prevent habitat degradation.
- MM BIO-8: Monitoring and Reporting Schedule. Specifies timing of monitoring activities and requirements for reporting to regulatory agencies.
- MM BIO-11: Revegetation. Requires revegetation of temporarily disturbed areas to maximize post-construction habitat value for desert tortoise and other wildlife, and to minimize erosion, weed invasion, and dust source.
- MM BIO-12: Post construction monitoring for birds and bats. Following construction, the applicant will conduct monitoring to identify bird and bat fatalities associated with the Project facilities.
- MM BIO-13: Bird and Bat Conservation Strategy. The applicant will conduct pre-construction surveys to locate nesting birds, specify measures to minimize Project-related adverse effects, passive relocation of burrowing owls if needed, and adaptive management as needed to reduce or offset bird mortality impacts.

c) **Migratory Bird Treaty Act.** The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711) is a treaty signed by the United States, Canada, Mexico, and Japan that prohibits take of any migratory bird, including eggs or active nests, except as permitted by regulation (e.g., hunting waterfowl or upland game species). Under the MBTA, "migratory bird" is broadly defined as "any species or family of birds that live, reproduce or migrate within or across international borders at some point during their annual life cycle" and thus applies to most native bird species.

Bald and Golden Eagle Protection Act. The Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668, enacted by 54 Stat. 250) protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this act. Under BGEPA, take includes "disturb," which means "to agitate or bother a bald eagle or a golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

Plant Protection Act of 2000. Prevents importation, exportation, and spread of pests that are injurious to plants, and provides for the certification of plants and the control and eradication of plant pests. The Act consolidates requirements previously contained within multiple federal regulations including the Federal Noxious Weed Act, the Plant Quarantine Act, and the Federal Plant Pest Act.

Native Birds – California Fish and Game Code Sections 3503 and 3513. California Fish and Game Code Section 3503 prohibits take, possession, or needless destruction of bird nests or eggs except as otherwise provided by the Code; Section 3503.5 prohibits take or possession of birds of prey or their eggs except as

otherwise provided by the Code; and Section 3513 provides for the adoption of the MBTA's provisions (above). With the exception of a few non-native birds such as European starling, the take of any birds or loss of active bird nests or young is regulated by these statutes. Most of these species have no other special conservation status as defined above. The administering agency for these sections is the CDFW. As with the MBTA, these statutes offer no statutory or regulatory mechanism for obtaining an incidental take permit for the loss of non-game migratory birds.

The Project may adversely affect several special-status plant and wildlife species that could occur within the Project site. If present on the Project site, the Project could cause disturbance to one or more of these species. With implementation of BIO MMs, impacts to special-status species would be less than significant. Additionally, conformance with the CVMSHCP would authorize take of any covered species.

Special-Status Plants

Several public agencies and private entities maintain lists of plants of conservation concern. The CDFW compiles these species including California Rare Plant Rank (CRPR) 1, 2, 3, or 4. These plants are treated here as "special-status species." One of these, spiny-hair blazing star has a low potential to be present. No additional special-status plants have been documented from the Project site or are expected to occur there. Refer to Tables 2 and 3 of the BRTR (Appendix B) for additional information on all special-status plants.

Spiny-hair blazing star: Spiny-hair blazing star is an erect annual that has a CRPR of 2B.1 (i.e., rare in California but more common elsewhere in its range). It blooms from March through May and is found in Mojavean desert scrub on sandy, gravelly slopes and washes. It was documented in 2013 at three locations along a service road just west of Whitewater, within about 0.2 miles of the Project site. It was not found during the field surveys, but there is low potential that a small individual may have been overlooked or that a seed could enter the site and germinate in the future. The best habitat for this species is along the steep eroded slopes at the southern edge of the site. No Project infrastructure is planned for this area.

Summary of impacts to special-status plants. No Project impacts to special-status plants are anticipated. However, any unexpected impacts to special-status species that are covered under the CVMSHCP would be offset through regional habitat conservation and management, supported in part through the Project applicant's participation in the MSHCP, as required by Riverside County.

Special-Status Wildlife

Special status wildlife are species that are not federally or state listed as threatened or endangered, but that have special protections under other regulations. These include one candidate for state listing, Crotch bumblebee, and state fully protected species, including golden eagle and bald eagle, American peregrine falcon, desert kit fox, and Nelson's bighorn sheep. Golden eagle and bald eagle are also protected under the federal Bald and Golden Eagle Protection Act. In addition to the special-status wildlife species listed above, several public agencies and private entities maintain lists of wildlife species of conservation concern. The CDFW compiles these in its compendium of "Special Animals." These species are also treated here as special-status species, and include: coast horned lizard, red diamond rattlesnake, burrowing owl, raptors, upland perching birds, San Diego woodrat, bats, desert kit fox, and American badger.

Refer to Tables 2 and 3 of the BRTR (Appendix B) for additional information on all special-status wildlife.

Invertebrates

Crotch Bumble Bee. Crotch bumble bee is a candidate species for State listing (CDFW, 2019c). It is a widespread secretive species; more than 100 recent observations have been made throughout much of California. It is typically found in openings in grassland and scrub habitats where it burrows into the ground and lives in colonies. It feeds on native plants including milkweed, pincushion, lupine, phacelia, sage, snapdragon, clarkia, bush poppy, and buckwheat (Hatfield et al., 2015). Many of these food plants and suitable burrowing and foraging habitat are present on or in the vicinity of the Project site. Crotch bumblebee has a moderate potential to be present on the site. Crotch bumblebee is not covered under the CVMSHCP.

Reptiles

Coast horned lizard. Coast horned lizard is a CDFW Species of Special Concern, found throughout much of coastal southern California, inland as far as the southern Mojave Desert. Coast horned lizards occur in sandy soils in shrubland, grassland, and woodland habitats. They have been extirpated from much of their historic range by land use changes, but remain fairly common in natural open space areas where their primary prey (native ants) are found. They have been documented from Whitewater Canyon to the east and from the vicinity of Cabazon to the southwest. Desert horned lizard (no special-status) was observed on the site, but coast horned lizard was not. There is suitable habitat throughout the Project site, and coast horned lizards have a high potential to be present.

Red diamond rattlesnake. Red diamond rattlesnake is a CDFW Species of Special Concern that lives throughout most of Orange County and western Riverside County, south through San Diego and Baja California and inland to the Colorado Desert margins. Their habitats include coastal sage scrub, chaparral, and woodlands through most of their geographic range, and desert scrub at the eastern margins of their range. They are generally found around boulders and rock outcrops. There are numerous records of red diamond rattlesnakes from Whitewater Canyon just east of the Project site. Two adult red diamond rattlesnakes were observed during the field surveys.

Birds

American Peregrine Falcon. Peregrine falcons were formerly listed under CESA and ESA but have been delisted under both acts. They are fully protected under the state Fish and Game Code. They are found irregularly in the region, generally during migratory and winter seasons. Waterfowl and shorebirds make up a large proportion of their prey, and nest sites are often within foraging range of large water bodies. Peregrine falcons are regularly observed migrating through the San Gorgonio pass and there are numerous observations within about one mile of the Project site. Peregrine falcons have a high potential to migrate over the Project site. There are no nest sites known in the vicinity.

Golden Eagle. Golden eagles are fully protected under the state Fish and Game Code and are protected under the Federal BGEPA. They are year-round residents throughout most of their range in the western United States. In the southwest, they are more common during winter. In the desert, they generally nest in steep, rugged terrain, often on sites with overhanging ledges, cliffs or large trees as cover. Golden eagles are wide-ranging predators, especially outside of the nesting season. Golden eagle foraging habitat consists of open terrain such as grasslands, deserts, savanna, and early successional forest and shrubland habitats throughout the regional foothills, mountains, and deserts. The mountains and canyons surrounding the Project site provide suitable golden eagle nesting habitat.

The Project site does not have suitable nesting habitat, but the entire site is suitable foraging habitat. There are several documented golden eagle nest locations within a 10-mile radius of the site but none

within 2 miles (current nest survey distance per the new guideline from USFWS). The nearest recorded nest sites are about 2.5 miles west of the AM site. Golden eagles are regularly observed migrating through the San Gorgonio pass and there are numerous observations within about one mile of the site. Golden eagles have a high potential to occur over the site during winter, migration, or nesting seasons.

Bald Eagle. Bald eagles are fully protected under the state Fish and Game Code and are protected under the Federal BGEPA. They are occasional migrants in southern California during the winter. There are a few year-round resident birds, regularly seen near Lake Hemet in Riverside County, and more recently Big Bear Lake in San Bernardino County and Irvine Lake in Orange County. Bald eagles have been observed migrating through the San Gorgonio pass and were observed twice in January of 2019 at the nearby Interstate 10 Whitewater rest area (ebird.org, 2019). Bald eagles have a high potential to migrate over the Project site.

Raptors. In addition to the raptors discussed above, several other CDFW special-status birds of prey are found seasonally in the region, especially during winter and migration. These include osprey, ferruginous hawk, Cooper's hawk, sharp-shinned hawk, northern harrier, prairie falcon, merlin, and long-eared owl. None of these raptors are expected to nest on the site due to lack of suitable habitat, but all of them have high potential to fly over the site and occasionally forage on the site. Suitable winter or migratory season foraging habitat for these raptors is widely available throughout the region.

Upland Perching Birds. Several upland perching bird species are included in the CDFW Special Animals compilation (CDFW, 2018b). These include Costa's hummingbird, loggerhead shrike, LeConte's thrasher, black-tailed gnatcatcher, California horned lark, southern California rufous-crowned sparrow (winter/ migration), and Lawrence's goldfinch (winter/migration). Costa's hummingbird, loggerhead shrike, and California horned lark were observed on the site during the field surveys. The remaining species have moderate to high potential to occur on the site (based on their habitat and geographic range).

Burrowing owl. The burrowing owl is a CDFW Species of Special Concern. It is a small, terrestrial owl of open country that occurs year-round in southern California. Burrowing owls favor flat, open annual or perennial grassland or gentle slopes and sparse shrub or tree cover. They use the burrows of ground squirrels and other rodents for shelter and nesting. Where ground squirrel burrows are not available, the owls may use alternate burrow sites or man-made features (such as drain pipes, debris piles, or concrete slabs). In the California deserts, burrowing owls generally occur in low numbers in scattered populations, but they can be found in much higher densities near agricultural lands where rodent and insect prey tend to be more abundant. Burrowing owls are covered under the CVMSHCP. The site provides suitable habitat for burrowing owls and a single adult burrowing owl was observed during the field surveys.

Mammals

San Diego desert woodrat. The San Diego desert woodrat is a CDFW Species of Special Concern. It is known from coastal and desert scrub and rocky outcrops throughout much of southern California. It frequently builds nests or middens (piles of sticks and debris arranged to form a shelter) in rock outcrops or may occupy larger middens (usually built by a different woodrat species) around the bases of shrubs. It is known from the region and has been trapped near the community of Whitewater (CDFW, 2019a). Habitat throughout the Project site is suitable for San Diego desert woodrat and numerous middens were observed under concrete foundation and among rock outcrops. No live woodrats were observed, and surveys could not confirm if common or special-status woodrats were occupying the middens. There is a high potential for San Diego desert woodrat to be present.

Bats. There are ten special-status bats that could occur in the Project vicinity; six of these are ranked as CDFW Species of Special Concern: pallid bat (SC), Townsend's big-eared bat (SC), western mastiff bat (SC),

western red bat (SC), California leaf-nosed bat, long-eared myotis, fringed myotis, Yuma myotis, pocketed free-tailed bat (SC), and big free-tailed bat (SC). There is low potential for these species to roost on the site. The special-status bats of the local area roost in rock crevices, tunnels, or caves and one species (western yellow bat) roosts in the foliage of riparian trees. None of these features is present on the site.

All special-status regional bats are insectivorous, catching their prey either on the wing or on the ground. Some species feed mainly over open water where insect production is especially high, but others forage over open shrublands such as those found on the Project site. These special-status bats have moderate to high potential to forage over the Project site.

Three special-status bats have potential to fly over the site en route to foraging habitat elsewhere, including spotted bat (SC), western yellow bat (SC), and cave myotis (SC).

Desert kit fox. Desert kit fox is protected by the California Code of Regulations (Title 14, CCR: §460) and Fish and Game Commission Section 4000 as a fur-bearing mammal. Title 14 of the California Code of Regulations, Section 460, stipulates that desert kit fox may not be taken at any time. Desert kit fox is a fossorial mammal that occurs in arid open areas, shrub grassland, and desert ecosystems within the Mojave Desert. Desert kit fox typically occurs in association with its prey base, which includes small rodents, primarily kangaroo rats, rabbits, lizards, insects, and in some cases, immature desert tortoises (Zeiner et al., 1990). Burrow complexes that have multiple entrances provide shelter, escape, cover, and reproduction, but desert kit fox may utilize single burrows for temporary shelter. No desert kit fox burrows were found during the survey, but they have a moderate potential to be present within the Project site.

American badger. American badgers are a CDFW Species of Special Concern. They occupy mountains, deserts, and interior valleys, and are most abundant in drier open stages of most shrub, forest, and herbaceous habitats. They occupy areas where burrowing animals are available as prey and where soils are friable. Two potential American badger burrows were observed within the Project site.

Nelson's Bighorn Sheep. Nelson's bighorn sheep (or desert bighorn sheep) are fully protected under the state Fish and Game Code, and are known from the Transverse Ranges, California Desert Ranges, Nevada, northern Arizona, and Utah. Its populations in the Peninsular Ranges, south of the Project site, are federally listed as a threatened distinct vertebrate population segment. Nelson's bighorn sheep have been observed at the Mesa Wind site immediately north of the Project site and have a high potential to forage on the site.

Summary of impacts to special-status wildlife.

The Project would potentially substantially degrade about 48.5 acres of natural habitat. As part of the decommissioning of the existing legacy turbines, it would also restore currently disturbed habitat. None of the project components would introduce new barriers to wildlife movement except on a very localized scale.

Without minimization or avoidance measures, the Project could cause mortality or injury to ground-dwelling wildlife during decommissioning of legacy turbines, construction, or O&M activities. Clearing and grading activities may remove vegetation inhabited by wildlife or may injure or kill individuals, eggs, or young. Wildlife could be trapped in open trenches and pipes, killed or injured from vehicle strikes, or crushed or entombed in collapsed burrows.

Wildlife behaviors could be disrupted by night lighting, noise, or vibrations from heavy equipment. Wildlife may be attracted to the construction area by the shade produced by vehicles, equipment, or materials, or by the cooler conditions created by the application of water to control dust, placing them at a higher risk of injury or mortality.

Construction and operation may create "subsidies" such as food, water, or nest sites for opportunistic predators. However, the repower also would remove existing legacy tubular turbine towers, eliminating nest and perch sites at non-operable legacy turbines. Other impacts could include the introduction and spread of invasive weeds, leading to decreased habitat quality, and increased human presence.

Impacts to special-status wildlife would be avoided or minimized through implementation of the following BIO MMs:

- MM BIO-1: Wildlife Relocation. Specifies methods to move wildlife, including desert tortoise that may be located in work areas, from harm's way.
- MM BIO-2: Biological Monitoring. Requires on-site monitors during work where tortoises could occur, to ensure activities are halted or relocated to avoid tortoises, and to ensure worker compliance with avoidance areas and related requirements.
- MM BIO-3: Worker Environmental Awareness Program Training. Requires worker education to ensure familiarity with various protection measures for desert tortoises and other resources.
- MM BIO-4: Minimization of Vegetation and Habitat Impacts. Requires flagging to delimit approved work areas and prohibits ground disturbance outside specified areas.
- MM BIO-5: Wildlife Protection. Specifies multiple requirements to prevent harm to wildlife such as vehicle speed limits, pre-construction surveys in work areas, and various requirements to prevent attracting wildlife to work areas (e.g., managing water sources and trash) to prevent inadvertent harm to wildlife.
- MM BIO-6: Desert Tortoise Protection. Identifies multiple additional tortoise-specific measures to protect desert tortoises, such as checking beneath vehicles or equipment before moving them.
- MM BIO-7: Integrated Weed Management Plan. Requires actions to prevent introductions of weed seeds onto the site, and management measures to control invasive weeds, to prevent habitat degradation.
- MM BIO-8: Monitoring and Reporting Schedule. Specifies timing of monitoring activities and requirements for reporting to regulatory agencies.
- MM BIO-9: Trash Management. Minimizes potential attractants to tortoise predators (common ravens, coyotes, feral dogs) by preventing availability of food waste.
- MM BIO-10: Raven Management Plan. Requires monitoring for raven activity and follow-up agency coordination as needed.
- MM BIO-11: Revegetation. Requires revegetation of temporarily disturbed areas to maximize post-construction habitat value for desert tortoise and other wildlife, and to minimize erosion, weed invasion, and dust source.

The primary Project risk to special-status birds and bats would be collision with the turbines or other infrastructure during operation of the Project, described under the summary of impacts to T&E birds, above.

Other potential impacts to birds and bats due to construction may include noise or lighting that may deter them from using surrounding habitat for nesting, roosting, foraging, or as a migratory stopover site. Grading during construction may remove vegetation and potential nesting and roosting habitat. If construction is performed during nesting season, nests, eggs, or young could also be destroyed.

Impacts to special-status birds and bats would be avoided or minimized through implementation of the following additional BIO MMs:

- MM BIO-12: Post construction monitoring for birds and bats. Following construction, the applicant will conduct monitoring to identify bird and bat fatalities associated with the Project facilities.
- MM BIO-13: Bird and Bat Conservation Strategy. The applicant will conduct pre-construction surveys to locate nesting birds, specify measures to minimize Project-related adverse effects, passive relocation of

burrowing owls if needed, and adaptive management as needed to reduce or offset bird mortality impacts.

With implementation of the MMs identified above, impacts to special-status wildlife would be less than significant. Additionally, any potential take of covered special-status species would be authorized through conformance with the CVMSHCP.

d) The Project would not erect permanent or long-term barriers to wildlife movement, although there would be some short-term interruption of potential movement during Project construction. The California Essential Habitat Connectivity Project identifies the San Bernardino Mountains and the San Jacinto Mountains, to the north and south of the Project site as natural landscape blocks. There are also essential connectivity areas between these natural landscape blocks that include the Project site. Additionally, the Project site is located within the Stubbe and Cottonwood Canyons Conservation Area and the Whitewater Canyon Conservation Area as identified in the CVMSHCP (CVAG, 2007). These Conservation Areas were identified as an important part of a Linkage and Biological Corridor linking the San Bernardino Mountains portion of the Transverse Ranges with the Peninsular Ranges (San Jacinto and Santa Rosa Mountains). It is likely to be used by predators and large mammals, including coyotes, bobcats, mountain lions, and foxes to move between the two mountain ranges.

Short-term construction impacts may include removal of vegetation used as cover for wildlife movement, or noise, vibrations, and night lighting that may alter wildlife movement through the Project site. However, these impacts would not prevent wildlife access to important resources or habitat areas. Additionally, the Project site is currently developed with wind turbines and has been operating in this capacity for over 20 years. Any effects on potential wildlife movement during operation would be similar to existing conditions and would be less than significant.

With the implementation of the following BIO MMs, the Project would avoid or minimize disturbance to wildlife movement or nursery sites, and impacts would be less than significant.

- MM BIO-4: Minimization of Vegetation and Habitat Impacts. Requires flagging to delimit approved work areas and prohibits ground disturbance outside specified areas.
- MM BIO-5: Wildlife Protection. Specifies multiple requirements to prevent harm to wildlife such as vehicle speed limits, pre-construction surveys in work areas, and various requirements to prevent attracting wildlife to work areas (e.g., managing water sources and trash) to prevent inadvertent harm to wildlife.
- MM BIO-11: Revegetation. Requires revegetation of temporarily disturbed areas to maximize post-construction habitat value for desert tortoise and other wildlife, and to minimize erosion, weed invasion, and dust source.

Regarding bird and bat movement, migration, or nursery sites there is a potential for bats or migratory or nesting birds to be present on the Project site, and their foraging, migration, or nest sites could be impacted by Project activities and facilities. As discussed above under T&E birds, the San Gorgonio Pass, located south of the Project area, is a high-use nocturnal flyway for migratory songbirds. Most of these migratory birds flew higher than the existing or proposed turbines, but about 11 percent were at altitudes within the blade-swept areas of the proposed turbines.

With the implementation of BIO MMs, the Project would avoid or minimize disturbance to bats and migratory or nesting birds, and any potential impacts would be less than significant. Please also refer to the discussions of impacts to T&E birds and special-status wildlife, above.

- MM BIO-12: Post construction monitoring for birds and bats. Following construction, the applicant will conduct monitoring to identify bird and bat fatalities associated with the Project facilities.
- MM BIO-13: Bird and Bat Conservation Strategy. The applicant will conduct pre-construction surveys to locate nesting birds, specify measures to minimize Project-related adverse effects, passive relocation of burrowing owls if needed, and adaptive management as needed to reduce or offset bird mortality impacts.

e) **Clean Water Act.** The Clean Water Act (33 U.S.C. 1251 et seq.) establishes legal requirements for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Federal jurisdiction is determined by the U.S. Army Corps of Engineers and has not yet been determined for the Project site.

Section 401. Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the United States must obtain a State certification that the discharge complies with other provisions of the Clean Water Act. The Regional Water Quality Control Boards (RWQCBs) administer the certification program in California.

Section 404. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) regulating the discharge of dredged or fill material into waters of the United States, including wetlands. Implementing regulations by the USACE are found at 33 CFR Parts 320-330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines and were developed by the EPA in conjunction with the USACE (40 CFR Parts 230). The Guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Lake or Streambed Alteration Agreements – California Fish and Game Code Sections 1600-1616. Under these sections of the Fish and Game Code, an applicant is required to notify CDFW prior to constructing a project that would divert, obstruct, or change the natural flow, bed, channel, or bank of a river, stream, or lake. Preliminary notification and project review generally occur during the environmental review process. When a fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Lake and Streambed Alteration Agreement (LSAA) that becomes part of the plans, specifications, and bid documents for the project. CDFW jurisdiction is determined to occur within the water body of any natural river, stream, or lake. The term "stream," which includes creeks and rivers, is defined in Title 14, CCR, Section 1.72.

California Porter-Cologne Water Quality Control Act. Pursuant to the California Porter-Cologne Water Quality Control Act, the State Water Resources Control Board (SWRCB) and the nine RWQCBs may require permits ("waste discharge requirements") for the fill or alteration of "Waters of the State." The term "Waters of the State" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e]). Although "waste" is partially defined as any waste substance associated with human habitation, the SWRCB interprets this to include fill discharge into water bodies. The SWRCB and the RWQCB have interpreted their authority to require waste discharge requirements to extend to any proposal to fill or alter "Waters of the State," even if those same waters are not under the jurisdiction of the USACE. Pursuant to this authority, the SWRCB and the RWQCB may require the submission of a "report of waste discharge" under Water Code Section 13260, which is treated as an application for a waste discharge requirement.

There are no riparian or sensitive natural community types on the Project site; however, one sensitive vegetation type identified by the CDFW, desert willow woodland, is located west of the Project Site along the main access road.

The following vegetation types provide suitable habitat for many common wildlife species as well as special-status wildlife. None of these vegetation types identified on the Project site are classified as sensitive (CDFW, 2018c).

- Brittlebush scrub is the most abundant vegetation on the site, found primarily on exposed, west- and south-facing slopes. Brittlebush is a common to dominant species in desert shrublands and in coastal scrub of the interior valleys west of the site.
- California sagebrush – California buckwheat scrub is most common on disturbed soils such as along road cuts and adjacent to graded areas.
- California juniper woodland within the site is found on a single north-facing slope along the northern edge of the site.
- Creosote bush – brittlebush scrub is found throughout much of the site on areas with relatively flat topography. It is a widespread in the southern California deserts.
- Desert willow woodland is not found within the Project ROW but is along the main access road on private land where Mesa has an easement and the road crosses Cottonwood Creek. Potential impacts could affect up to 0.45 acres of this habitat, limited to areas of minor road improvements at the crossing site.
- Unvegetated areas or ruderal vegetation cover the roads, cleared areas, and building or O&M pads for the existing wind turbines.

The CVMSHCP identifies only one natural community, Sonoran Mixed Woody and Succulent Scrub, within the Project site. This natural community is characterized by presence of cactus and other stem succulents, and is not ranked as a sensitive community. The remainder of the Project site is mapped as wind energy.

Ephemeral desert washes and channels on the site do not support wetlands or other sensitive natural communities. However, ephemeral channels may provide habitat elements for wildlife such as increased plant diversity, cover, or food availability, and they serve to convey water and sediment downstream, supporting offsite habitat values.

These ephemeral channels meet jurisdictional criteria as waters of the state according to California Fish and Game Code and the Porter-Cologne Water Quality Act and are regulated by the CDFW and Colorado River RWQCB. They may meet federal Clean Water Act (CWA) criteria as waters of the U.S. and may require authorization from the United States Army Corps of Engineers under Section 404 of the CWA.

The Project is expected to permanently impact 0.64 acres of CDFW jurisdictional waters of the state. The Project is also expected to temporarily impact 0.16 acres of CDFW jurisdictional waters of the state. All of the potentially jurisdictional waters of the state mapped within the proposed disturbance area are characterized as ephemeral desert washes or ephemeral channels. These washes and channels exhibited field indicators of infrequent ephemeral active flow such as water marks, linear deposits of sediment and/or plant debris, bank scour, and erosion. Any substantial alteration (e.g., construction activities, culvert installation, or deposition of fill material) to these jurisdictional features, while not significant under CEQA, would require regulatory permits from the CDFW.

The desert willow woodland vegetation is in a dry wash crossing for the main access road, located within a road easement on Riverside County Flood Control land. Access for project construction would necessitate a temporary expansion of the easement, to be restored according to APM BIO-11 (Revegetation)

following construction. Mitigation Measure BIO-11 specifies that the Applicant will prepare and implement a Revegetation Plan for all temporarily disturbed areas, and that the goal for areas where no future disturbance will occur (e.g., the expanded road crossing) will be restoration of vegetation and habitat characteristics to provide habitat for listed species comparable to what is present before the disturbance. The restoration requirement will return any impacted area along the road crossing to natural habitat similar to what is present prior to disturbance, so that no significant impact occurs. Other mitigation measures that will minimize project effects to this location are:

- MM BIO-2: Biological Monitoring. Requires on-site monitors during work where tortoises could occur, to ensure activities are halted or relocated to avoid tortoises, and to ensure worker compliance with avoidance areas and related requirements.
- MM BIO-3: Worker Environmental Awareness Program Training. Requires worker education to ensure familiarity with various protection measures for desert tortoises and other resources.
- MM BIO-4: Minimization of Vegetation and Habitat Impacts. Requires flagging to delimit approved work areas and prohibits ground disturbance outside specified areas.
- MM BIO-7: Integrated Weed Management Plan. Requires actions to prevent introductions of weed seeds onto the site, and management measures to control invasive weeds, to prevent habitat degradation.

In addition to the mitigation measures identified above, biological resource impacts at the road crossing site are covered under the CVMSHCP and mitigated through the MSHCP's to development fees. These fees are used to acquire and manage natural habitats throughout the Coachella Valley. (Please see *Impact g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*). These fees would serve to offset the Project's potential impacts to desert willow woodland through a "fair-share" payment to preserve and manage biological resources throughout the Coachella Valley. With these mitigation measures and MSHCP participation, the net impact would be less than significant. Finally, impacts to jurisdictional waters where the desert willow woodland occurs are subject to CDFW and RWQCB authorization as described above. Both agencies may specify permit conditions beyond the mitigation measures and CVMSHCP requirements identified here.

f) No wetlands are present on the Project site or in the vicinity and the Project would have no impact on wetlands. The project would involve disturbance to several ephemeral dry channels that meet CDFW jurisdictional criteria under the California Fish and Game Code (addressed above), but would not result in significant impacts to channels.

g) As discussed above in Item (a), the Project site is located within the CVMSHCP boundaries and would not conflict with the CVMSHCP.

Western Coachella Valley Area Plan. The Project site is located within the County of Riverside and is covered in its Western Coachella Valley Area Plan. The Plan contains policies that guide the physical development and land uses in the unincorporated western portion of the Coachella Valley, and is an extension of the County's larger General Plan. The General Plan establishes standards and policies for development within the entire unincorporated County territory, while the Area Plan details standards and policy direction relating specifically to the Western Coachella Valley (County of Riverside, 2019).

Habitat Conservation is addressed under Multipurpose Open Space and Local Open Space Policies. Relevant policies include:

WCVAP 20.1 Protect visual and biological resources in the Western Coachella Valley through adherence to General Plan policies found in the Multiple Species Habitat Conservation Plans, Environmentally Sensitive Lands, Wetlands, and Scenic Resources sections of the Multipurpose Open Space Element.

WCVAP 21.1 Protect the Whitewater River watershed and habitat, and provide recreational opportunities and flood protection through adherence to policies in the Open Space, Habitat and Natural Resources Preservation section of the General Plan Land Use Element and the Wetlands and Floodplain and Riparian Area Management sections of the General Plan Multipurpose Open Space Element.

WCVAP 22.1 Protect biological resources in the Western Coachella Valley through adherence to General Plan policies found in the Multiple Species Habitat Conservation Plans, Environmentally Sensitive Lands, Wetlands, and Floodplain and Riparian Area Management sections of the Multipurpose Open Space Element, as well as policies contained in the Coachella Valley Multiple Species Habitat Conservation Plan.

Consistent with the Western Coachella Valley Area Plan policies WCVAP 20.1, 21.1, and 22.1 (above) the project would adhere to Riverside County General Plan policies found in the Environmentally Sensitive Lands, Wetlands, Floodplain and Riparian Area Management, and Scenic Resources sections of the Multipurpose Open Space Element, and the Open Space, Habitat and Natural Resources Preservation section of the Land Use Element.

Mitigation:

Habitat compensation. The Alta Mesa Wind site is within the CVMSHCP boundaries and would offset the potential disturbance through the MSHCP process, including filing a Joint Project Review. +

MM BIO-1 **Wildlife Relocation**. The Applicant will prepare and implement a Wildlife Relocation Plan to ensure that special-status wildlife species, including (but not limited to) desert tortoise, burrowing owl, and desert kit fox, are safely relocated outside the Project construction area prior to construction. The Wildlife Relocation Plan will conform to USFWS guidelines for desert tortoise surveys and relocation and to CDFW guidelines for burrowing owl and desert kit fox passive relocation, including scheduling to avoid disturbance to natal dens or burrows. The Wildlife Relocation Plan will specify methodology for pre-construction clearance surveys on the proposed Project construction sites; monitoring or tracking special-status species, burrows, or dens that may be located during the surveys; construction of off-site artificial burrows, if needed; relocation methods for localized "out of harm's way" relocation; passive relocation methods for burrowing owl or desert kit fox; qualifications of field personnel who may handle desert tortoises; and follow-up monitoring of relocated animals.

MM BIO-2 **Biological Monitoring.** The Applicant will assign an Authorized Biologist as the primary point of contact for the lead resource agencies regarding biological resources mitigation and compliance. For desert tortoise protection measures (BIO-6, below), the Authorized Biologist will serve as the Field Contact Representative (FCR). The Applicant will provide the resume of the proposed Authorized Biologist to the County, USFWS, and CDFW (as appropriate) for concurrence at least 30-days prior to onset of ground-disturbing activities. The Authorized Biologist will have demonstrated expertise with the biological resources within the Project area. In general, the duties will include, but will not be limited to those listed below:

- Regular, direct communication with representatives of County, USFWS and CDFW, and other agencies, as appropriate.

- Train and supervise additional Biological Monitors to ensure that all biological monitoring activities are completed properly and according to schedules. Monitoring will include clearance surveys of any area or activity that may impact biological resources to ensure compliance with all avoidance and minimization measures for biological resources.
- Conduct or oversee WEAP training (MM BIO-3).
- Conduct or oversee clearance surveys and monitoring duties.
- Halt any activities in any area if it is determined that the activity, if continued, would cause an unauthorized adverse impact to biological resources.
- Clearly mark sensitive biological resource areas during construction, O&M, and decommissioning, and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions.
- Conduct or oversee compliance inspections during ground disturbing construction and decommissioning activities. Inspections will include delineating limits of disturbance, fence construction activities, pre-construction clearance surveys; and clearing, grubbing, and grading.
- Inspect or oversee daily inspection of active construction or O&M activity areas where animals may have become trapped. At the end of each workday, either inspect installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (e.g., parking lots) for animals in harm's way and relocate them if necessary.
- During the operations phase of the Project, provide annual report conduct compliance inspections (trash management, wildlife mortality logs per incident, etc.); conduct weed monitoring and control (according to the Integrated Weed Management Plan).
- Immediately notify the Applicant, County, and resource agencies (as applicable) in writing of dead or injured special-status species, or of any non-compliance with biological mitigation measures or permit conditions.
- During construction, provide weekly verbal or written updates to County, and, for any information pertinent to state or federal permits, to the County and resource agencies.
- During construction and O&M, prepare and submit monthly and annual compliance reports, respectively.

Qualifications of Authorized Biologist. The Applicant shall assign at least one Authorized Biologist to the Project. The Applicant shall submit the resume and USFWS health assessment letter, if applicable, of the proposed Authorized Biologist(s), with at least three references and contact information, to the County for approval in consultation with CDFW and USFWS at least 30-days prior to the start of ground disturbing activities. The Authorized Biologist must meet the following minimum qualifications:

- Bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field;
- Three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society;

- Have at least one year of field experience with biological resources found in or near the Project area;
- Meet the current USFWS Authorized Biologist qualifications criteria, demonstrate familiarity with protocols and guidelines for the desert tortoise, and be approved by the USFWS;
- Possess a CESA Memorandum of Understanding pursuant to §2081(a) for desert tortoise.
- In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the County, in consultation with CDFW and USFWS, that the proposed Authorized Biologist or alternate has the appropriate training and background to effectively implement the mitigation measures.

Process of approving a Biological Monitor

- The Authorized Biologist or Applicant shall submit the resume, at least three references, and contact information of the proposed Biological Monitors to the County. The resume shall demonstrate, to the satisfaction of the County, the appropriate education and experience to accomplish the assigned biological resource tasks. The Biological Monitor is the equivalent of the USFWS-approved biologist (also "Service-approved biologist").
- Biological Monitor(s) training by the Authorized Biologist shall include familiarity with the project design features, BO, WEAP, and USFWS guidelines on desert tortoise surveys and handling procedures.

MM BIO-3 **Worker Environmental Awareness Program Training.** The FCR or Authorized Biologist will prepare and implement a WEAP. The Applicant will be responsible for ensuring that all workers at the site receive WEAP training prior to beginning work on the Project and throughout construction and operations. The WEAP will be available in English and Spanish. The Applicant will submit the WEAP to County for approval prior to implementation. If the County does not respond to submittal of the draft Plan within 60 days, the Project owner may consider this a waiver of the County's authority to comment and the Plan may be considered approved. The WEAP will:

- Be developed by or in consultation with the Authorized Biologist and consist of an onsite or training center presentation with supporting written material and electronic media, including photographs of protected species, available to all participants.
- Provide an explanation of the function of flagging that designates authorized work areas; specify the prohibition of soil disturbance or vehicle travel outside designated areas.
- Discuss general safety protocols such as vehicle speed limits, hazardous substance spill prevention and containment measures, and fire prevention and protection measures.
- Review mitigation and biological permit requirements.
- Explain the sensitivity of the vegetation and habitat within and adjacent to work areas, and proper identification of these resources.
- Discuss the federal and State Endangered Species Acts, Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act and the consequences of non-compliance with these acts.

- Discuss the locations and types of sensitive biological resources on the Project site and adjacent areas and explain the reasons for protecting these resources. This includes the biology and ecology of sensitive biological resources on the Project site and adjacent areas.
- Inform participants that no snakes, other reptiles, birds, bats, or any other wildlife will be harmed or harassed.
- Place special emphasis on species that may occur on the Project site including special-status plants, desert tortoise, burrowing owl, golden eagle, nesting birds, desert kit fox, American badger, and Nelson's bighorn sheep.
- Specify guidelines for avoiding rattlesnakes and reporting rattlesnake observations to ensure worker safety and avoid killing or injuring rattlesnakes. Wherever feasible, rattlesnakes should be safely removed from the work area using appropriate snake handling equipment, including a secure storage container for transport.
- Describe workers' responsibilities regarding wildlife avoidance, prohibitions of pets and firearms, and for avoiding the introduction of invasive weeds onto the Project site and surrounding areas, describe the Integrated Weed Management Plan.
- Provide contact information for the FCR and Authorized Biologist and instructions for notification of any threatened, endangered or sensitive wildlife discoveries, vehicle-wildlife collisions or dead or injured wildlife species encountered during Project-related activities.
- Include a training acknowledgment form to be signed by each worker indicating that they received training and will abide by the guidelines.

MM BIO-4 **Minimization of Vegetation and Habitat Impacts.** Prior to ground-disturbing activities, work areas (including, but not limited to, staging areas, access roads, and sites for temporary placement of construction materials and spoils) will be delineated with construction fencing (e.g., the common orange vinyl material) or staking to clearly identify the limits of work and will be verified by the Authorized Biologist. No paint or permanent discoloring agents shall be applied to rocks or vegetation (to indicate surveyor construction activity limits or for any other purpose). Fencing/staking will remain in place for the duration of construction. Spoils will be stockpiled in disturbed areas. All disturbances, vehicles, and equipment will be confined to the fenced/flagged areas.

When feasible, construction activities will minimize soil and vegetation disturbance to minimize impacts to soil and root systems. Upon completion of construction activities in any given area, all unused materials, equipment, staking and flagging, and refuse shall be removed and properly disposed of, including wrapping material, cables, cords, wire, boxes, rope, broken equipment parts, twine, strapping, buckets, and metal or plastic containers. Any unused or leftover hazardous products shall be properly disposed of offsite.

Hazardous materials will be handled and spills or leaks will be promptly corrected and cleaned up, according to applicable requirements. Vehicles will be properly maintained to prevent spills or leaks. Hazardous materials, including motor oil, fuel, antifreeze, hydraulic fluid, grease, will not be allowed to enter drainage channels.

MM BIO-5 **Wildlife Protection.** The Applicant shall undertake the following measures during construction and O&M to avoid or minimize impacts to wildlife. Implementation of all measures shall be subject to review and approval by the County.

- *Wildlife avoidance.* Wherever feasible, Project activities will avoid interference with wildlife (include ground-dwelling species, birds, bats) by allowing animals to escape from a work site prior to disturbance; conducting pre-construction surveys and exclusion measures for certain species as specified in other measures; checking existing structures and foundations for wildlife that may be present, and safely excluding them prior to removing the structures.
- *Minimize traffic impacts.* The Applicant will specify and enforce 15 miles per hour as the maximum vehicle speed limits, to minimize risk of wildlife collisions and fugitive dust.
- *Minimize lighting impacts.* Night lighting, when in use, shall be designed, installed, and maintained to prevent side casting of light towards surrounding fish or wildlife habitat. Any FAA required safety lighting color and pattern (e.g., steady vs. flashing lighting) will be designed to minimize potential hazards (i.e., attraction and subsequent collision) to native birds and bats.
- *Avoid use of toxic substances.* Soil bonding and weighting agents used for dust suppression on unpaved surfaces shall be non-toxic to wildlife and plants.
- *Minimize noise and vibration impacts.* The Applicant will minimize noise to offsite habitat.
- *Water.* Potable and non-potable water sources such as tanks, ponds, and pipes shall be covered or otherwise secured to prevent animals (including birds) from entering. Prevention methods may include storing water within closed tanks or covering open tanks with 2-centimeter netting. Dust abatement will use the minimum amount of water on dirt roads and construction areas to meet safety and air quality standards. Water sources (e.g., hydrants, tanks, etc.) shall be checked periodically by biological monitors to ensure they do not create puddles.
- *Trash.* All trash and food-related waste shall be contained in vehicles or covered trash containers inaccessible to ravens, coyotes, or other wildlife and removed from the site regularly.
- *Workers.* Workers shall not feed wildlife or bring pets to the Project site. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons.
- *Wildlife netting or exclusion fencing.* The existing fence surrounding the O&M structure will be updated to include desert tortoise exclusion fencing. The Applicant may install temporary or permanent netting or fencing around equipment, work areas, or Project facilities to prevent wildlife exposure to hazards such as toxic materials or vehicle strikes, or prevent birds from nesting on equipment or facilities. Bird deterrent netting will be maintained free of holes and will be deployed and secured on the equipment in a manner that, insofar as possible, prevents wildlife from becoming trapped inside the netted area or within the excess netting. The Desert Tortoise Monitor or Authorized Biologist will inspect netting (if installed) twice daily, at the beginning and close of each work day. The Desert Tortoise Monitor or Authorized Biologist will inspect exclusion fence (if installed) weekly.

- *Wildlife entrapment.* Project-related excavations shall be secured to prevent wildlife entry and entrapment. Holes and trenches shall be backfilled, securely covered, or fenced. Excavations that cannot be fully secured shall incorporate wildlife ramp or other means to allow trapped animals to escape. At the end of each workday, a Desert Tortoise Monitor or Authorized Biologist shall ensure that excavations have been secured or provided with appropriate means for wildlife escape.
- *All pipes or other construction materials or supplies* will be covered or capped in storage or laydown areas. No pipes or tubing will be left open either temporarily or permanently, except during use or installation. Any construction pipe, culvert, or other hollow materials will be inspected for wildlife before it is moved, buried, or capped.
- *Dead or injured wildlife* will be reported to CDFW or the local animal control agency, as appropriate (special-status species must be reported to USFWS, County, and CDFW). An Authorized Biologist shall safely move the carcass out of the road or work area if needed and dispose of the animal as directed by the agency. If an animal is entrapped, an Authorized Biologist shall free the animal if feasible, or work with construction crews to free it, in compliance with safety requirements, or work with animal control or USFWS and CDFW to resolve the situation.
- *Pest control.* No anticoagulant rodenticides, such as Warfarin and related compounds (indandiones and hydroxycoumarins), may be used within the project site, on off-site project facilities and activities, or in support of any other project activities.

MM BIO-6 **Desert Tortoise Protection.** All ground-disturbing activities would avoid desert tortoise take by either exclusion fencing or on-site monitoring. The determination whether to fence work areas will be made on a case-by-case basis dependent on the schedule and extent of planned activities and topography of the work site. Desert tortoises would be handled or translocated according to the Desert Tortoise Relocation Plan, to be prepared as specified in MM BIO-1, pending approval by both the USFWS and CDFW.

The Authorized Biologist shall conduct or oversee pre-construction clearance surveys for each work area, watch for tortoises wandering into the construction areas, check under vehicles, and examine excavations and other potential pitfalls for entrapped animals. The Authorized Biologist will be responsible for overseeing compliance with desert tortoise protective measures and for coordination with the County, USFWS, and CDFW (described below). The Authorized Biologist shall have the authority to halt all Project activities that are in violation of these measures or that may result in take of a desert tortoise. Only the Authorized Biologist or Desert Tortoise Monitor with direct oversight from the Authorized Biologist will handle or relocate desert tortoises and only as specifically outlined in the Desert Tortoise Relocation Plan. Any incident that is considered by the Authorized Biologist to be in noncompliance with these measures will be documented immediately.

The Authorized Biologist will be responsible for overseeing compliance with desert tortoise protective measures and for coordination with resource agencies. The FCR will also have the authority to halt any Project activities that may risk take of a desert tortoise or that may be inconsistent with adopted mitigation measures or permit conditions. Neither the FCR nor any other Project employee may bar or limit any communications between any Natural Resource Agency or County and any Project biologist, biological monitor or contracted biologist. Upon notification by another Authorized Biologist or Monitor of any

noncompliance, the FCR will ensure that appropriate corrective action is taken and documented. The following incidents will require immediate cessation of any Project activities that could harm a desert tortoise: (1) location of a desert tortoise within a work area; (2) imminent threat of injury or death to a desert tortoise; (3) unauthorized handling of a desert tortoise, regardless of intent; (4) operation of construction equipment or vehicles outside a Project area cleared of desert tortoise, except on designated roads; and (5) conducting any construction activity without a Desert Tortoise Monitor where one is required.

The Authorized Biologist will be responsible for implementing, inspecting, or overseeing the following requirements in coordination with Desert Tortoise Monitors, the Applicant, and all its on-site contractors.

- *Monitor Desert Tortoise Exclusion Fence Installation (if necessary)*. The desert tortoise exclusion fence installation will be monitored by the Authorized Biologist or Desert Tortoise Monitor, under supervision from the Authorized Biologist, who will ensure stipulations provided in the Service's (2009, Chapter 8) guidance for tortoise exclusionary fencing are met. Throughout the construction phase, the tortoise exclusionary fence will be checked regularly and immediately after major rainfall events to ensure its integrity. Repairs will be made within 48 hours of discovery to prevent a tortoise from entering the site.
- *Preconstruction Clearance Survey for fenced areas.* For construction areas that would be fenced with desert tortoise exclusion fencing or standard construction fencing, clearance surveys will follow procedures outlined in the Service's *Desert Tortoise Field Manual* (December 2009) or more current Service guidance. The Authorized Biologist will conduct preconstruction clearance surveys immediately prior to initiation of ground disturbing activities in desert tortoise habitat regardless of the time of year. The goal of a clearance survey is to find all tortoises on the surface and in burrows that could be harmed by construction activities. Surveys will cover 100 percent of the acreage to be disturbed. All potential burrows within 100 feet of construction activity will be marked and avoided to the extent practicable. Those that cannot be avoided will be excavated by the Authorized Biologist.
- *Monitor and oversee activities within construction phase tortoise exclusion fencing.* Prior to construction of Alta Mesa Wind repower, temporary or permanent desert tortoise exclusion fencing may be installed around the laydown area (temporary areas in use during construction and decommissioning phases only). The existing fence surrounding the O&M structure will be updated to include desert tortoise exclusion fencing. The fence will adhere to USFWS design guidelines (Service, 2009). The Authorized Biologist will conduct or oversee a clearance survey before the tortoise fence is enclosed to ensure no tortoises are in the work area. Any potentially occupied burrows will be avoided until monitoring or field observations (e.g., with a motion-activated camera or fiber-optic mounted video camera) determines absence. If live tortoises or an occupied tortoise burrow are identified in the work area, tortoises shall be relocated by the Authorized Biologist or allowed to leave on their own accord before enclosing the fence. The fence shall be either continuously monitored prior to closure, or clearance surveys shall be repeated prior to closure after tortoises are removed. Once installed, exclusion fencing will be inspected at least daily and following all rain events, and corrective action taken if needed to maintain it. Fencing around each work area

will include a "cattle guard" or desert tortoise exclusion gate at each entry point. This gate will remain closed at all times, except when vehicles are entering or leaving the Project area. If it is deemed necessary to leave the gate open for extended periods of time (e.g., during high traffic periods), the gate may be left open as long as an Authorized Biologist or Desert Tortoise Monitor is present to monitor for tortoise activity in the vicinity.

- *Monitor and oversee activities within unfenced work areas.* As an alternative to exclusion fencing, for any work conducted in an area that is not fenced to exclude desert tortoises, the work area must be surveyed no more than two hours prior to any planned vehicle or equipment activities and monitored by a Desert Tortoise Monitor who will stop work if a tortoise enters the work area. Work activities will only proceed at the site and within a suitable buffer area after the tortoise has either moved away of its own accord, or if it has been relocated out of harm's way by an Authorized Biologist or a Monitor under the direct supervision of the Authorized Biologist. Work sites with potential hazards to desert tortoise (e.g., auger holes, steep-sided depressions) that are outside of the desert tortoise exclusion fencing will be securely covered or filled at the end of each workday. Note that work areas without tortoise exclusion fencing nonetheless will be clearly defined by other fencing materials, staking, flagging, or other measures (BIO-4, above).
- *Tortoises under vehicles.* The ground beneath parked vehicles will be inspected immediately prior to the vehicle being moved. If a tortoise is found beneath a vehicle, the tortoise shall be allowed to move out of the area on its own. If it does not leave within 30 minutes, the Authorized Biologist may move the tortoise out of harm's way in a manner consistent with MM BIO 1 and Service handling guidance.
- *Tortoises on roads.* If a tortoise is observed on or near the road accessing a work area, the Authorized Biologist or Desert Tortoise Monitor will be contacted immediately, and vehicles will stop to allow the tortoise to move off the road on its own. If it does not leave the site within 30 minutes, the Authorized Biologist may move the tortoise out of harm's way in a manner consistent with MM BIO-1 and Service handling guidance.
- *Tortoise Observations.* Any time a desert tortoise is observed within or near a work site, Project work activities will only proceed at the site and within a suitable buffer area after the tortoise has either moved away of its own accord, or if it has been moved from harm's way by the Authorized Biologist. If a tortoise is observed in an unfenced work area, construction will stop and the tortoise shall be allowed to move out of the area on its own. If it does not leave the site within 30 minutes, the Authorized Biologist may move the tortoise out of harm's way in a manner consistent with MM BIO 1 and Service handling guidance. If a tortoise or tortoise burrow is observed within the exclusion fencing, construction in the vicinity will stop, pending relocation of the tortoise.
- *Dead or Injured Desert Tortoise.* Upon locating a dead or injured tortoise, the Authorized Biologist will immediately notify the County, the USFWS's Palm Springs Fish and Wildlife Office, and CDFW by telephone. Written notification must be made within five days of the finding to the Palm Springs Fish and Wildlife Office and CDFW. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death, if known, and other pertinent information.

MM BIO-7 **Integrated Weed Management Plan.** The Applicant will prepare and implement an Integrated Weed Management Plan (IWMP) to minimize or prevent invasive weeds from infesting the site or spreading into surrounding habitat. The County must approve the plan. The IWMP will identify weed species occurring or potentially occurring in the Project area, means to prevent their introduction or spread (e.g., vehicle cleaning and inspections), monitoring methods to identify infestations, and timely implementation of manual or chemical (as appropriate) suppression and containment measures to control or eradicate invasive weeds. The IWMP will identify herbicides that may be used for control or eradication, and avoid herbicide use in or around any environmentally sensitive areas. The IWMP will also include a reporting schedule, to be implemented by the Applicant.

MM BIO-8 **Monitoring and Reporting Schedule.** Encounters with desert tortoise shall be immediately reported to the FCR, Authorized Biologist, or Monitor. The Authorized Biologist shall maintain a record of all desert tortoises encountered during construction and decommissioning activities. Information recorded for each desert tortoise will include: the location; date of observation; general condition of health and apparent injuries and state of healing; location of damaged exclusion fence (if applicable); if moved, location moved from and location moved to and whether the desert tortoise voided its bladder; and diagnostic markings (i.e., identification numbers or marked lateral scutes).

The Project proponent will provide monthly reports to the County, USFWS, and CDFW throughout the construction and decommissioning phases that summarizes the implementation of Project measures pertaining to desert tortoise management. The reports will be prepared by the Authorized Biologist.

The Project proponent will provide annual reports to the County, USFWS, and CDFW throughout the construction and decommissioning phases, and a final report upon completion of construction and decommissioning, that summarize the implementation of Project measures pertaining to desert tortoise management. The reports will be prepared by the Designated Biologist or other qualified biologist.

MM BIO-9 **Trash Management.** All garbage associated with the Project during all phases of the Project will be contained in secure receptacles to prevent the introduction of food resources that could potentially attract or support common ravens, coyotes, and other predators or scavengers. Secure, wildlife proof self-closing waste bins will be used for all organic waste. To reduce the possibility of ravens or other scavengers from ripping into bags and exposing the garbage, plastic bags containing garbage will not be left out for pickup. All such waste material must be in secure waste bins or dumpsters at all times.

MM BIO-10 **Raven Management Plan**. The Project applicant will develop and implement a Raven Management Plan to address activities that may occur during the pre-construction, construction, decommissioning, and O&M phases of the Project that may attract common ravens (*Corvus corax*), a nuisance species that is a subsidized predator of desert tortoises and other sensitive species in the Project vicinity. The measures contained in the Raven Management Plan will be designed to:

- Identify conditions associated with the Project that might provide raven subsidies or attractants.
- Describe management practices to avoid or minimize conditions that might increase raven numbers and predatory activities.

- Describe control practices for ravens.
- Address monitoring during construction and for the life of the Project and discuss reporting requirements.

The Project Applicant will submit payment to the Project sub-account of the Renewable Energy Action Team (REAT) Account held by the National Fish and Wildlife Foundation (NFWF) to support the Service's Regional Raven Management Program. The one-time fee will be as described in the cost allocation methodology or more current guidance as provided by the Service or CDFW. The contribution to the regional raven management plan will be $105 per acre impacted.

MM BIO-11 **Revegetation**. The Applicant will prepare and implement a Revegetation Plan for all temporarily disturbed areas, to be reviewed and approved by County, USFWS, and CDFW. The Revegetation Plan will specify success criteria and materials and methods for site preparation, reseeding, maintaining, and monitoring revegetated areas in the following two categories:

- Temporarily disturbed areas where no future disturbance will occur (e.g., cut and fill slopes along roadways or turbine pads, to be left undisturbed throughout the life of the project). The goal of revegetation on these sites will be restoration of vegetation and habitat characteristics to provide habitat for listed species comparable to what is present before the disturbance.
- Temporarily disturbed construction areas around turbines, where future repairs or maintenance may necessitate further disturbance during the life of the project. The goal of revegetation on these sites will be to minimize dust, erosion, and invasive weeds from disturbed sites, but not to restore pre-disturbance habitat values (those impacts are mitigated through off-site compensation).

The nature of revegetation will differ according to each site, its pre-disturbance condition, and the nature of the construction disturbance (e.g., drive and crush vs. blading). The Plan will include: (a) soil preparation measures, including locations of recontouring, decompacting, imprinting, or other treatments; (b) details for topsoil storage, as applicable; (c) plant material collection and acquisition guidelines, plants from the project site, as well as obtaining replacement plants from outside the project area (sources for plant materials will be limited to locally occurring native species from the local area); (d) a plan drawing or schematic depicting the temporary disturbance areas described above; (e) time of year that the planting or seeding will occur and the methodology of the planting; (f) a description of the irrigation, if used; (g) success criteria; and (h) a monitoring program to measure the success criteria, commensurate with the Plan's goals, (i) contingency measures for failed revegetation efforts not meeting success criteria.

MM BIO-12 **Post construction monitoring for birds and bats.** The Applicant would conduct post construction mortality surveys for bird and bat populations on the repowered Alta Mesa Wind.

MM BIO-13 **Bird and Bat Conservation Strategy.** The Applicant will prepare and implement a Bird and Bat Conservation Strategy (BBCS) in coordination with the County, USFWS, and CDFW. The BBCS will specify (1) pre-construction survey schedule and methodology to locate nesting birds, including burrowing owl, near planned construction activities; (2) minimization and avoidance measures to prevent project-related nest abandonment or other

potential take of nesting birds; (3) passive relocation methods to be implemented if an active burrowing owl burrow is located near work activity areas; (4) pre- and post-operation monitoring protocol for bird and bat mortality; (5) mortality thresholds for listed or sensitive birds that will trigger adaptive management measures, (6) an adaptive management strategy to be implemented in the event mortality thresholds are exceeded, and (7) a format and schedule for reporting monitoring data and adaptive management actions to the County, USFWS, and CDFW.

Monitoring: Species-specific pre-construction and construction monitoring is required consistent with the provisions outlined in the Mitigation Measures outline certain avoidance, minimization, and mitigation requirements for the activities within the Alta Mesa site and along the main access road. These requirements include, but are not limited to, the pre-construction surveys for burrowing owl and desert tortoise. If burrowing owl and/or desert tortoise are found on the Project site or main access road during the course of these surveys, additional avoidance measures would be implemented pursuant to the CVMSHCP requirements.

Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
8. Historic Resources				
a) Alter or destroy a historic site?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of a historical resource, pursuant to California Code of Regulations, Section 15064.5?	☐	☒	☐	☐

Source(s): On-site Inspection, Project Application Materials, Phase I Cultural Resources Assessment for Alta Mesa Wind Project Repower (PDA 8030)

Findings of Fact: Impacts will be less than significant with the incorporated mitigation.

a-b) To address the Project's potential to impact historical resources, a cultural resources records search was conducted by Aspen Environmental Group (Aspen) on October 7, 2019, at the California Historical Resources Information System (CHRIS) Eastern Information Center located at the University of California, Riverside. The record search included a document review of all previously identified cultural resources, built environment resources, technical reports, ethnographic literature, historic aerial photographs and topographic maps, and determinations of eligibility for cultural resources. This search also included a review of eligible and listed resources on the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), California State Historical Landmarks, and California Points of Historical Interest. Additionally, an intensive pedestrian field survey of the Project area was conducted during the week of November 12-15, 2019, and was led by Aspen's Michael E. Macko, M.A., RPA. Mr. Macko exceeds the Secretary of the Interior Qualification Standards in archaeology, and he has in-depth familiarity with the prehistoric and historic period cultural resources of the San Gregorio Pass area. Mr. Macko was assisted by Aspen archaeological field technician Elliot D'Antin, B.S.

The record search identified 24 previous cultural resource studies that have been completed within a 1.0-mile radius of the Project area. None of the 24 previous studies encompassed the Project area. The

previous studies identified 23 cultural resources within a 1.0-mile radius of the Project, none of which are within the Project area.

No NRHP or CRHR listed or eligible resources are located within the Project area. However, previously unknown buried resources could be uncovered, damaged, or destroyed during construction-related ground-disturbing activity, which would be considered a potentially significant impact. Therefore, implementation of mitigation measure CUL-1 would reduce such potential impacts to unknown historical resources to a less than significant level.

Mitigation:

MM CUL-1 **Cultural Resource Monitoring Program.** Prior to issuance of grading permits: The applicant/developer shall provide evidence to the County of Riverside Planning Department that a County certified professional archaeologist has been contracted to implement a Cultural Resource Monitoring Program (CRMP). A CRMP shall be developed in coordination with the consulting tribe(s) that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this project. This document shall be reviewed by the consulting tribes and provided to the County Archaeologist for review and approval prior to issuance of the grading permit.

The CRMP shall contain at a minimum the following:

- ***Archaeological Monitor*** – An adequate number of qualified archaeological monitors shall be onsite to ensure all earth moving activities are observed for areas being monitored. This includes all grubbing, grading and trenching onsite and for all offsite improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined sand directed by the Project Archaeologist.
- ***Cultural Sensitivity Training*** – The Project Archaeologist and if required, a representative designated by the Tribe shall attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all construction personnel. Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; the areas to be avoided during grading activities; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event unanticipated 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. This is a mandatory training and all construction personnel must attend prior to beginning work on the project site. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.
- ***Unanticipated Resources*** – In the event that previously unidentified potentially significant cultural resources are discovered, the Archaeological and/or Tribal Monitor(s) shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Project Archaeologist, in consultation with the Tribal monitor, shall determine the significance of the discovered resources. The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected

area. Further, before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The Project Archaeologist shall determine the amount of material to be recovered for an adequate artifact sample for analysis. Isolates and clearly non-significant deposits shall be minimally documented in the field and the monitored grading can proceed.

- ***Artifact Disposition*** **–** the landowner(s) shall relinquish ownership of all cultural resources that are unearthed on the Project property during any ground-disturbing activities, including previous investigations and/or Phase III data recovery.

The Professional Archaeologist may submit a detailed letter to the County of Riverside during grading requesting a modification to the monitoring program if circumstances are encountered that reduce the need for monitoring.

MM CUL-1 **Project Archaeologist.** Prior to issuance of grading permits: The applicant/developer shall provide evidence to the County of Riverside Planning Department that a County certified professional archaeologist (Project Archaeologist) has been contracted to implement a Cultural Resource Monitoring Program (CRMP). A Cultural Resource Monitoring Plan shall be developed that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this project. A fully executed copy of the contract and a wet-signed copy of the Monitoring Plan shall be provided to the County Archaeologist to ensure compliance with this condition of approval.

Working directly under the Project Archaeologist, an adequate number of qualified Archaeological Monitors shall be present to ensure that all earth moving activities are observed and shall be on-site during all grading activities for areas to be monitored including off-site improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist.

Monitoring:

A County certified professional archaeologist shall prepare CRMP. Implement CRMP during construction, including WEAP training of all supervisors and crew prior to the start of construction.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
9. Archaeological Resources				
a) Alter or destroy an archaeological site?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to California Code of Regulations, Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Source(s): On-Site Inspection, Project Application Materials, Phase I Cultural Resources Assessment for Alta Mesa Wind Project Repower (PDA 8030)

Findings of Fact: Impacts will be less than significant with the incorporated mitigation

a-b) Aspen conducted a record search in October 2019 and an intensive pedestrian survey of the Project area in November 2019.

The record search identified 24 previous cultural resource studies that have been completed within a 1.0-mile radius of the Project. None of the 24 previously studies encompass the Project area. The previous studies identified 23 cultural resources within a 1.0-mile radius of the Project, none of which are within the Project area.

The intensive pedestrian survey identified one cultural resource; a segment of a larger prehistoric trail designated as P-33-000075. The record search did not indicate the presence of P-33-000075, due to inaccurate plotting of the site location. Site P-33-000075 encompasses five features; the previously recorded trail segment, three rock cairns, and a lithic reduction concentration. Site P-33-000075 was evaluated for CRHR eligibility and was recommended as not eligible for listing on the CRHR under Criterion 1, 2, 3, or 4as there is no continuous connection with the trail identified in the 1950s. Further, the data recorded for the trail indicates that it does not have the potential to contribute to the understanding of prehistory beyond what is already known. A more detailed description of the CRHR evaluation for P-33-000075 is provided below.

Criterion 1 – (The resource) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage. Title 14, CCR Section 4852(b)(1) adds, "is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States."

The historic research conducted and presented here has indicated that the Project area was very likely part of the larger ethnographic Serrano and Desert and Pass Cahuilla traditional use areas. The original site record by Johnston (1956) did indicate the presence of ceramics along the trail, but these were not noted in the segment recorded in the Project. The research did not identify any association of the Project area with events important in the history of Whitewater, San Gorgonio Pass, Riverside County, California, or the United States. The resources do not lend themselves to establishing their placement in the Cultural History of the Cahuilla, Serrano and their ancestors. Therefore, site 33-000075 is recommended not eligible for listing in the CRHR under Criterion 1.

Criterion 2 – Is associated with the lives of persons important in our past. Title 14, CCR Section 4852(b)(2) adds, "is associated with the lives of persons important to local, California, or national history."

No features or historical associations of the Project area have been identified with persons of importance to local, California, or national history. Therefore, site 33-000075 is recommended not eligible for listing in the CRHR under Criterion 2.

Criterion 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. Title 14, CCR 4852(b)(3) allows a resource to be CRHR eligible if it represents the work of a master.

Trails, lithic scatters and cairn trail markers are not notable for their design or workmanship. They include very sparse remains with little richness and diversity and do not embody a distinctive character of the ethnohistoric or prehistoric periods. Therefore, site 33-000075 is recommended not eligible for listing in the CRHR under Criterion 3.

Criterion 4 – Has yielded, or may be likely to yield, information important in prehistory or history. Title 14, CCR 4852(b)(4) specifies that importance in prehistory or history can be defined at the scale of "the local area, California, or the nation."

The present level of recordation for this segment of 33-000075 is believed to exhaust the information potential of the resource. Therefore, site 33-000075 is recommended not eligible for listing in the CRHR under Criterion 4.

No NRHP- or CRHR-listed or eligible resources are located within the Project area. However, previously unknown buried resources could be uncovered, damaged, or destroyed during construction-related ground disturbing activity, which would be considered a potential significant impact. Therefore, implementation of CUL-1 and CUL-2 would reduce potential impacts to known and unknown archaeological resources to a less than significant level.

c) No formal or informal cemeteries or burial grounds were identified in the cultural resources records search or during the intensive pedestrian survey. However, there is always a possibility of encountering unknown buried remains during Project-related ground disturbing activities. In the unlikely event human remains are discovered, compliance with State Law Health and Safety Code § 7050.5 would be required as indicated by AND Planning-CUL.1-Human Remains. These requirements state that no further excavations or disturbance of the site shall occur until the County Coroner has made the necessary findings as to its origin. Further, pursuant to Public Resources Code § 5097.98 (b), remains shall be left in place and free from disturbance until a final decision as to their treatment and disposition has been made. With the implementation of existing state regulations, potential impacts to human remains would be less than significant.

Mitigation:

MM CUL-1: Prepare and implement Cultural Resources Monitoring Plan (CRMP). (full text above)

MM CUL-2: County certified professional archaeologist (Project Archaeologist) to implement CRMP. (full text above).

MM CUL-3 **Temporary Fencing** – Temporary fencing shall be required for the protection of cultural site(s) P-33-000075 during any grading activities. Prior to commencement of grading or brushing, the project archaeologist shall confirm the site boundaries and determine an adequate buffer for protection of the site(s). The applicant shall direct the installation of fencing under the supervision of the project archaeologist and if required, Native American Monitor. The fencing can be removed only after grading operations have been completed.

Monitoring:

Ensure all supervisors and crew receive WEAP training. Ensure resource is flagged properly.

Energy

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
10. Energy Impacts				
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a State or Local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Source(s): Riverside County General Plan Land Use Element, Project Application Materials

Findings of Fact: There will be no impacts

a-b) The Project site is located in the San Gorgonio Pass wind resource area in Riverside County. The Project will help the State of California meet its renewable energy goals and contribute to the Renewable Portfolio Standard (RPS) goal of 50 percent by 2030. During construction, there would be no wasteful, inefficient, or unnecessary consumption of energy resources. Construction would take place on site with up to 170 people. The equipment used would meet California standards for efficiency. During operation, there would be no wasteful, inefficient, or unnecessary consumption of energy resources, since the project would not be consuming energy, but rather creating renewable energy. No infrastructure added to the Project would consume electricity that would substantially exceed what is currently used for the Project. The Project would not conflict with or obstruct any state or local plans for renewable energy. The Project helps meet the goals of both the state and county guidelines that are set to reduce use of fossil fuels, grow the RPS, and do so in a way that is nonobstructive and compatible with surrounding communities. Therefore, there will be no impacts.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Geology and Soils

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
11. Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones				
a) Be subject to 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?	☐	☐	☒	☐

Source(s): Riverside County General Plan Appendix H, GIS database, County Geologic Report No. 200033, Southern California Earthquake Data Center

Findings of Fact: Impacts will be less than significant.

a) This Project is located within the Transverse ranges, within the San Andreas Fault Zone, as defined in the Riverside County General Plan Appendix H and by the Southern California Earthquake Data Center. The San Andreas Fault Zone near the Project deviates from its general north-south trend, bending westward and resulting in a complex zone with many active faults. Active faults of the San Andreas Fault Zone in the vicinity of the Project site are the Garnet Hill fault, San Gorgonio fault zone, and Banning fault. Due to the interrelated nature of these faults, there is a potential that one or more of the fault strands might rupture concurrently with and earthquake on another strand in the vicinity.

Several Alquist-Priolo Earthquake Fault Zones (A-P Zones) for the Garnet Hill and San Gorgonio Pass faults are located in the Project area. One of the A-P Zones for the Garnet Hill fault crosses along the western edge of the Project site and two turbines (T-1 and T-2A) are located with the A-P Zone. The A-P Zone for the San Gorgonio Pass fault zone is located along the northern edge of the Project site and two proposed turbines (T-13A and T-3A) are located with the A-P Zone. Two turbines, (T-2A and T-7A) are located in the vicinity of mapped secondary faults identified by previous geologic consultants. The mapped traces of the faults within the Project area do not cross any Project components, except the main access road. The main access road to the west of the Project crosses two segments of the Garnet Hill fault and the associated A-P Zone for these fault segments. The Alquist-Priolo act is applicable to surface ruptures and seeks to prevent or minimize harm to habitable structures (occupied 2,000 person hours per year). The Project does not include any new habitable structures and would not be subject to Alquist-Priolo regulations; however, County of Riverside policy prohibits location of critical structures, including power supply facilities, on active faults. Although several of the turbines are located with an A-P Zone and could potentially be damaged due to surface fault rupture, the construction phase will be short term and would be conducted in accordance with existing regulations and site-specific geological recommendations and all structures would be designed in accordance with all applicable codes and regulations, including required California Building Code and County seismic building standards (see Appendix D). The risk of loss, injury, or death would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
12. Liquefaction Potential Zone				
a) Be subject to seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

Source(s): Riverside County General Plan Figure S-3, "Generalized Liquefaction," Riverside County General Plan Figure S-4, "Earthquake-Induced Slope Instability Map," County Geologic Report No. 200033

Findings of Fact: Impacts will be less than significant.

a) Soils that are prone to seismically induced ground failure and liquefaction are generally loose, unconsolidated soils. Liquefaction occurs when loose, water-saturated sediments lose strength and fail during strong ground shaking. The Project site is underlain by semi-consolidated Pleistocene alluvial deposits of the Cabezon Fanglomerate with groundwater levels of greater than 300 feet below ground surface. Due to the deep groundwater levels and the semi-consolidated nature of the Cabezon Fanglomerate it is

unlikely that liquefaction would occur in this area. Seismically induced landslides generally occur in steep areas with poorly consolidated or weak geologic units. Only small portions of the Project site are mapped as having low to moderate susceptibility to seismically induced landslides by the County, with the remainder of the site having no susceptibility to earthquake induced landslides. However, the geologic hazards report for the Project notes that the steep slopes in the Project area are likely prone to slope instability, ground cracking, and ridgetop spreading due to seismically induced ground shaking. The Project would be designed be in accordance with geotechnical recommendations and all applicable codes and regulations to avoid areas of unstable slopes and prevent slope failure. Therefore, the impact would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
13. Ground-shaking Zone				
a) Be subject to strong seismic ground shaking?	☐	☒	☐	☐

Source(s): Riverside County General Plan Figure S-4, "Earthquake-Induced Slope Instability Map," and Figures S-13 through S-21 (showing General Ground Shaking Risk), California Geological Survey County Geologic Report No. 200033

Findings of Fact: Impacts will be less than significant with mitigation.

a) The Project is located in an area that is prone to ground shaking. This area has a high likelihood of a substantial earthquake happening over the 30-year life of the Project. The CGS Earthquake Shaking Potential Map indicates estimated long-period (1.0 second) ground accelerations [ground accelerations, represented as a fraction of the acceleration of gravity (g)] in the Proposed Project area of approximately 1.45g, which represents a potential for strong to severe ground shaking within the Project area (CGS, 2016). Long-period ground shaking affects tall, relatively flexible structures, but also correlates well with overall earthquake damage. Comprehensive research on the effect of seismic ground shaking on wind turbines is limited. Evidence from past earthquakes in California and Japan has shown that modern wind turbines have the ability to withstand substantial earthquakes without a catastrophic failure. Buckling of the tower or damage to the foundation are the most common damage found from earthquakes or seismic ground shaking. Recently, more installations of wind turbines have occurred in areas that are prone to earthquakes, so additional studies are being published and seismic shaking is considered in the engineering process, such as the requirements set in MM GEO-1 (Katsanos et al., 2016). It is likely that an earthquake will occur over the life of the Project that could result in strong seismic ground shaking. However, the Project site is remote, there is only one employee present, and the nearest turbine to a residence would be over 4,400 feet away, more than 9 times the height of a turbine. The Project would engineer the WTGs to consider the possibility of strong seismic ground shaking and ensure sufficient distance between the WTGs and the nearest residences, which would ensure a very low risk of loss, injury, or death due to seismic ground shaking. The impact would be less than significant with mitigation.

Mitigation:

MM GEO-1 **Conformance with Geotechnical Recommendations.** Site design and engineering shall be conducted in conformance with recommendations specified in site-specific geotechnical and geologic feasibility studies and soils reports prepared for the Project.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
14. Landslide Risk				
a) 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, collapse, or rockfall hazards?	☐	☐	☒	☐

Source(s): On-site Inspection, Riverside County General Plan Figure S-5, "Regions Underlain by Steep Slope," California Geological Survey County Geologic Report No. 200033

Findings of Fact: Impacts will be less than significant

a) Landslides generally occur in areas with steep slopes underlain by poorly consolidated or weak geologic units. Although portions of the Project area are on areas of slope of 30% or greater, no existing landslides have been mapped in the Project area by the California Geological Survey. However, the geologic hazard report for the Project site notes that instability of the steep hillsides, road cuts, and artificial fill on slopes is likely and that debris flow hazards are present in the lower elevation areas of the Project. The Project's construction requires some grading and compaction on roads, turbine pads, and work sites, which would be in accordance with all applicable codes and regulations to prevent slope failure. Therefore, impacts would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
15. Ground Subsidence				
a) 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 ground subsidence?	☐	☐	☒	☐

Source(s): Riverside County General Plan Figure S-7, "Documented Subsidence Areas Map," County Geologic Report No. 200033

Findings of Fact: Impacts will be less than significant

a) The Project would not be located on unstable geologic units or units that would become unstable as a result of the Project. Although there are faults near the Project and the site is likely to experience strong

to severe ground shaking, the area Is unlikely to experience liquefaction related phenomena due to the deep groundwater and the semi-consolidated nature of the Cabezon Fanglomerate underlying the site. Although there is no history of subsidence in the project area, the County has mapped the Project area as having a moderate susceptibility for subsidence. However, there would be a low risk of ground subsidence in the Project area due to the semi-consolidated nature of the underlying geologic units and lack of substantial groundwater withdrawal in the area. Project design and engineering would consider geology, soils, and seismic hazards of the site for each turbine and comply with all applicable standards and regulations. Therefore, this impact would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
16. Other Geologic Hazards				
a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?	☐	☐	☒	☐

Source(s): On-site Inspection, Project Application Materials, County Geologic Report No. 200033

Findings of Fact: No Impact

a) The Project site has existing drainage channels, where mudflows are possible as a result of very intense rainfall. The Project would not increase the amount of runoff, and therefore would not increase the chances of mudflow. The Project is not located in an area that could be affected by other geological hazards such as seiche or volcanic hazard. Therefore, impacts associated with other geologic hazards would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
17. Slopes				
a) Change topography or ground surface relief features?	☐	☐	☒	☐
b) Create cut or fill slopes greater than 2:1 or higher than 10 feet?	☐	☒	☐	☐
c) Result in grading that affects or negates subsurface sewage disposal systems?	☐	☐	☒	☐

Source(s): Riv. Co. 800-Scale Slope Maps, Project Application Materials, Slope Stability Report; County Geologic Report No. 200033

Findings of Fact: Impacts will be less than significant with mitigation.

a-c) The Project will not significantly change the topography or ground surface relief features. The Applicant is conducting geotechnical testing at each turbine location and the site design and engineering shall be conducted in conformance with all recommendations from the geotechnical work. The Project site contains slopes that range from less than 15 percent to greater than 30 percent. The Project is designed so that the wind turbines and Project access roads are not located on slopes greater than 5%, and the Project will not create slopes that are greater than 2:1 or higher than 10 feet. All cut/fill activities would be required to comply with all applicable grading requirements set forth by the County. This includes applying for and securing a grading permit and implementation of best management practices (BMPs), and standard design/engineering principles intended to minimize impacts of grading in areas containing steeper topography. The Project will not result in grading that affects or negates subsurface sewage disposal systems, as they do not traverse the project site. Therefore, impacts would be less than significant with mitigation.

Mitigation:

MM GEO-1 **Conformance with Geotechnical Recommendations.** Site design and engineering shall be conducted in conformance with recommendations specified in site-specific geotechnical and geologic feasibility studies and soils reports prepared for the Project.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
18. Soils				
a) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
b) Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2019), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
c) Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Source(s): U.S.D.A. Soil Conservation Service Soil Surveys, Project Application Materials, On-site Inspection, Soils Report, SCAQMD, 1976, Riverside County General Plan Map, County Geologic Report No. 200033

Findings of Fact: Impacts will be less than significant with the incorporated mitigation

a-c) The Project area is in an area defined by the Riverside County General Plan as having moderate to high wind erodibility. This is due to the steep topography, dry soils, and being in an area with severe wind. The Project would comply with both SCAQMD Rules number 402 (Nuisance) and 403 (Fugitive Dust). Rule 402 requires dust suppression techniques to prevent particles from becoming a nuisance off-site, and Rule 403 requires control measures to reduce fugitive dust from active operations (SCAQMD, 1976). The project construction process would take measures to reduce wind erosion of soils including adopting a Fugitive Dust Control Plan to reduce wind erosion (MM AQ-1). A site-specific Storm Water Pollution Prevention Plan (SWPPP) would be required and would prevent erosion due to water. This SWPPP would include Best Management Practices to control erosion and for diverting water flow around disturbed areas, managing overland flow with temporary and permanent measures such as silt and straw fencing, and stabilizing

areas of concentrated flow. Topsoil would be eliminated in areas where new grading would occur and stabilization and revegetation post construction would be required in temporarily disturbed areas. The project proposes approximately 466,383 cubic yards of cut and fill. After construction, roads would be maintained to reduce erodibility, and after revegetation there would be less permanent land disturbance than the current amount. Standard soil erosion reduction requirements and MMs would ensure this impact would be less than significant.

This Project would not be located on expansive soil. The soil that is on the Project site is mainly sandy, gravelly, or loamy. These soils do not hold water and do not expand, so they would not create any direct or indirect risks to life or property. Therefore, there would be no impact.

The current wind energy project on the site sustains a septic system. Part of the Project overlays the Coachella Valley Groundwater Basin (CVGB). The groundwater basin is far below the surface of the earth, and even farther away from the Project, since the Project sits on a 600-foot-tall hill. There are adequate soils and adequate distance between the septic field and the CVGB, as well as any other sources that could be contaminated. Therefore, there would be no impact.

Mitigation: MM-AQ-1 Fugitive Dust Control Plan (see Air Quality for full text).

Monitoring: See Air Quality for monitoring requirements.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
19. Wind Erosion and Blowsand from project either on or off site				
a) Be impacted by or result in an increase in wind erosion and blowsand, either on or off site?	☐	☐	☒	☐

Source(s): Riverside County General Plan Figure S-8, "Wind Erosion Susceptibility Map," Ord. No. 460, Article XV & Ord. No. 484

Findings of Fact: Impacts will be less than significant.

a) Wind erosion and blowsand would be issues during the grading phases of Project construction. Blow-sand creates concern for maintenance activities, since it acts as an abrasive on metal, glass, and wood surfaces including those on cars, windows, and siding. The operation and maintenance activities that occur on the Project site would not result in additional workers being located on-site for additional durations of time. Thus, the safety and quality of life issues associated with blowsand are not relevant to the project. Implementation of the Project's Dust Control Plan and adherence with the County's Fugitive Dust and Erosion Control Ordinance would serve to reduce the effects of wind erosion. The Project would adhere to Riverside County Ordinance No. 484, which requires prevention of substantial quantities of soil from being deposited on public roads and private property. As previously addressed, the Project would be required to comply with SCAQMD Rules 403 and 403.1 to control dust emissions generated during the grading activities onsite and along the main access road. Standard construction practices to reduce fugitive dust emissions would be implemented, which include watering of the active sites. Therefore, impacts associated with wind erosion and blowsand would be less the significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Greenhouse Gas Emissions

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

Source(s): Riverside County General Plan, Riverside County Climate Action Plan ("CAP"), Project Application Materials

Findings of Fact: Impacts will be less than significant with the incorporated mitigation

a) Decommissioning of the old turbines, and construction of the Project would result in GHG emissions. These GHG emissions come from the use of off-road construction equipment, worker vehicles, mobilizing construction equipment, crew, and materials. The vehicles and equipment are used during all phases of construction activities through restoration and clean-up. These activities would cause GHG emissions due to fuel combustion by the construction vehicles and off-road equipment. Different sources of GHG emissions include diesel powered off-road equipment, gasoline powered construction vehicles which include trucks and autos for moving crews, equipment, materials, and water for fuels delivery. The equipment and vehicles would emit CO2, CH4, and N2O as products of fuel use and combustion. Motor vehicle fuel combustion emissions in terms of CO2e are approximately 95% CO2 with less than 1% mass being composed CH4 and N2O emissions compared to CO2. The new WTGs of the Project would produce electricity that would displace the need to produce electricity from traditional resources, such as fossil fuels.

Emissions from Development Activities. The construction, operation and maintenance activities create GHG emissions. These emissions come from improvements to the access roads, construction of the repowered plant, operations, and the eventual decommissioning of the Alta Mesa Project. The GHG emissions are specifically a result of the fossil-fuel combustion in the engines of construction equipment and vehicles used for transportation of workers or materials. Diesel fuel or gasoline is used in heavy-duty construction equipment, site development and preparation, facility construction, roadway construction and eventual decommissioning. Annual GHG emissions over the duration of construction, including future decommissioning, would vary up to 1,264 MTCO2e/year. Direct on-site O&M activities would be the same as emissions from the baseline, because the operation and maintenance would remain the same, or very similar to the existing condition.

Emissions Avoided by Producing Electricity. The Project would produce up to 27 megawatts (MW) of wind energy. Any production of power that exceeds what is currently being produced would be an increase in displacement of carbon-based fuels that would otherwise be used to meet electricity demand. The power displaced is incremental power provided by generators elsewhere on the grid, typically from natural gas power plants. The displacement of carbon-based fuels means that the project would avoid GHG that would be emitted elsewhere on the grid. The quantity of avoided GHG could very over time depending on California's statewide progress in reducing GHG in the electricity supply, by increasing its Renewable Portfolio Standard.

GHG impacts could arise from gas-insulated switchgear within the turbines, which contains SF6, and could leak over the life of the project. The amount of SF6 emitted are unquantified, although this is minimal, and avoided according to ARB regulations and the Applicant would be required to submit annual SF6 inventory and emissions reporting to the ARB for turbine and substation breaker/switch gear units. Installation of the project would result in new temporary and permanent ground disturbance. This effects GHG emissions since vegetation sequesters CO2, and acts as a sink as it removed CO2 from the atmosphere.

There would be a net GHG reduction due to this project from the direct and indirect effects on emissions from the construction and operations phases. The overall quantities of GHG generated by the Project would not have a significant impact on the environment because the SCAQMD threshold level would not be exceeded and the impact associated with GHG emissions would be less than significant.

b) Riverside County's Climate Action Plan (CAP) is a qualified GHG reduction plan according to CEQA guidelines. The Project would not exceed the 3,000 MT CO2e threshold established by the CAP. The Project would not conflict with any of the GHG reduction measures or goals within the Cap, and thus, is consistent with the plan. In addition, the Project would not inhibit the County from implementing any of the measures in the plan, both that apply to the Project and do not apply to the Project. Therefore, the impacts will be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
21. Hazards and Hazardous Materials				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?	☐	☐	☒	☐
d) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter (1/4) mile of an existing or proposed school?	☐	☐	☐	☒
e) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

Source(s): Project Application Materials, CAL FIRE Fire Hazard Severity Zones in SRA, CPUC FireMap Tier 2 and Tier 3, County of Riverside EMS Plan and Fire Department Strategic Plan, US Occupational Safety and Health Standards 1910 Subpart L, California State Water Resources Control Board 2020 GeoTracker, US Department of Toxic Substances Control, 2020, US Department of Energy's Wind Energy Technologies Office WINDExchange, General Electric Technical Documentation.

Findings of Fact: There will be no impacts

a-c) During construction of the Project, hazardous and potentially hazardous materials will be routinely transported, such as gasoline, diesel fuel, lubricants, and other products used to operate and maintain construction equipment. During construction, standard operating procedures would be followed to ensure that lubricants do not escape the surrounding area, and the transportation, use, and handling of these materials would be a temporary activity during construction and decommissioning. Oils from new turbines would not affect ground level soils because the project would be routinely monitored by on-site maintenance personnel, who regularly inspect the wind turbines. The wind turbines are equipped with a SCADA system which monitors the operation and safety of the wind turbines. Hazardous materials may be stored on the project site, and any transport, use, and handling of the hazardous materials would be conducted by a permitted and licensed service provider, and comply with applicable federal, state, and local agencies and regulations. These agencies include the U.S. Environmental Protection Agency (EPA), the Department of Toxic Substances Control (DTSC), the California Department of Transportation, The California Occupational Safety and Health Administration (Cal/OSHA), the Resource Conservation and Recovery Act (RCRA), and the Riverside County Department of Environmental Health. As mandated by Cal/OSHA, all hazardous materials stored on site would be accompanied by a Material Safety Data Sheet, which would inform on-site personnel about the necessary remediation procedures in the case of accidental release. The existing Hazardous Materials Business Plan (HMBP) and Spill Prevention, Control, and Countermeasures (SPCC) would be updated for the new project and would be provided to all appropriate authorities. Transmission oils from the turbines would not affect ground level soils.

The routine storage, transportation, and use of hazardous materials associated with vehicles and equipment used for project activities could result in an inadvertent release or spill. However, the volume of hazardous materials used for this project is relatively low, and modern wind turbines have an excellent safety record. According to WINDExchange, a resource of the U.S. Department of Energy's Wind Energy Technologies Office, turbine failures are rare events, and there have been fewer than 40 incidents in the modern fleet of 40,000 turbines in the United States as of 2014.

Hazards associated with blade throw, when a blade disconnects from the turbine and is thrown, while virtually non-existent in modern turbines, is minimized by a proper setback. According to the industry best practices and General Electric's setback considerations, the setback distance to ensure safety would be 1.1 times the tip height of the turbine. The tip height is the hub height, plus the height of half of the rotor diameter. For the Project, the maximum tip height would be 499 feet, which means the setback would need to be 546 feet. The distance from the closest turbine to any residential use is 4,500 feet, which is more than sufficient to ensure safety from blade throw. As stated above, the modern wind turbines are equipped with a SCADA system, which would alert crew members to potentially hazardous situations due to a mechanical failure, therefore preventing the release of hazardous materials related to a turbine failure.

The Project may require short-term road closures during construction due to transfer of oversized equipment and infrastructure. Road closures are not expected to occur during operation. During construction, the bulk of traffic on public roads would be caused by the associated construction workers, followed by delivery of turbine components, and other construction equipment. If temporary lane closures are required,

Brookfield would apply for the necessary permits from the California Department of Transportation or local agencies, which would require coordination with emergency service providers to ensure they are aware of any route restrictions. Temporary traffic delays or lane closures could occur during project construction, it would occur only during the short-term window of construction and alternate routes would be available for emergency evacuation should they be needed. Therefore, the impact would be less than significant.

d-e) There are no schools within one-quarter mile of the Project. Additionally, the Project is not located on or near a site that is included on a list of hazardous material sites and would not create any hazard to the public or the environment. Therefore, there would be no impact.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
22. Airports				
a) Result in an inconsistency with an Airport Master Plan?	☐	☐	☐	☒
b) Require review by the Airport Land Use Commission?	☐	☐	☐	☒
c) For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
d) For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure S-20, "Airport Locations," GIS database

Findings of Fact: There will be no impacts

a-d) The project requires review by the Airport Land Use Commission (ALUC) since the turbines exceed 200-feet in height. An application with the ALUC was filed in December 2020 and the project will be considered by the ALUC at their February hearing. Previously, the proposed Project was reviewed by the Federal Aviation Administration (FAA) who issued a "Determination of no Hazard to Air Navigation" for each turbine and the MET tower. In addition, the FAA required lighting on each turbine. The ALUC will use these FAA determinations in their consideration of the proposed Project. The Project is not located within 2 miles of an airport or airstrip. The closest airport to the Project is the Banning Municipal Airport, which is over 10 miles away from the Project, to the west. The Palm Springs International Airport is approximately 10 miles southeast of the Project. The Project is not located within an airport land use zone. The Applicant would follow the lighting requirements imposed by the FAA and ALUC.

There would be no safety hazard or excessive noise for people residing or working in the Project area due to the distance between the project and the public use airport. Therefore, there would be no impacts.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
23. Water Quality Impacts				
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 groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces?	☐	☐	☒	☐
d) Result in substantial erosion or siltation on-site or off-site?	☐	☐	☒	☐
e) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?	☐	☐	☒	☐
f) 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?	☐	☐	☒	☐
g) Impede or redirect flood flows?	☐	☐	☒	☐
h) In flood hazard, tsunami, or seiche zones, risk the release of pollutants due to project inundation?	☐	☐	☐	☒
i) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure S-9, "Special Flood Hazard Areas," Figure S-10, "Dam Failure Inundation Zone," Riverside County Flood Control District Flood Hazard Report/Condition, GIS database

Findings of Fact: Impacts will be less than significant

a) Construction would require excavation and grading for access roads, tower pads and foundations, and installation of towers. Disturbance of soil during construction could result in soil erosion and lowered water quality through increased turbidity and sediment deposition into local drainageways. Accidental spills or disposal of harmful materials used during construction could wash into and pollute surface waters or groundwater. Materials that could contaminate the construction area or spill or leak include lead-based paint flakes, diesel fuel, gasoline, lubrication oil, cement slurry, hydraulic fluid, antifreeze, transmission fluid, lubricating grease, and other fluids.

Potential threats to surface water during construction would be minor and limited by measures required to prevent contamination of surface and ground water. The local drainageways are normally dry. Should contaminant spills occur during construction, these would be cleaned up prior to water being contaminated and conveyed to downstream waters such as the Whitewater River. Any contamination of surface waters from most of the site which drains to Cottonwood Creek or the San Gorgonio River is also unlikely due to dry conditions. Contamination of these downstream waters is further unlikely due to the lack of connectivity between the tributaries and the San Gorgonio River.

Because the towers are on hills, 600 feet or more above the adjacent valley floor, and the CVGB is primarily below the valley floor, CVGB groundwater is well below the maximum depth of excavation, resulting in little likelihood that this groundwater could be affected during construction. Secondary containment for hazardous materials such as fuels would be required by law, and a Spill Prevention Control and Countermeasure Plan (SPCCP) developed and adhered to. The fuels stored on-site would be in a locked container within a fenced and secure temporary staging area. Temporary portable sanitation facilities will be provided for construction and these will be maintained by a licensed hauler. A site-specific SWPPP would be required and would prevent water contamination from spills and sediment disturbance during construction. The SWPPP would include measures for diverting flow around disturbed areas, managing overland flow with temporary and permanent measures such as silt and straw fencing, stabilizing areas of concentrated flow, protecting inlets to culverts and catch basins, and prevention of tracking of sediment by vehicles. Site inspections would be conducted on a regular basis and after rainfall events exceeding 0.5 inches to ensure proper function of the stormwater control measures described in the SWPPP. Areas of temporary disturbance would be revegetated.

Potential threats to surface water quality during O&M would be minor. Most O&M activities do not involve ground disturbance except for inspection and maintenance of access roads and pads to minimize the potential for ongoing erosion. The only fluids used would be replacement lubricating fluids which would be minor and any spills of which would be subject to the SPCCP.

With these protection measures in place, impacts to surface or groundwater quality would be less than significant.

b) Construction water use is expected to be approximately 35 acre-feet total, and operations use would be up to 7,300 gallons per year. Both construction and operation would likely use water drawn from the CVGB because there are no other known aquifers in the area. Water for construction would be obtained from a local water purveyor and operations water would be provided from an existing on-site well. The amount of water drawn out for construction is very minor (about 0.03%) compared to the overall annual deficit of 137,000 acre-feet per year and would be a one-time use. Water used for operations (approximately 1 acre-foot/year) would be ongoing during the life of the project and would be consistent with the amount of water currently in use for operations. Therefore, the Project would have a less than significant impact.

c) Construction activities, including excavation and grading for access roads, construction yards, tower pads, foundations, and installation of towers, would not substantially alter the existing drainage pattern of the site. There are no streams or rivers on the site and drainages would be avoided to the maximum extent feasible except for access road crossings. The Project would remove 159 turbines and install 7 turbines. The engineering of the project would incorporate the existing drainage pattern of the site and any impacts to it would be less than significant.

d) Construction activities include excavation and grading for access roads, construction yards, tower pads, foundations, and installation of towers. These activities could result in soil erosion, and potential siltation

of water depositing into local drainageways. A project-specific SWPPP would be required and would include measures for diverting flow around disturbed areas with temporary and permanent measures such as silt and straw fencing, and areas of temporary disturbance would be revegetated. These measures are put in place to prevent erosion and siltation of water. Therefore, the Project would have a less than significant impact.

e) The Project would not increase the rate or amount of surface runoff. The overall amount of ground disturbance would be reduced from what is currently on the Project site, so there would be more infiltration, and less runoff. The Project is not in a county designated flood zone. The runoff that does exist now is not enough to result in flooding on the Project site where turbines or facilities are located, due to the topography of the area. There would not be an increased risk of flooding off-site due to the project, because of the arid climate and because none of the drainageways on the site carry sufficient water to generate runoff except during infrequent rains. Therefore, the Project would have a less than significant impact.

f) The Project would not increase the amount of runoff. Since the area is in an arid climate, the local drainageways are normally dry. In the event that a contaminant spills during construction, it would be cleaned up prior to any water being contaminated and conveyed downstream. The site-specific SWPPP would be required and would prevent water contamination from spills and sediment disturbance during construction, therefore preventing any polluted runoff. The SWPPP would include measures for diverting flow around disturbed areas, managing overland flow with temporary and permanent measures such as silt and straw fencing, stabilizing areas of concentrated flow, protecting inlets to culverts and catch basins, and prevention of tracking of sediment by vehicles. Site inspections would be conducted on a regular basis and after rainfall events exceeding 0.5 inches to ensure proper function of the stormwater control measures described in the SWPPP. During operation, there would be no runoff created that would exceed the capacity of the drainage systems, and the Project would not cause any runoff to become polluted. Therefore, the impact would be less than significant.

g) The Project would not impede or redirect flood flows. The project is in an area that has an arid climate, and the project site is not in an area that could flood, since it is elevated from the valley floor and on mountainous terrain. Drainage off the project site would not be impeded or redirected due to the Project. Therefore, the impact would be less than significant.

h) The Project is not in any flood hazard, tsunami, or seiche zones, therefore there is no impact.

i) The Project would not obstruct or conflict with implementation of a water quality control plan or sustainable groundwater management plan. During construction, the developer would follow guidelines set by these plans to protect water resources, by following the SWPPP, and by adhering to the Sustainable Groundwater Management Act (SGMA). The Project area does not have a Sustainable Groundwater Plan, but the CVWMP satisfies the requirements of the SGMA, as described in the SGMA Bridge Document for the Indio Sub-basin. The Bridge Document outlines the sustainable management criteria from the SGMA, explains why the CVWMP is sufficient. The Project would adhere to these management criteria and would not interfere with the goals of sustainable water management, such as overdraft, since the project would only use large amounts of water during construction. Therefore, there would be no impact.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Land Use/Planning

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
24. Land Use				
a) 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?	☐	☐	☐	☒
b) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	☐	☐	☐	☒

Source(s): Riverside County General Plan Land Use Element, Riverside County Western Coachella Valley Area Plan, GIS database, Project Application Materials, National Trails System Act Legislation, DRECP LUPA

Findings of Fact: There will be no impacts.

a-b) All activities associated with the Project would occur within the existing site of the Alta Mesa Wind Project, with the exception of improvements to the main access road and construction yard on the Mesa Wind site (see Figure 2b). There would be no changes to established land uses on the existing site or to areas surrounding the Project. The Project is undergoing environmental review by the County including review of all the appropriate plans to ensure it is consistent with their requirements. The Project would be consistent with the County's planning and zoning designation of Open Space Rural and Open Space Recreation.

Under the existing condition, the Project site operates as a commercial wind energy facility and is designated Open Space Rural (OS-RUR) in the Western Coachella Valley Area Plan, and would continue to operate as such upon implementation of the Project. The project proposes removal with decommissioning of 159 existing wind turbines and installation of 7 new wind turbines up to 499 feet in height. The subject land was previously approved under Commercial WECS Permit No. 71R9 which has a permit life to which is now proposed to be replaced by WCS 71R10. In addition, the Project site is surrounded by operational wind energy development to the east and west. Thus, assuming that the County finds the Project to be consistent with the present and planned land use of the Project area, it is expected that the Project would continue to be consistent with Project area's land use once repowering activities have been completed. Impacts would be less than significant.

The project is not located within a City Sphere. A community outreach brochure was distributed in January 2020 regarding project facts and an open house was held on February 12, 2020.

The Project will not divide or disrupt the physical arrangement of an established community. The Project site an existing wind energy project, and the areas around the Project site consist of vacant desert land or existing wind farms. The Project site is approximately 4,500 feet away from the nearest residential site, in the unincorporated community of Bonnie Bell. The Project would not introduce any new infrastructure that could create a barrier across an existing community, due to the distance to any community and the non-linear nature of the Project. No impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Mineral Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
25. Mineral Resources				
a) Result in the loss of availability of a known mineral resource that would be of value to the region or 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?	☐	☐	☐	☒
c) Potentially expose people or property to hazards from proposed, existing, or abandoned quarries or mines?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure OS-6, "Mineral Resources Area", Multipurpose Open Space Element, and Land Use Element.

Findings of Fact: There will be no impacts

a-c) The Project is located in a California Geological Survey designated Mineral Resource Zone (MRZ) identified as MRZ-3, which are areas containing known or inferred mineral occurrences of undetermined mineral resource significance. The Project would not interfere with any active mining operations and would consist of repowering an existing wind energy project. The potential for mineral development in the future after the use of the site for a wind project will remain the same. The Project would not constitute a substantial impact on regionally or locally important mineral resources. Therefore, no loss in availability of known mineral resources due to the Project would occur.

There are no proposed, active, or abandoned mining operations on the Project site. There are no delineated mineral resource recovery sites identified in the Riverside County General Plan or the Western Coachella Valley Area Plan (County of Riverside, 2019). Therefore, there would be no impact related to loss of availability of a locally important mineral resource recovery site. Additionally, no potential exists to expose people or property to hazards from proposed, existing, or abandoned quarries or mines.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Noise

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
26. Airport Noise				
a) For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure S-20, "Airport Locations," County of Riverside Airport Facilities Map

Findings of Fact: There will be no impacts.

a-b) The Project is not located within the vicinity of a private airstrip or an airport land use plan. The closest airport is over 10 miles away. The Project would not expose people residing or working the in the project area to excessive noise levels during construction or operation. Therefore, there would be no impact.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
27. Noise Effects by the Project				
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, noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐

Source(s): Riverside County General Plan, Table N-1 ("Land Use Compatibility for Community Noise Exposure"), Project Application Materials

Findings of Fact: There will be less than significant impacts.

a) Construction of the Project would create short-term and temporary construction noise levels that could be heard by nearby residents. Construction includes the removal of 159 existing legacy turbines, and installing 7 new WTGs, along with the electrical collection system, and modifying access roads. The installation of new WTGs would temporarily increase noise in the vicinity of the site and transportation corridors due to the use of heavy-duty construction equipment, haul trucks, and other vehicles.

The construction of new WTGs would be accomplished within a period of 12 months. During this time, noise from construction would be limited to occur during the day, when noise is tolerated better than at night due to the masking effect of background noise. During construction, the equipment used will vary depending on the work to be accomplished, and due to the nature of the construction, the equipment use, and associated noise, would be intermittent. Types of equipment to be used would include graders, dump trucks, compactors, excavators, drill rigs, concrete trucks, and cranes. The construction equipment can generate short-term maximum noise levels of approximately 89 dBA at a distance of 50 feet when the

equipment is under maximum load. With the time-varying usage of equipment, construction activities would likely generate daytime noise levels between 80 and 90 dBA Leq. These levels would attenuate over distance, so that construction noise levels would be less than 54 dBA at the nearest residence to the site. Lower noise levels would occur for locations shielded by terrain.

For locations within 50 feet of the access road, about 10 trucks per hour would cause about 61 dBA Leq and 56 dBA Ldn. Typical truck traffic volumes related to the Project would be an average of less than 220 trucks per week. Worker commute traffic and medium-duty truck deliveries would cause less noise than the heavy truck traffic because each light duty vehicle pass by emits about one-tenth of the sound of a heavy truck.

The daytime construction noise would be at least 4,500 feet from inhabited dwellings (see Figure 2a), and accordingly, construction activity and traffic would be exempt from limits in the County Noise Ordinance No. 847. Daytime noise levels would increase as a result of construction-related on-road traffic to 61 dBA for the nearest residences and locations within 50 feet of access roads. At distances greater than 100 feet, the resulting noise level would diminish so that it would be within the Riverside County General Plan Noise Element's Normally acceptable range (under 60 dBA Ldn) for low-density residential uses greater than 100 feet from roads. Depending on local existing daytime conditions along access roads, there would be a perceptible and noticeable increase in traffic noise levels (over a 3 dBA increase) due to haul truck trips during approximately 12 months of construction. Although this noise would be noticeable near the traffic, this traffic noise would be exempt under the Noise Ordinance, and construction traffic noise levels would be considered normally acceptable by the Noise Element of the County General Plan. Further, this would be temporary and would not result in a significant permanent ambient noise-level increase once the Project is operational. Therefore, this would be a less than significant impact and no mitigation is required.

During operation of the Project, wind turbines contribute to noise in two categories: mechanical and aerodynamic. There are also different types of noise produced by operation and maintenance, which include transformer and switchgear noise from step-up transformers and existing substations, corona noise from existing transmission lines. During maintenance, noise sources include vehicular traffic noise, including commuter and visitor and material delivery; and noise from the operation and maintenance (O&M) building.

Mechanical wind turbine noise is associated with the rotation of mechanical and electrical components. This type of noise on WTGs is primarily generated by the gearbox and related parts, and tends to be tonal in nature, although a broadband component exists. On modern turbines, this type of noise is substantially less of a factor, since they have been designed to minimize noise. The dominant noise component for the Project's turbines is aerodynamic noise. Aerodynamic noise has a broadband character which originates from the flow of air over and past the blades; therefore, the noise generally increases with tip speed, and is usually described as a "swishing" or "whooshing" sound.

According to the Applicant, the Noise generation characteristics at rated power output are 106.1-109.5 dBA. These levels could be revised as specific turbine generator models are chosen, but they represent the maximum potential source level, at the wind speed that causes the highest sound levels (10 meters per second at the hub). At high wind speeds, the noise from the wind itself tends to mask the increasing turbine noise.

To determine the potential noise impacts at nearby residences and other noise sensitive areas from the wind turbines, propagation of the source sound levels would occur over the surrounding terrain and distances. Considering geometric spreading only, each turbine would cause a sound pressure level of 75 dBA at a distance of 50 meters (164 feet), which is a level that would constitute a severe impact. Spacing

between the turbines would be determined closer to construction but would generally be approximately 150 meters (492 feet) or more. The noise level caused by each turbine would be 65 dBA at 150 meters apart. The new WTGs would be no closer than 4,500 feet from the nearest residences in the community of Bonnie Bell. Here, the equivalent sound pressure from each turbine would be approximately 46 dBA, or 53 dBA Ldn on a day-night basis, when the wind is blowing from the turbine tower toward the receptor. This noise level depends on the ultimate arrangement of wind turbines and the shielding that the terrain causes sound waves to redirect away from the receptor. The resultant combined noise levels would not increase or decrease by more than 10 dBA.

Besides distance and terrain, there are other factors that affect noise levels at nearby sensitive areas. Atmospheric conditions, including temperature inversions, can refract or bend, sound downward. Temperature inversions happen on calm nights and are characterized by temperature of the air increasing with height due to radiative cooling of the surface. Temperature inversions that could affect noise only happen with a stable atmosphere with low wind speeds, or below the cut in speed for operation of the turbine, therefore, the increased noise propagation associated with temperature inversion would be minimal. The exception would be in sheltered valleys with relatively low ambient noise levels. In general, the effects of wind speed on noise propagation would generally dominate over those of temperature gradient. Wind-generated background noise, such as the noise caused by wind interacting with vegetation and structures would also mask the wind turbine noise above wind speeds of 8 meters per second.

Along with the WTGs, there would be noise generated from the substation and transmission line, as well as noise generated by maintenance activities. There are two sources of noise associated with substations, transformer noise and switchgear noise. A transformer produces a constant low-frequency humming noise that is generally uniform in all directions and continuous. Switchgear noise is impulsive in nature, loud, and of very short duration, as it comes from the operation of circuit breakers used to break high-voltage connections. Noise from regular maintenance activities would include periodic site visits which would involve light or medium duty vehicle traffic with relatively low noise levels. Infrequent but noisy activities would be anticipated for road maintenance work with heavy equipment, as well as occasional repairs to wind turbines or auxiliary equipment. The anticipated noise levels for these activities would be well below those caused by construction activities and would not be substantially greater than the existing condition.

In conclusion, since the receptors would be no closer than 4,500 feet from the nearest WTG, the noise from each WTG would naturally attenuate with distance to a level of 46 dBA at the nearest residences, or 53 dBA Ldn on a day-night basis. This would not exceed the 55 dBA standard set by the County Ordinance No. 348 for impacts caused by WECS at habitable dwellings. For locations near the site boundary, such as the PCT, the noise levels would not exceed 65 dBA at 150 meters (500 feet) from any WTG. All offsite locations that are shielded by terrain would experience lower noise levels than unshielded areas. The new WTGs and related maintenance activities would result in a permanent increase in ambient noise levels; however, the resulting increase in noise levels would not be substantial since the noise levels remain compatible with the affected land uses in the project vicinity. Therefore, this impact would be less than significant, and no mitigation is required.

b) Construction of the Project would use different types of equipment that may cause minimal amounts of groundborne vibration or noise. Types of activities that could cause groundborne vibrations are traffic of medium and heavy-duty vehicles driving over uneven surfaces, and drilling equipment. These vibrations may be felt in the immediate vicinity of construction activities and are temporarily bothersome within 50 feet, depending on the source. No Project activity during construction, or equipment or facilities during operation are likely to create substantial and consistent vibration that could cause damage or annoyance. Therefore, this would be a less than significant impact, and no mitigation is required.

The project shall comply with conditions of approval on file including AND Planning.16-Operational Noise.

The Project would not cause groundborne vibration or groundborne noise levels during operation. Vibrations from wind turbines can lead to ground vibrations and these can be measured with sensitive vibration sensors. In several studies WTG vibrations have been measured at large distances, but this was because these vibrations could affect the performance of seismic stations that detect nuclear tests. These vibrations are too weak to be detected or to affect humans, even for people living close to wind turbines (van Kamp and van den Berg, 2017). Further studies have measured the vibrations at the foot of turbines and at nearby residences and even at the foot of the turbine, vibrations were very low; at the house, not only were vibrations low but those measured did not correspond with the output of the wind turbine (Meunier, 2013). Therefore, there would be no impact.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Paleontological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
28. Paleontological Resources				
a) Directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature?	☐	☒	☐	☐

Source(s): Riverside County General Plan Figure OS-8, "Paleontological Sensitivity," Paleontological Resource Report (PDP 01667)

Findings of Fact: Impacts will be less than significant with the incorporated mitigation

a) To determine if the Project would potentially impact paleontological resources, Aspen conducted a geology map review, a literature review, and requested the Western Science Center (WSC) in Hemet to conduct a paleontological record search for the adjacent Mesa Wind project, which included the current Project area. Aspen also conducted a pedestrian survey of the current project area for this analysis.

A review of the geology of the area concluded that the Project lies in a curious geologic position. The San Gorgonio pass is the major geologic divide between the igneous batholithic Peninsular Ranges and the Transverse Ranges, which is a massive fault block composed of diverse forms of rock. The entirety of the Project footprint is mapped as Qcf: alluvial fanglomerate, light gray, weakly indurated, crudely bedded unconsolidated boulders, cobbles, and pebbles of detritus; mostly quartz diorite derived from the San Jacinto Mountains.

The WSC replied on March 3, 2019 with the paleontological record search results, which indicated they have no records of fossil localities within a one-mile radius of the Mesa Wind project area, including the current Project footprint, but do note fossil localities from similarly mapped old alluvial fan deposits within the region.

Aspen conducted a pedestrian survey of the Project area on April 20, 2020. A paleosol (technically a relict soil because it is not buried) has formed in the uppermost layers of the alluvial fan, indicating an extended period of stasis. Pedogenic calcium carbonate (caliche) was found in partings between the sediment peds in some areas. The presence of caliche in these partings indicates a date of over 10,000 years, given the

known rate of accumulation in nearby parts of the desert. The paleosol contains large quantities of dark red-brown silt mixed with the coarser alluvium, often containing large clasts. The oxidized silt may attain a depth of at least 10 feet.

No rhizoliths or other paleontological resources were noted in exposures of the paleosol within the Project area. However, a short distance west of the Project area, the same paleosol can be seen at the eroding edge of the alluvial fan surface, and rhizoliths do occur there. The coarseness of the alluvium in this area makes it unlikely that any organisms but the largest mammals could leave any trace within it. The paleontological potential of the Cabezon Fanglomerate in this area is rated as low potential. Regarding the paleosol developed at the exposed surface of the fan within the Project area, it is conceivable that small fossorial vertebrate organisms could have utilized the soil as habitat. However, no indications of such remains were detected during the survey, although vertebrate microfauna is usually detected through screening bulk sediment samples. Sampling and screening the paleosol were beyond the scope of the survey. The paleontological potential of the paleosol within the Project area is rated as unknown at this time.

The record search, literature review, and the survey did not indicate the presence of paleontological resources within the Project area. However, because rhizoliths were observed a short distance from the Project area within the same paleosol, it is possible that vertebrate fossils could be located subsurface within the Project area. Previously unknown buried paleontological resources could be uncovered, damaged, or destroyed during construction ground-disturbing activity, which would be considered a potentially significant impact. Implementation of mitigation measure PAL-1 would reduce potential impacts to unknown paleontological resources to a less than significant level.

Mitigation:

PAL-1 **Sampling and Worker Environmental Awareness Program (WEAP).** A 600 pound sample of the paleosol shall be tested (screened) for microvertebrate fossils. If none are found, paleontological resources monitoring is not required. If microvertebrate fossils are located, then monitoring would be warranted, and a Paleontological Resources Impact Mitigation Program (PRIMP) should describe procedures for unexpected discovery protocols, monitoring, sediment sampling and processing, identification, reporting and curation of fossils found on the Project, as well as radiocarbon dating of pedogenic carbonate from the Project footprint. If microvertebrate fossils are not located during pre-construction testing, then the PRIMP will consist only of a WEAP and an unexpected discovery of fossils plan.

Monitoring: All workers would receive the WEAP and potential monitoring may be required.

Population and Housing

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
29. Housing				
a) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?	☐	☐	☐	☒
c) 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)?	☐	☐	☐	☒

Source(s): Project Application Materials, GIS database, Riverside County General Plan Housing Element, US Census Bureau ACS 5-Year Estimates Data Profile.

Findings of Fact: There will be no impacts

a-c) The purposed of the Project is to repower an existing wind energy project. This would not require the permanent removal or displacement of housing or persons that would warrant replacement housing elsewhere. The Project would not induce substantial unplanned population growth in the area directly or indirectly. The Project would not create a demand for additional housing, either due to displacement, or housing affordable to households earning 80% or less of the County's median income. No new housing or businesses, or extension of roads or other infrastructure are proposed as part of the Project. There would be no increase in permanent positions to operate the Project. During construction, some workers would reside in the Project area temporarily, and relocate after the Project construction is completed. Most construction workers are expected to commute to the Project site from surrounding communities. Therefore, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
30. Fire Services	☐	☐	☒	☐

Source(s): Riverside County General Plan Safety Element, Rengel et al. Computational Dynamics Inside a Wind Turbine, Uadiale et al. Overview of Problems and Solutions in Fire Protection Engineering of Wind Turbines.

Findings of Fact: Impacts will be less than significant

The Project site, main access road and construction yard are located within State Responsibility and Federal Responsibility Areas, respectively, mapped as Moderate Fire Hazard Severity Zones. Areas to the north of the Project, which are Federal Responsibility Area, are designated with "Very High" fire hazard

potential. Construction and routine maintenance of the Project is not expected to significantly increase the risk of fire. During construction, fires could be caused by a variety of factors, including vehicle exhausts, sparks associated with grading activities, welding activities, parking on dry vegetation, and the overall temporary increase in human activity. All construction equipment used for the Project is required to have fire suppression equipment on board or available at the work site. The site is also required to have an adequate supply of water with all-weather access for fire-fighting equipment and emergency vehicles.

Although occurrence is low, there is some potential for fire inside a WTG. Malfunctions leading to fires in modern WTGs are extremely low. (Bengel et al., 2017; Uadiale, 2014). The Project would be equipped with an automatic control system that is capable of monitoring all operational parameters, including stopping and starting each WTG. In the event of a fire, excess vibration or temperature, the WTG would be halted immediately. An alarm would immediately notify the on-call operators who would then take appropriate emergency measures. In the event of a fire in the hub of a WTG, there is limited availability of fire suppression crews to effectively fight fires that occur hundreds of feet above the ground. The high-wind conditions that are characteristic of the area make this a risky situation for both WTG malfunction and the spread of a wildfire due to embers falling to the ground from the WTG. These wind-blown embers could potentially travel outside the WTG pad and ignite surrounding vegetation.

Public concern related to fire from wind energy facilities are also associated with the potential for tower collapse or rotor failure and blade throw (separation of the blade from the rotor). The likelihood of a tower failure or collapse is very low and uncommon. Tower failure or collapse can occur as a result of static stress, material fatigue, seismic activity, or ground settling. Excess speed, material fatigue, excessive stress, or vibration can cause a potential rotor blade crack or dislocation from the turbine tower. Blade failures may occur due to extremely high winds and excess rotor speed, so commercial wind turbines are equipped with safety and engineering features to prevent excess rotor speed. Routine inspections and maintenance of the Project's WTGs would greatly reduce the risk of mechanical failure along with implementation of project design features such as a Construction Fire Prevention Plan and an Operational Fire Safety Plan. These plans will assist in the prevention of fire incidents and ensure an appropriate response.

Emergency response via the fire department could be required at the Project site in the event of an accident during construction or maintenance. The likelihood of an accident requiring such a response is unknown and expected to not be significant, because construction and maintenance activities associated with the Project are short term and temporary.

The Project will not induce an increase in population that would require additional fire protection. Additionally, compliance is required with conditions of approval on file including AND Fire. Therefore, the Project would have less than significant impacts.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
31. Sheriff Services	☐	☐	☒	☐

Source(s): Riverside County General Plan

Findings of Fact: Impacts will be less than significant

The presence of workers and equipment associated with construction may attract vandals or other security risks to the area, which would increase demand on law enforcement services. However, the likelihood of requiring a response is unknown, and not expected to be significant due to the temporary and short-term nature of construction and maintenance activities. As stated above, the Project would not induce population growth so there would be no need for an increase in service. On the Project site, there would be adequate security measures in place, such as locked access gates and potential security guards. These measures are to minimize the amount of service calls from this type of land use, although this type of land use is not typically a cause of high numbers of service calls. Therefore, the Project would have a less than significant impact.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
32. Schools	☐	☐	☒	☐

Source(s): GIS database

Findings of Fact: There will be no impacts

The Project would have no direct physical impact to schools. During construction, workers are expected to commute to the Project site from surrounding communities. Operations of the Project would not induce an increase in population. Therefore, substantial increases in populations that would adversely affect local school populations are not expected, there would be no need to build additional facilities

The Banning Unified School District provides public education services for the project area. The applicant will be required to pay school fees in accordance with State law due to proposed new commercial development (COA 80.Planning. – School Fees) of 7 new wind turbines. Therefore, impacts are less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
33. Libraries	☐	☐	☐	☒

Source(s): Riverside County General Plan

Findings of Fact: There will be no impacts.

The Project's construction and maintenance activities would not generate a permanent increase in population that would impact public facilities, such as libraries. It is not anticipated that the Project would increase population in a way that would increase the need for libraries. Therefore, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
34. Health Services	☐	☐	☐	☒

Source(s): Riverside County General Plan

Findings of Fact: There will be no impacts

The Project's construction and maintenance activities would not generate a permanent increase in population that would impact public facilities, such as health services. It is not anticipated that the Project would increase population in a way that would increase the need for health service facilities. Therefore, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Recreation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
35. Parks and Recreation				
a) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
b) Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
c) Be located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?	☐	☐	☐	☒

Source(s): GIS database, Ord. No. 460, Section 10.35 (Regulating the Division of Land – Park and Recreation Fees and Dedications), Ord. No. 659 (Establishing Development Impact Fees)

Findings of Fact: There will be no impacts

a-c) The Project does not include any recreational facilities. The Project would not cause an increased use of any recreational facilities or parks. There are no parks within one mile of the Project. The Pacific Crest Trail (PCT) runs north and west of the Project site, and there are federal lands nearby that are used for recreation. Local population would not be increased as there would be no increase in permanent positions to operate the Project. During construction, it is possible that some workers would reside in the Project area temporarily, but most construction workers are expected to commute to the Project site from surrounding communities. The Project would not induce local population growth that would cause an increased use of the PCT, recreation lands, or any parks nearby. The Project would be limited to construction and operation of wind energy facilities, and none of the proposed activities would involve or prompt the construction or expansion of recreational facilities.

The Project site is not within the boundaries of any public agency designated to receive land dedication or fees pursuant to Section 10.35 of Ordinance No. 460. The Project would not result in an increase in population generating a need for recreational services (Section 10.35 Riverside County Ordinance No. 460). Therefore, no impacts associated with park and recreational facilities would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
36. Recreational Trails				
a) Include the construction or expansion of a trail system?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure C-6, Trails and Bikeway System

Findings of Fact: There will be no impacts

a) The Project area is near some Non-County trails as shown in the Riverside County General Plan. This trail system is the Pacific Crest Trail. The Project does not involve the construction or expansion of a trails system. The Project would also not prompt population growth that would lead to a trail system being expanded or constructed. Therefore, there would be no impact.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Transportation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
37. Transportation				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☒	☐	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?)	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☒	☐
d) Cause an effect upon, or a need for new or altered maintenance of roads?	☐	☒	☐	☐
e) Cause an effect upon circulation during the project's construction?	☐	☒	☐	☐
f) Result in inadequate emergency access or access to nearby uses?	☐	☒	☐	☐

Source(s): Riverside County General Plan, Project Application Materials, Riverside County Regional Transportation Plan, Congestion Management Appendix.

Findings of Fact: Impacts will be less than significant with the incorporated mitigation

a) During the Project's construction, there would be workers travelling to/from the site, as well as deliveries of equipment and materials generating temporary vehicle trips to the area. The performance of local roadways and the I-10 may be slightly reduced due to the commuter and delivery trips. It is estimated that there would be a maximum addition of 170 daily commute trips (average of 150 daily commute trips during construction) and approximately 30 daily truck deliveries during construction. However, given the existing daily traffic on I-10, (over 96,000 vehicles), an additional 200 vehicles would not have an effect. Local roadways would experience a greater effect, but the impact would be temporary, and the Community of Whitewater would be given advance notice of the construction schedule.

Consistent with MM-TRA-1, the Applicant will prepare a construction management plan, which would include measures designed to reduce the impact of temporary construction traffic, such as advanced notice to local departments, residents, and businesses, and use of signage before and during construction to ensure roads are accessible.

Any oversized trucks would require permits through Caltrans and the County and would follow all safety requirements such as flaggers and flashing lights. The Project is located in a rural area, and not within close proximity to office uses, employment venters, or existing or future residential sites. Therefore, the opportunities for alternative transportation in the area are limited and would not impact an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including bicycles, public transportation, and pedestrian facilities.

Operation and maintenance of the Project is expected to generate minimal daily traffic volumes, would be similar to the existing traffic for the Project, and would not require any temporary disruptions to travel lanes. Due to the limited nature of construction and maintenance activities, less than significant impacts to an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system would occur.

Proof of legal access shall be required prior to building permit issuance as outlined under COA 80.Trans.1-Evidence Legal Access. Additionally, the project does not conflict with any County policy regarding mass transit.

Transportation Uniform Mitigation Fees (TUMF) mitigation fees shall be required (COA 80.Trans.2-TUMF) prior to any future building permits.

b) As discussed in CEQA Guidelines Section 15064.3(b.3), a qualitative analysis of construction traffic vehicle miles travelled (VMT) may be appropriate. The Project would result in temporary traffic trips during construction. The majority of truck trips associated with materials and equipment deliveries would likely come from within the Palm Springs and/or Riverside–San Bernardino area because they are readily available in the region and would likely be more cost efficient compared with obtaining such materials and equipment from greater distances. Some materials trips would likely originate from the Ports of Long Beach and Los Angeles or potentially from the other states due to the specialized nature of the WTGs and the limited suppliers. Many temporary workers needed for construction of the Project would reside within a 60- to 90-minute drive time of the Project area. This assumption is based on observations regarding worker commute habits during construction monitoring efforts for other renewable energy and transmission projects in the California desert. However, it is likely that some specialized construction workers would come from outside a reasonable commute area and seek temporary housing proximate to the work area.

While some construction truck trips may require high VMT to access the Project site, such trips would be necessary to deliver specialized equipment and materials that are not available locally. Due to the availability of rail lines from the ports and from out of state to the general project area, VMT may be reduced by equipment and materials being hauled via rail to closer locations before being trucked to work sites. Project-related construction trips are not considered to require a substantial or sustained increase in VMT compared to regional averages for rural construction projects, nor would they result in temporary emission increases that could impact plans and policies related to the reduction of greenhouse gas emissions by reducing VMT.

Upon completion of construction, all construction-related worker commute trips and truck trips would cease. Operation and maintenance of the Project is expected to generate minimal daily traffic volumes, with VMT being identical or similar to that occurring under current operation and maintenance of the existing wind farm. Therefore, while the Project may include temporary construction trips with VMT from outside the immediate Project area, these trips would be temporary and would not affect existing transit uses or corridors and are presumed to cause a less than significant transportation impact.

The existing Metropolitan Water District (MWD) facilities will not be affected during construction or operations.

c) Where feasible, the existing network of permanent access roads would be retained, improved, and reused for the Project. In addition to the existing roads, less than 0.5 miles of new segments of permanent maintenance roads would be constructed to provide access and circulation within the Project boundaries. Access roads would incorporate applicable federal and local standards regarding internal road design and circulation. On-site, the construction of the access and maintenance roads would not increase hazards due to

design features, and steep slopes and sharp turns would be avoided. Access roads would be improved or widened to ensure a sufficient turn radius. Local roads within the Community of Whitewater have been reviewed to ensure their width is appropriate for transport of the oversized WTG equipment and the Applicant would work with the County to get any encroachment permit needed.

d) Because of the large-scale vehicles needed to bring the equipment to the site, the Project could require additional maintenance of roads. Off-site, workers commuting and transportation of equipment would be short term, and not cause a need for new maintenance. Consistent with MM-TRA-1, the Applicant will prepare a construction management plan that will include measures to ensure the public roads are restored to the same or better conditions after completion of the construction. On-site, maintenance of roads is included in the Operations and Maintenance of the Project, such as periodic grading or replacement of gravel to maintain road quality.

e) As stated above, the Project would result in an increase in trips to and from the Project site during construction. This would be approximately 170 daily commute trips, plus an additional 30 trips from delivery trucks. Compared to the circulation in the area currently, about 96,000 vehicles on the I-10, this would be a miniscule addition, and would not cause an effect on the circulation. Mitigation measure MM-TRA-1 ensures that construction does not interfere with circulation.

f) The Project would not alter emergency access onto the Project site. The existing network of permanent access roads would be retained as used for the Project, where feasible. The Project would include an approximately 16-foot-wide permanent access road to provide access to the Project site, and some minor additions of 16-foot-wide permanent maintenance roads, which includes 16-foot wide maintenance road access to each WTG and ancillary equipment. Some roads may be widened to ensure a proper turn radius. These roads would incorporate applicable federal and local standards regarding internal road design and circulation, particularly those provisions relating to emergency vehicle access. MM-TRA-1 ensures that the County Fire Department and Sheriff's Department is notified of closures to roads in advance to prevent issues with emergency access.

Mitigation:

MM-TRA-1 **Construction Management Plan.** Prior to finalization of plans and specifications, a construction management plan (CMP) should be prepared by the Applicant and/or their construction contractor for any construction activities that encroach into the public right-of-way. The CMP shall include measures designed to reduce the impact of temporary construction traffic and any necessary lane or street closure. Such measures may include but are not limited to providing early notification of closures to the County Fire Department and Sherriff's Departments, residents, and nearby businesses; the use of signage before and during construction activities that clearly delineates detour routes around the lane and street closures; and flaggers to direct traffic in the vicinity of the closure. The CMP will also include a description or pictures of the pre-construction conditions of the roadways and ensure that they are restored to the same or better conditions after construction.

Monitoring: The County would review the CMP and ensure the measure is implemented.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
38. Bike Trails				
a) Include the construction or expansion of a bike system or bike lanes?	☐	☐	☐	☒

Source(s): Riverside County General Plan

Findings of Fact: There will be no impacts

The Project is a wind energy repower project in a rural area. There will be no bike lane or bike system constructed or expanded as part of the project or as a result of the project. Therefore, there will be no impact.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Tribal Cultural Resources

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

Source(s): County Archaeologist, AB52 Tribal Consultation,

Findings of Fact: Impacts will be less than significant with the incorporated mitigation

a-b) In compliance with Assembly Bill 52 (AB52), notices regarding this project were mailed to all requesting tribes on August 27, 2020. Consultations were requested by the Soboba Band of Luiseño Indians and the Agua Caliente Band of Cahuilla Indians. The Quechan Tribe had no comments on this project and deferred to the more local Tribes. No response was received from the Twenty-Nine Palms Band of Mission

Indians, Colorado River Indian Tribes (CRIT), Morongo Cultural Heritage Program, Torres Martinez Desert Cahuilla Indians or the San Manuel Band of Mission Indians.

Agua Caliente requested to consult in a letter dated August 27, 2020. Consultation was initiated on September 22, 2020. The cultural report was provided to the tribe on September 22, 2020 and the project conditions of approval were sent to them on September 30, 2020. In a letter dated November 3, 2020, the tribe requested to be contacted to arrange tribal monitoring and consultation was concluded by the tribe.

The Soboba Band requested consultation in a letter dated August 31, 2020. Consultation was initiated during a meeting on September 23, 2020. The cultural report was sent to the tribe on September 22, 2020 and the project conditions of approval were provided to the tribe on September 30, 2020. Consultation was concluded with Soboba via email on October 08, 2020.

Both tribes provided confidential information that identified Tribal Cultural Resources within and in the vicinity of the project. They also expressed concern that the project area is sensitive for cultural resources and there is the possibility that previously unidentified resources might be found during ground disturbing activities. As such, the project has been conditioned for a Tribal Monitor from the consulting Tribe(s) to be present during grading activities. This will ensure that any Tribal Cultural Resources found during construction activities will be handled in a culturally appropriate manner. In addition, conditions of approval that dictate the procedures to be followed should any unanticipated resources or human remains be identified during ground disturbing activities has been placed on this project. With the inclusion of these Conditions of Approval/ Mitigation Measures, impacts to any previously unidentified Tribal Cultural Resources would be mitigated to a level less than significant.

Mitigation:

MM TCR-1 **Tribal Monitoring.** Prior to the issuance of grading permits, the developer/permit applicant shall enter into agreement(s) with the consulting tribe(s) for Native American Monitor(s).

The Native American Monitor(s) shall be on-site during all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, grading and trenching. In conjunction with the Archaeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources.

The developer/permit applicant shall submit a fully executed copy of the agreement(s) to the County Archaeologist to ensure compliance with this condition of approval. Upon verification, the Archaeologist shall clear this condition.

This agreement shall not modify any condition of approval or mitigation measure.

Monitoring: Monitoring will be conducted by participating tribes. Tribal and cultural monitors will ensure implementation of procedures regarding identification of any potential unanticipated resources or human remains.

Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
40. Water				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage systems, whereby the construction or relocation would 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?	☐	☐	☒	☐

Source(s): Project Application Materials,

Findings of Fact: Impacts will be less than significant

a-b) During construction, wastewater generation would be limited to construction workers and would be contained within portable toilet facilities or at approved public facilities, both of which would dispose of wastewater with the local treatment provider. During operation, the Project would not generate substantial volumes of wastewater due to the minimal number of full-time or part-time employees, and it would be disposed of within the existing on-site septic system. Construction and some maintenance/repair activities would require the temporary use of water for dust suppression and possibly equipment wash down, soil compaction and other miscellaneous uses (such as concrete or grout production). Water used for these purposes would be obtained from the well that is currently used on the Project site. However, water used for these purposes would be temporary and not in quantities requiring the construction of new or expanded water supplies. The Project site is located on mountainous terrain that is intersected by small local drainageways, which handle stormwater, and no other stormwater management would be needed. The Proposed Project would not induce population or other facilities that may place increased demands on these utility services. No impacts to such facilities would occur.

There would be sufficient water supplies to serve the Project under any circumstance. There would be no foreseeable future development related to the Project that would increase the amount of water drawn from the source other than what is needed for construction, operation, and maintenance. The well on the site draws from the CVGB, which has a 36,500,000 acre-feet capacity. The Project is estimated to draw 35 acre-feet for construction, and 7,300 gallons per year for operation and maintenance. The CVGB has plenty of water supply for the Project. The Project would not induce population or other facilities that may place increased demands on water supplies. Less than significant impacts would occur.

The southern portion of the project site is bisected by the Colorado River Aqueduct under the jurisdiction of the Metropolitan Water District of Southern California (MWD); however, this area of the project site is well south of the proposed turbine development area

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
41. Sewer				
a) Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects?	☐	☐	☐	☒
b) Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

Source(s): Department of Environmental Health Review

Findings of Fact: Impacts will be less than significant

a-b) Wastewater generation for construction workers would either be contained within portable toilet facilities or at approved public facilities, both of which would dispose of wastewater with the local treatment provider. Construction is expected to be short term, and therefore would not create a substantial amount of wastewater. During operation, wastewater from the minimal number of full time or part time employees would be disposed of within the on-site septic system. The volume of wastewater generated by employees during operation would be minimal and would not impact the capacity of wastewater treatment providers serving the Project area. The Project would result in less than significant impacts.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
42. Solid Waste				
a) 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?	☐	☐	☒	☐
b) Comply with federal, state, and local management and reduction statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan)?	☐	☐	☒	☐

Source(s): Riverside County General Plan, CalRecycle Integrated Waste Management Plan Enforcement, California Public Resources Code, California Solid Waste Reuse and Recycling Access Act of 1991.

Findings of Fact: Impacts will be less than significant

a-b) Waste generated during construction and operation of the Project would be limited and is not expected to be at or exceed a level that could impact daily throughput or overall capacity of any landfill or waste disposal facility. The closest landfill to the Project is Lamb Canyon Landfill, which has a remaining capacity of over 19 million cubic yards. The Project would result in less than significant impacts.

The Project would comply with the Riverside County Source Reduction and Recycling Element. Applicable materials would be resold or refurbished, then recycled if possible, and the rest of the material would be disposed of in the appropriate scrap or waste facilities. Some waste generated during construction and maintenance would be green waste (vegetation) and recycled (plastic and aluminum trash, other metals, etc.). If any of the waste for disposal is identified as hazardous, it would be managed by a certified hazardous waste transporter. This applies to all stages of the Project. Therefore, solid waste generated during decommissioning, construction, and operations and maintenance of the Project would be properly disposed of in a manner that complies with federal, state, and local management. Compliance with conditions of approval on file including COA 80. Waste Resources.1-Waste Recycling Plan and COA 90.Waste Resources.1-Waste Reporting Form and Receipts. The Project would result in less than significant impacts.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Would the project impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects?	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
43. Utilities				
a) Electricity?	☐	☐	☐	☒
b) Natural gas?	☐	☐	☐	☒
c) Communications systems?	☐	☐	☐	☒
d) Street lighting?	☐	☐	☐	☒
e) Maintenance of public facilities, including roads?	☐	☐	☐	☒
f) Other governmental services?	☐	☐	☐	☒

Source(s): Project Application Materials, Western Coachella Valley Area Plan, The Riverside County General plan Safety Element.

Findings of Fact: There will be no impacts

a-f) The Project includes installation of 7 new commercial WTGs. After construction, there would be no increase in the number of employees at the site for operation and maintenance. Therefore, there would be no increase in demand for electricity, natural gas, communications systems, street lighting or other government services. Since there would be no increase in demand, there would be no construction or expansion of such facilities due to the Project.

The Project layout was designed based upon County and third party (SCE) requirements for safety setbacks from utilities, including present and potential future electrical transmission lines, natural gas pipelines, telephone and water lines, roads and other public utilities.

To avoid contact or damage to buried wet and dry utilities, the construction contractor is required to contact "Dig Alert" (Underground Service Alert of Southern California) prior to the issuance of grading permits to ensure that pipelines are properly located. The Project Applicant would also be required to secure all appropriate amendments to rights-of-way or corresponding instruments from the Southern California Gas Company, MWD, SCE, and other utilities. Utility easements of record would be observed and unauthorized disturbance would be prohibited by law. The project shall also comply with conditions of approval such as AND Planning.14-No Connect w/o Final. Therefore, impacts associated with utilities would be less than significant.

The Project would use public roads to access the site and would use access roads within the ROW. The Project would not be required to improve any public roads.

There would be no impacts associated with utilities.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

Wildfire

If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
44. Wildfire Impacts				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☒	☐	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐
e) Expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☒	☐	☐

Source(s): Riverside County General Plan Figure S-11, "Wildfire Susceptibility," and Safety Element, GIS database, Project Application Materials, Rengel et al. Computational Dynamics Inside a Wind Turbine, Uadiale et al. Overview of Problems and Solutions in Fire Protection Engineering of Wind Turbines.

Findings of Fact: Impacts will be less than significant with mitigation

a) The Project would require the use of local roads to transport construction equipment and material. This would require under 2 miles of local roadways and the majority of vehicle and truck transport would be standard sized and would not result in blockages of local roadways. Construction could require closure of roadways during transportation of oversized loads. MM FIRE-1 would provide for fire/emergency services access if roadways blockages occur. All of the local roadways have redundant parallel roads to access the local neighborhood. The local roadways used by the Project are not known to be part of an adopted or designated emergency evacuation route or plan. Operation and maintenance are expected to have no impact since there will be no new full-time employees, and there will be no change from the current scenario. Occasionally, for maintenance activities, there may be a short term, and temporary increase in traffic volume. MM FIRE-2 requires that the Applicant expands the existing Operational Fire Safety Plan for review and approval by the RCFD, prior to operation of the project. Therefore, impacts would be less than significant.

b) The Project is located in a region with high wildfires risk due to the presence of dense, dry fuels, paired with a warm and arid climate. The approach to fire prevention and defense includes both facility design and planned construction and operational activities.

Construction. During construction, fires could be caused by a variety of factors, including vehicle exhaust, sparks associated with grading activities, welding activities, parking on dry vegetation, and the overall temporary increase in human activity. Accidental ignition could result in a fire, which, depending on the location, could spread. The consequences of a such a fire could be severe depending on weather conditions at the time and the ability of on-site firefighting personnel to quickly respond to the fire. If noticed by the equipment operator or other construction personnel, small ignitions can easily be suppressed by on-site equipment and designated fire watch personnel. All construction equipment is required to have fire suppression equipment on board or at the work site to ensure the availability of an adequate onsite supply of water with all-weather access for fire-fighting equipment and emergency vehicles.

MM FIRE-1 would minimize adverse impacts due to fire during construction and require preparation of a Construction Fire Prevention Plan. Adherence to standard construction best management practices and applicable fire requirements identified in the Construction Fire Protection Plan reduces the potential for significant fire hazards.

Given the unpredictable nature of wildfire and wind, and the fact that high winds exist at the Project site, it should be expected that a wildfire within the Project area has the potential to disperse pollutants throughout the area and the West Coachella Valley. However, the Project would not alter wind patterns, the spread of a wildfire through the area, or result in vegetation that could exacerbate pollutant concentrations compared to existing conditions. With implementation of MM FIRE-1, the Project would result in less than significant impacts.

Operations. During operations, fires could be caused by vehicle activity, parking on dry vegetation, and human activity. Since the number of employees and vehicles during operations would not increase, and the number of turbines would reduce from 159 to 7, no increase in fire potential would occur. See Impact (c). below for description of potential failures related to project facilities and associated fire risk. With implementation of MM FIRE-2, the Project would result in less than significant impacts.

c) The Project would construct, operate, maintain, and decommission 7 new WTGs. Although the new WTGs pose a fire risk, it would be reduced compared to the baseline of the 159 legacy turbines. There are risks for fire due to WTGs, power lines, and access roads.

WTGs have a potential for fire starting inside of them, but malfunctions leading to fires inside modern WTGs are very low (Bengel et al., 2017; Uadiale, 2014). The Project would be controlled by an automatic

control system capable of monitoring all operational parameters and starting and stopping each WTG. In the event of a fire, excess vibration, or temperature, the WTG would be stopped immediately. A notice would be sent to on-call operators who would take appropriate emergency measures. In the event of a fire inside a turbine, there are few fire suppression crews that would be able to effectively fight fires that occur hundreds of feet above the ground. A fire in the turbine could release embers, and in a high wind situation, could be blown outside the WTG pad and ignite vegetation in the surrounding area.

As discussed in the hazards section, another concern related to wind energy would be the potential for tower collapse or rotor failure and blade throw (separation of the blade from the rotor), and a potential fire that could result from such an event. Excessive static stress, material fatigue, seismic activity, or ground settling can cause tower failure, collapse, or both. The likelihood of either of these events is very low, and the occurrence is uncommon. A fire occurrence from one of these events is also uncommon. Modern, commercial turbines are equipped with safety and engineering features to prevent excess rotor speed, and routine inspection and maintenance would reduce the risk of WTG mechanical failure that could lead to fire. Additionally, MM FIRE-2 requires the Applicant to renew and expand the existing Operational Fire Safety Plan to minimize potential adverse fire ignition impacts.

Power Lines. Risk of fire for this project is due to high winds or avian collision with overhead collector lines. The Project does not propose to build new transmission lines. Vegetation would be cleared around all overhead power lines in compliance with California Public Utilities Commission requirements. In the event of downed power lines due to severe storms, earthquakes, or accidents, MM-FIRE-2 would be applied.

Access Roads. The cleared and graded main access road and access roads on the Project site could act as firebreaks. The Project is improving access roads and therefore would be allowing increased access to firefighting vehicles and equipment. Maintenance includes periodic grading or replacement of gravel on access roads to maintain road quality for access to the Project site, the WTGs, and through the site.

The maintenance of WTGs, power lines, and access roads will prevent fires and benefit fire response to a wildfire event. Construction and operation of the Project would not directly require new or expanded infrastructure that may exacerbate fire risk.

With implementation of the mitigation measures, less than significant impacts would occur with regard to the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

d) The Riverside County General Plan's Earthquake-Induced Slope Instability Map shows that the Project is in an area that has low to locally moderate susceptibility to seismically induced landslides and rockfalls. The slopes in the area range from less than 15% to over 30%. All WTGs would be placed at least 4,500 feet from the nearest residence and would not be placed directly upslope from any residence. The Project does not include extensive grading, excavation, or new structures that would significantly alter soil stability. Since the site's current use is a wind energy facility, the Project is not considered to expose persons or structures to substantial adverse potential effects from landslides after a wildfire compared to baseline.

The Project area is semi-undisturbed vacant desert land, on mountainous terrain in a warm and arid climate. The site has small, local drainageways, a small portion of which make their way to the Whitewater River directly, or like a larger portion does, through Cottonwood Creek to the west and the San Gorgonio River to the south of the Project. The Project does not propose any changes that would substantially change drainage that could cause flooding or erosion. Therefore, the Project would not increase the risk of flooding after a wildfire compared to existing conditions.

Less than significant impacts would occur.

e) The Project is located in a warm, arid climate with high wildfire risks due to dense, dry fuels. According to the Riverside County General Plan Figure S-11, the Project site is within both a state and federal moderate fire susceptibility zone. Fire prevention and defense includes both facility design and planned construction and operational activities. During construction, fires could be caused by a variety of factors, including vehicle exhaust, parking on dry vegetation, sparks associated with grading or welding activities, and the overall increase in human activity.

Fires could happen as a result of accidental ignition, which depending on the location, could spread. If noticed by the equipment operator or other construction officer, small fires can be suppressed by on-site equipment and designated fire-watch personnel. All construction equipment is required to have fire suppression equipment on board or on site, to ensure the availability of an adequate onsite supply of water with all-weather access for fire-fighting equipment and emergency vehicles.

Consequences of a fire could be severe depending on the weather conditions and the availability of on-site firefighting personnel to quickly respond to the fire.

MM FIRE-1 would minimize adverse effects due to fire during construction and require preparation of a construction fire prevention plan. Adherence to standard construction best management practices and applicable fire requirements identified in the Construction Fire Protection plan reduces the potential for significant fire hazards.

Impacts would be less than significant with mitigation.

Mitigation:

MM-FIRE-1 **Construction Fire Prevention Plan**. Prior to construction, the Applicant (in coordination with their contractors shall prepare a Construction Fire Prevention Plan for review and approval by the Riverside County Fire Department (RCFD) that includes (but not be limited to) the following information and provisions:

- Responsibilities of the Project Applicant, their contractor(s), and RCFD with respect to fire prevention and inspection of work areas.
- On-site personnel in charge of overseeing Fire Plan implementation.
- Construction staff and equipment that can be used for fighting fire.
- Emergency measures for construction curtailment.
- Provisions for fire/emergency services access if roadway blockage occurs due to large loads during construction and operation.
- Cleared, maintained worker parking and construction staging areas shall be designated; no parking or construction activities shall be allowed in non-designated areas.
- Smoking and open fires shall be prohibited at the Project site during construction and operations. A copy of the notification to all contractors regarding prohibiting smoking and burning shall be provided to the RCFD.
- Assurances that all internal combustion construction equipment shall be equipped with appropriate spark arrestors and carry fire extinguishers.
- A fire watch with appropriate firefighting equipment shall be available at the Project site at all times when welding activities are taking place. Spark producing activities (such as

welding and metal cutting) shall not occur when sustained winds exceed limits set forth by the RCFD.

- Appropriate hot work permits/approvals (for activities such as welding and metal cutting) shall be obtained from the jurisdictional fire agency.
- All construction activities shall be curtailed in the event of a fire or when fuel and weather conditions get into the "very high" and "extreme" ranges (Red Flag Warning), as determined by the National Weather Service. Any specific Project-related activities to be allowed during very high or extreme weather conditions would be at the discretion of the RCFD.

MM-FIRE-2 **Renew and Expand the Existing Operational Fire Safety Plan**. Prior to operation of new WTGs, the Project Applicant shall expand the existing Operational Fire Safety Plan for review and approval by the RCFD. The plan shall contain (but not be limited to) the following provisions:

- A vegetation management plan to address vegetation clearance around all WTGs; and plans for regularly scheduled brush clearance of vegetation on and adjacent to all access roads, power lines, and other facilities. All vegetation clearance and fire breaks shall be consistent with federal and State requirements, whichever is most stringent.
- Means for ensuring on-site operational fire water supply (i.e. a functioning well or storage tank) is available prior to operation.
- Procedures for Supervisory Control and Data Acquisition (SCADA) system (or other constant monitoring equipment) providing immediate notifications to emergency fire services.

Monitoring: No monitoring is required

Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
45. 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?	☐	☒	☐	☐

Source(s): Staff Review, Project Application Materials

Findings of Fact: Implementation of the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or 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.

The Project is located within an existing wind farm and would be located on already disturbed land so would not substantially reduce the habitat of a fish or wildlife species. After construction, there would be minimal permanently disturbed lands. Habitat that is impacted would be restored or replaced as required as required by mitigation presented in the Biological Resources section; therefore, wildlife populations would not drop below self-sustaining levels due to habitat loss (and fish populations would not be affected at all). Because vegetation communities would be restored or replaced, the Project would not threaten to eliminate a plant or wildlife community. The Applicant would ensure the Project was consistent with the Coachella Valley MSHCP. Finally, because the Project is located entirely within an existing wind farm, the Project would not reduce the number or restrict the range of rare or endangered plants or wildlife.

Cultural resources surveys have been completed and Native American tribes have been consulted. There are no known TCRs located within the Project area and no known TCRs within one mile of the Project area's boundary. There are no known resources eligible for the CRHR or NRHP within the Project boundary.

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Have impacts which 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, other current projects and probable future projects)?	☐	☐	☐	☐

Source(s): Staff Review, Project Application Materials

Findings of Fact: CEQA requires lead agencies to consider the cumulative impacts of proposed projects under review. A project may result in significant adverse cumulative impacts when its effects are cumulatively considerable; that is, the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects regardless of what agency or person undertakes such other actions (Section 15130(a)(1)).

Under CEQA, there are two acceptable and commonly used methodologies for establishing the cumulative impact setting or scenario: the "list approach" and the "projections approach." The first approach would use a list of past, present, and probable future projects producing related or cumulative impacts. (Section 15130 (b)(1)(A)). The second approach is to use a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. (Section 15130 (b)(1)(B)).

The "list" approach was selected. As used in the analysis of cumulative impacts, the term "cumulative scenario" is used to include the proposed Project and other identified projects whose impacts have the potential to combine with or overlap with those of the Project.

Cumulative Projects. Projects used in the cumulative impact analysis are listed in Table 6, Cumulative Projects. Projects within a 10-mile radius of the Project are considered in the analysis.

Table 6. Cumulative Projects

Project Name	Project Description	Location	Proximity to Project	Status
Mesa Wind Repower Project	The Mesa Wind Repower proposes to construct, operate, and decommission 8 turbines. Prior to construction, 460 existing legacy turbines would be removed under existing permits. This would occur on BLM administered land. This project is being proposed by Brookfield and is under permitting by the BLM (BLM approved October 2020) and CDFW.	South and west of the Alta Mesa Wind Project	<0.1 miles	In development
Painted Hills Wind Energy Repowering Project	Painted Hills is an approximately 600-acre Wind Energy Repower project. The project proposes decommissioning and removing almost 300 existing wind turbines, and installing up to 14 new commercial wind turbines, up to 499 feet tall. The project proposes to install ancillary equipment that includes 3 temporary meteorological towers, 2 permanent meteorological towers and site upgrades. This project has been approved by Riverside County.	Riverside County, east of the unincorporated Whitewater area, and within the San Gorgonio Pass Wind Energy Policy Area.	1.75 miles east	In construction
Coachella Wind Holdings Repower (previously San Jacinto Wind II)	The San Jacinto Wind II Project proposes to decommission and remove approximately 146 existing wind turbines and install 3 new turbines on BLM land with ancillary equipment. This would occur on approximately 225 acres of land. This project proposes leaving 45 of the existing wind turbines operating.	Riverside County, South of Interstate 10 and State Route 62 Junction, 4 miles north of Downtown Palm Springs.	7.25 miles southeast	Approved, pre-construction
Multi-Tenant Wireless Broadband Communications Site	This project is one, three-legged, 196-foot-tall freestanding, self-support lattice communication tower on 2.2 acres of land administered by the BLM	Riverside County, in Morongo Canyon at Highway 62	6.5 miles northeast	Under environmental review
Interstate10 Bypass – Banning to Cabazon	This project would be a road between the City of Banning and the unincorporated community of Cabazon. It is currently under review with a final environmental document expected in early 2021. After the document is released, the design and ROW phases would begin.	Riverside County, between the City of Banning and unincorporated community of Cabazon.	6 miles west	Under environmental review
Whitewater River Groundwater Replenishment Facility ROW	This is a request to the BLM by the CVWD to operate and maintain their existing facility on 690 acres of public lands managed by the BLM. No new construction is required.	South of Highway 62 and north of Highway 111	5 miles southeast	Under environmental review

Table 6. Cumulative Projects

Project Name	Project Description	Location	Proximity to Project	Status
West of Devers Upgrade Project	Southern California Edison proposed to upgrade and adjust 48 miles of existing 220 kilovolt (kV) transmission lines between North Palm Springs and San Bernardino, in Riverside and San Bernardino Counties within a utility corridor occupied by existing transmission lines.	South of the Alta Mesa Project	0.1 miles south of the Project boundary	Under construction
Riverside County flood berm and road work – Whitewater Canyon	This project includes roadwork including a flood berm due to the road being washed out in 2019. The total project disturbance is 38 acres for roadwork and berm. Project is north of Bonnie Bell.	Riverside County, Whitewater Canyon Road at Horn Corner	1.5 miles north	Under construction
Private residential and commercial development in Palm Springs, Banning and at the Morongo Casino	Private residential and commercial development projects are proposed or under construction within the 10-mile radius. Example projects include the 3,385 residential unit Rancho San Gorgonio Project partially within the 10-mile radius in Banning, the Morongo Casino Expansion, and numerous residential projects in the City of Palm Springs.	Riverside County, within 10 miles of Project boundary	Between 7 and 10 miles from the project	Planning/Under environmental review/Under construction

Source: BLM, Mesa Wind Repower Project Environmental Assessment 2020.

Cumulative Analysis. This section discusses whether the Project would result in cumulatively considerable significant short-term or long-term environmental impacts when combined with other past, present, and reasonably foreseeable future projects in the area. Short-term impacts are generally associated with construction of the Project, while long-term impacts result from ongoing O&M of the Project.

The Project would have no impact to Agriculture and Forestry, Energy, Land Use and Planning, Mineral Resources, Population and Housing, and Recreation so would not contribute to cumulative impacts on these resources. For Greenhouse Gases, Public Services, Transportation, and Utilities and Service Systems, the Project would result in less than significant effects and would not contribute to a cumulatively considerable impact. The vehicle use considered in the Transportation section includes the vehicles that would be used for the adjacent Mesa Project and no additional cumulative projects would use the Haugen-Lehmann exit or local roadways.

Aesthetics. The geographic scope for aesthetics would be where the Alta Mesa Project is in the same field of view as other built facilities or impacted landscapes. This analysis will focus on one other project, the Mesa Repower Project because it is co-located with the Alta Mesa WTGs on adjacent ridges and it would be difficult for viewing populations to determine where one project ends and the other begins.

Because the Alta Mesa and Mesa project construction would occur at the same time or consecutively, construction activities, equipment and night lighting would combine and lead to the continued presence of construction equipment on roads and in the landscape in the I-10 corridor. The total construction timeframe for both projects would be the same as for the Alta Mesa Project, up to 12 months. Project

construction would be over 3,600 feet from the nearest residence and would be of short duration from any one viewpoint, so would not combine to result in a cumulatively significant impact.

The Alta Mesa and Mesa projects would appear identical in terms of structural design and scale. As a result, the two projects would be perceived as a single development. This would create a combined effect on visual resources. Both Alta Mesa and Mesa are repowering existing projects and removing 619 WTGs and putting up a combined 15 WTGs. While the new WTGs would be larger than the existing ones, they would not result in a cumulatively significant impact compared to the baseline and the new wind turbines would generally display a similar massing and scale as other modern wind turbine development in the Project area (see Figure 10a).

Air Quality. The geographic scope of the cumulative effects analysis for air quality is a 6-mile radius because this radius includes projects that are in close enough proximity to combine to result in localized air impacts. Cumulative impacts could occur during the 12 months of construction. Air emissions during operations would remain the same as ongoing operations. The Alta Mesa Project air impacts would primarily combine with construction of the Mesa Project because it is adjacent to the Alta Mesa Project and would be under construction at the same time. Because the construction of these projects is combined, the emissions presented in Tables 3 and 4 are for the total emissions for both repower projects (Mesa and Alta Mesa), that is to say, the emissions of Mesa were treated as Project emissions and not cumulative emissions. Other projects within the 6-mile radius include the Coachella Wind Holdings Repower, Painted Hills Wind Repower, West of Devers Upgrade, and flood berm and roadwork are already approved or under construction, so would be unlikely to overlap with the entirety of the Mesa and Alta Mesa construction. If portions of the cumulative projects construction, or if other projects are under construction concurrently and within a 6-mile radius, such as private development on the outskirts of Palm Springs, the combined effects of construction emissions including fugitive dust and equipment exhaust emissions, could be worsened. However, all projects under construction would need to comply with the applicable rules and regulations established by the SCAQMD to avoid visible plumes and implement additional measures where needed to control dust emissions. Therefore, impacts would not be cumulatively considerable.

Biological Resources. The cumulative analysis for Biological Resources uses the CVMSHCP coverage area as the geographic scope. The CVMSHCP boundaries include the Project and the species affected by the Project would be the same as those considered under the CVMSHCP. Under the CVMSHCP, private land use impacts to covered special status plant species and animal habitat throughout the Coachella Valley are offset through habitat acquisition and management to minimize or avoid the otherwise cumulative impacts of the development. For most biological resources within the CVMSHCP, the cumulative impacts are not substantial. The Project would offset habitat impacts through compensation and other measures, consistent with the MSHCP, and therefore would not contribute considerably to any existing cumulative impacts.

Although bird and bat mortality due to wind repowers has not been studied in the San Gorgonio Pass area, there have been studies in the Altamont Pass area, which document effects of first generation turbines. There are anecdotal reports of bird mortalities (including golden eagle) at the existing site and at several other sites in the area. As a result, the extent of golden eagle or other bird and bat mortality from wind turbine collisions in the San Gorgonio Pass has not been quantified and cannot be evaluated in terms of the overall importance to bird and bat populations. The Project would contribute to a new baseline and operational bird and bat mortality data, as part of the Bird and Bat Conservation Strategy. Additionally, the three other repower projects identified as cumulative projects (Mesa, Painted Hills, and Coachella Wind Holdings) are expected to contribute to an understanding of regional bird and bat mortality risks of

wind repower projects. Both the Coachella Wind Holdings and the Painted Hills repower project include requirements for bird and bat mortality monitoring. The Mesa Wind Repower is expected to include a similar requirement, which combined with the other projects in the area, will contribute to improving the understanding of bird and bat mortality in the area. The Bird and Bat Conservation Strategy will include an adaptive management strategy that will help reduce the cumulative contribution of the Project if any effects are found to less than cumulatively considerable.

Cultural. Of the cultural resources are located on the Alta Mesa Project site, none of which are eligible for the CRHR or NRHP, and no known unique archeological resources are present. The Project has measures in place to minimize impacts to resources that may be discovered during construction, and the adjacent Mesa Project is expected to have the same or similar guidelines. Because of this, cumulative impacts to cultural resources would not combine to be cumulatively significant.

Geology and Soils. Impacts to geology and soils are localized in nature and are unlikely to combine with the impacts of other projects unless immediately adjacent to the locations. Because the Mesa Wind Repower is adjacent to the Project and undergoing construction at the same time, it could combine with the Alta Mesa Project to result in cumulative impacts. Both the Alta Mesa and Mesa Projects would be required to use a SWPPP and Best Management Practices, which would reduce the projects contribution to any cumulative erosion. Additionally, both projects would be required to comply with all engineering studies to address the geology of the site reducing the effects of any potential ground shaking on the projects. Because both the Mesa and Alta Mesa are over 3,600 feet from the nearest sensitive receptor, they would not combine to result in a cumulatively significant impact due to geology and soils.

No known paleontological resources have been identified in the Project area or within one mile of the Project area. The Mesa Project and the Alta Mesa Project have the potential to destroy buried paleontological resources, given that this area has a PFYC of 3; however, the characteristics of the site such as slope and soil, are generally not good conditions for fossil preservation or yield. The Mesa Project would have measures in place to protect any paleontological discoveries and minimize impacts as noted in the Environmental Assessment, and the Alta Mesa Project also has similar guidelines. Therefore, there would be no cumulatively significant impact.

Hazards and Hazardous Materials. Impacts due to hazards and hazardous materials are localized in nature and unlikely to combine with impacts of other projects unless in the immediate vicinity. The Project and Mesa Project would involve the storage, use, disposal, and transportation of hazardous materials to varying degrees during construction and operation. Impacts from these activities would be less than significant because the storage, use, disposal, and transportation of hazardous materials are extensively regulated by various federal, State, and local laws, regulations, and policies. It is foreseeable that the Project and other cumulative projects would implement and comply with these existing hazardous materials laws, regulations, and policies. Therefore, the related projects impacts would not be considered cumulatively significant.

Fire. Cumulative risk of fire depends on the combined short-term and long-term potential to start a fire or impede firefighting. Both the Alta Mesa Project and Mesa will reduce the risk of fire compared with baseline and include fire prevention measures. The decommissioning of old turbines and construction of new turbines poses a minor fire risk but all construction projects are required to include measures to minimize fire risk. The new WTGs that are being built include modern technologies that would reduce the risk of fire compared to the legacy turbines. The West of Devers project that is just south of the Mesa and Alta Mesa Projects is also taking measures to reduce fire risk by replacing older transmission lines and wooden poles with new transmission lines. Therefore, the cumulative risk of fire would be reduced by the cumulative projects.

Noise. The geographic scope for the cumulative scenario for noise is 3,000 feet, because noise that has travelled beyond this distance dissipates into the environment. The cumulative scenario would last the duration of the Project. During constriction, the Project could potentially have cumulative effects when combined with the Mesa Project because the projects are adjacent to one another and construction would occur at the same time. The Mesa project, like the Alta Mesa Project, would need to comply with applicable Riverside County ordinances and standards to minimize noise impacts to area receptors. Due to the distance from the construction area to the closest receptor, noise would be expected to increase compared to the baseline, but would not be cumulatively significant.

During operation, the cumulative noise impacts of the Project would combine with the Mesa Project. Both of the projects are constructing modern turbines that are generally quieter in mechanical noise than the current turbines. The nearest receptor is over 3,600 feet away, and beyond the 3,000-foot setback set in Riverside County Noise Ordinance No. 348. Noise sources related to the Project and cumulative projects at distances greater than 3,000 feet from receptors would not likely create a cumulative noise impact at the receptors. Due to the limited phase operation noise impacts associate with the Project, the cumulative impact would be negligible, and operation of the Project would not result in adverse cumulative effects on noise levels.

Tribal Cultural Resources. Tribal concerns have been expressed through the AB52 consultation process for which the project has been conditioned to include tribal monitoring and procedures for identified unanticipated discoveries and human remains, should they occur. The adjacent Mesa Project is expected to have the same or similar guidelines. Because of this, cumulative impacts to tribal cultural resources would not combine to be cumulatively significant.

Hydrology and Water Quality. The Project is in the Whitewater Hydrologic Unit, and the Coachella Valley Basin Planning Area. The Mesa Project, which is adjacent to the Alta Mesa Project, is also in this unit and area. The sites, on mountainous terrain, in an arid climate, are intersected by small, local drainageways which carry runoff towards the Whitewater River. The streams are ephemeral, and none of these drainageways on the site carry sufficient water to generate runoff except during infrequent rains. Due to the terrain, there is no appreciable offsite drainage, nor are there designated flood zones.

Some of the turbines in the Mesa Project, and some of the shared access roads for the Alta Mesa Project are above the Coachella Valley Groundwater Basin (CVGB). This groundwater is well below the maximum depth of excavation since the project is on hills which are 600 feet or more above the valley floor. This means that groundwater is not likely to be affected by either of the projects. To prevent surface water contamination, a Spill Prevention Control and Countermeasure Plan (SPCCP), as well as a site-specific Stormwater Pollution Prevention Plan (SWPPP) would be required to prevent water contamination from spills and sediment disturbance during construction. The Mesa Project is expected to follow similar plans and guidelines to ensure water quality.

Water used during construction is expected to be drawn from the CVGB from an on-site well, as there is no known aquifer in the area. Construction water use for both of these projects is expected to be 76 acre-feet in total which is less than 0.06% of the aquifer. Much less water, approximately 14,600 gallons per year, would be used for operation. The water quality of surface and groundwater would be protected, and the cumulative scenario would not contribute to a significant deficit in the groundwater basin, so the project would not result in cumulatively adverse effects on hydrology or water quality.

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Source(s): Staff Review, Project Application Materials

Findings of Fact: As noted throughout the Initial Study, with mitigation, the proposed project would not result in environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly. The project is located 4,500 feet away from the nearest receptor, and noise levels from construction at any time would be below the threshold as set by ordinances as acceptable. The project would be required to comply with air district standards, including use of equipment that meets specific emission standards. Dust (particulate matter) has the potential of affect human health. The effects of fugitive dust would be less than significant with Applicant Proposed Measures. APM-AQ-1 (Fugitive Dust Control Plan) will mitigate the effect of fugitive dust on humans. APM-AQ-2 would minimize the emissions from on-site use of vehicles. In addition, most construction would be short-term and would occur in locations remote from residences, schools, and other sensitive receptors. Seismic impacts on workers during construction would be less than significant, and the project would not exacerbate existing seismic conditions. Hazards impacts would be less than significant. During construction, the Project would be required to have a Hazardous Materials Business Plan (HMBP) which contains information regarding the presence and storage of hazardous materials on site to prevent spills and ensure safety. APM-FIRE-1 and APM-FIRE-2 require a construction fire plan, and an operational fire safety plan, which both exist to reduce risk to property and humans. Operation and maintenance activities would be comparable to current activities and no additional impacts to human beings would occur. Project impacts would be less than significant.

VI. EARLIER ANALYSES

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 as per California Code of Regulations, Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

Earlier Analyses Used, if any: Commercial WECS Permit Nos. 71 through 71R9

Location Where Earlier Analyses, if used, are available for review:

Location: County of Riverside Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92505