

17 SUMMARY OF IMPACTS AND THEIR DISPOSITION; CUMULATIVE IMPACTS AND ANALYSIS

SUMMARY OF IMPACTS BY SIGNIFICANCE DETERMINATION

The following provides a summary of the conclusions reached in the evaluation of the project in Chapters 3 through 16 of this environmental impact report (EIR). For a tabulated summary of the effects of the proposed project, applicable mitigation, and significance determinations, refer to Table ES-1 in Chapter 1, Executive Summary.

SIGNIFICANT EFFECTS WHICH CANNOT BE AVOIDED

A “significant and unavoidable impact” is an impact that exceeds the defined standards of significance and cannot be eliminated or reduced to a less-than-significant level through the implementation of mitigation measures.

AESTHETICS

As detailed in Chapter 3, under Impact AE-1, implementation of the proposed project would result in a substantial adverse effect on multiple scenic vistas from within the Prairie City State Vehicular Recreation Area (SVRA). Therefore, the impact is significant. Even with mitigation measure recommended in the EIR, there are no feasible mitigation measures that would fully avoid this impact or reduce the impact to less than significant. Hence, the impact is significant and unavoidable.

As detailed under Impact AE-2, along Scott Road, the proposed project components would have varying degrees of visibility. While landscaping would not completely block views of the solar panels, it would be effective at screening and softening views of portions of the surface of the solar facility site and lower-profile project components from view. In addition, due to the proposed removal of native oak trees, some of the scenic resources within the existing viewshed would be adversely affected. Hence, this impact concerning damage to scenic resources and the scenic Scott Road viewshed is significant. Even with implementation of Mitigation Measures AE-2 and BR-2a in the short-term (i.e., within 5 years), the impact would be significant and unavoidable. After 5 years, the faster-growing interior live oak species have been selected to provide softening. At 3 years after planting approximately 30 percent of the oak seedlings would likely die, and approximately 50 percent of the surviving 3-year seedlings would likely die after 15 years due to the difficulty of establishing native oaks from plantings. There are no other feasible mitigation measures. Hence, although the project does not impact a scenic highway, the long-term impact to scenic resources and the scenic viewshed from the segment of Scott Road that runs through the project site would be significant and unavoidable.

As explained under Impact AE-3, views from the Prairie City SVRA would be substantially altered and degraded due to changes from grass and oak trees to solar panels. The viewshed from trails in the southeast corner of the SVRA (Cougar Trail, Rattlesnake Trail, and Jack Rabbit Loop) would also change substantially. In addition, as described above,

the viewshed from Scott Road would also be substantially degraded. Hence the impact is significant from the Prairie City SVRA OHV Trails and Scott Road. Even with implementation of Mitigation Measures AE-2 and BR-2, the impact would be significant and unavoidable from the Prairie City SVRA. As mentioned above, for Scott Road, even with re-planting, the long-term impact from substantial degradation of visual character and quality of the viewshed from Scott Road through the project site would be significant and unavoidable.

TRIBAL CULTURAL RESOURCES

As described in Chapter 14, numerous sites, both National Register of Historic Places (NRHP)-listed and NRHP-eligible have been recorded within the project site or within a half-mile radius of the project site. There are also numerous reports supporting the likelihood that Nisenan traversed the area and benefitted from Tribal Cultural Resources (TCRs) that once flourished. Given the presence of significant precontact archaeological resources, geomorphic and topographic conditions suited for some areas to contain buried features and/or deposits, and the conditions observed during fieldwork (variable ground surface visibility during survey), it is possible that additional unrecorded TCRs could be present. Archaeological TCRs may be buried and exposed during project construction and decommissioning activities. Buried archaeological remains may be determined eligible for listing in the California Register of Historical Resources (CRHR) as TCRs, as would Native American human remains. Impacts to such resources, left unmitigated, would have the potential to result in a significant impact.

As described in Chapter 8, "Cultural and Paleontological Resources," the implementation of Mitigation Measures CR-2a (Cultural Resource Management Plan), CR-2b (Construction Monitoring), and CR-3a (Walltown Mining District Historic Study and Interpretive Plan) would generally reduce the potential impacts to any unknown archaeological sites or buried human remains that could be determined to be TCRs. In addition, implementation of Mitigation Measure TCR-1 (Tribal Cultural Resource Avoidance and Minimization Plan) would further address impacts to TCRs. The County has verified that the TCRs in the vicinity of Coyote Creek are unique and spiritually significant to the living descendants of its former inhabitants and would be significantly impacted by changes in viewshed and the contemporary, spiritually associated ecology. While the mitigation measures shall ensure the proper treatment of TCRs, they would not fully reduce the holistic impacts to the landscape and its contributing resources to below a level of significance, there are no feasible mitigation measures that would fully mitigate for this impact. As a result, despite implementation of the recommended mitigation measures, the impact on TCRs would be significant and unavoidable.

SIGNIFICANT EFFECTS WHICH COULD BE AVOIDED WITH IMPLEMENTATION OF MITIGATION MEASURES

AGRICULTURAL RESOURCES

As detailed in the discussion in Chapter 4, Impact AG-1, although the applicant proposes to maintain the site in grazing during operation of the facility, should grazing be

discontinued or the site is otherwise converted to a non-agricultural use, the proposed project could result a potentially significant impact based on Sacramento County General Plan Policy AG-5. Mitigation Measure AG-1 (Implement the Agricultural Management Plan) would require implementation of an Agricultural Management Plan, which would require continued agricultural use (e.g., grazing) of the project site through the operational life of the project and maintain the site's soil characteristics. As a result, the impact would be less than significant with implementation of Mitigation Measure AG-1.

AIR QUALITY

As detailed in Chapter 5, under the analysis of Impact AQ-1 and Impact AQ-2, construction-related emissions would exceed the established thresholds for NO_x and PM₁₀ and decommissioning-related emissions would exceed the established threshold for PM₁₀ only. Therefore, the project's construction and decommissioning activities could result in a potentially significant temporary cumulatively considerable contribution to criteria air pollutants for which the region is in non-attainment of federal or state standards and thereby also could conflict with applicable SMAQMD air quality plans, including the Ozone Attainment and Progress Plan, PM_{2.5} Maintenance Plan, and PM₁₀ Implementation/Maintenance Plan. For these same reasons, the County's General Plan policies related to air quality require feasible strategies to reduce ozone precursors and particulate matter. Recommended Mitigation Measures AQ-2a (Implement Basic Construction Emission Control Practices [Best Management Practices, or BMPs] and Enhanced Fugitive Particulate Matter [PM] Dust Control Practices during Construction and Decommissioning), AQ-2b (Reduce Off-Road Equipment Exhaust-Related Emissions during Construction and Decommissioning), AQ-2c (Submit Construction and Decommissioning Emissions Control Plans), and AQ-2d (Off-site Construction and Decommissioning Mitigation) would require enhanced fugitive dust control, employing equipment that meets or exceeds Tier 4 emissions standards along with newer haul trucks, submitting a Construction Emissions Control Plan, and, as applicable, paying a mitigation fee to offset any constructions emissions that continue to exceed the significance thresholds with mitigation. Implementation of this set of mitigation measures would reduce construction-related air quality impacts to less than significant.

In addition, maintenance activities during operations would exceed the applicable zero threshold for particulate matter emissions. Mitigation Measure AQ-2e (Implement Best Management Practices for Reducing Operational PM Emissions) would require the implementation of BMPs (e.g., limit vehicle speeds and idling times), which would reduce operational PM emissions to less than significant under the applicable non-zero threshold.

As discussed under Impact AQ-3, equipment used for project construction and routine maintenance and operation would not result in localized air pollutant emissions at concentrations that are harmful to nearby sensitive receptors, however, according to the California Department of Conservation, the project site is located within areas categorized as moderately likely and least likely to contain naturally occurring asbestos (California Department of Conservation 2006). Exposure to soil dust containing asbestos can occur under a variety of scenarios, including grading and earth disturbing activities. Pursuant to SMAQMD guidance, impacts related to asbestos exposure shall be considered potentially

significant if a project would be located in an area moderately likely to contain naturally occurring asbestos. Implementation of Mitigation Measure AQ-3a would reduce impacts associated with generation of fugitive dust that potentially contains naturally occurring asbestos. If the site investigation determines that NOA is present on the project site, then implementation of a District-approved dust mitigation plan would reduce impacts related to construction and decommissioning activities in serpentinite soils.

The implementation of Mitigation Measure AQ-3a (Site Investigation for Potential Naturally Occurring Asbestos) would reduce the potential impacts related to naturally occurring asbestos to less than significant.

BIOLOGICAL RESOURCES

As detailed in the discussion of Impact BR-1 in Chapter 6, ground-disturbing activities during project construction would result in impacts on habitats that are potentially suitable for and/or known to be occupied by special-status plants and wildlife. In addition, noise, vibrations, visual or physical disturbances, and fugitive dust generated during construction or operations could harm or kill special-status plants and wildlife. Accidental spills/leaks from construction- or operations-related equipment use could expose special-status plants and wildlife to harmful pollutants. Construction vehicles and equipment used during construction and operations could introduce weeds that degrade wildlife habitat or compete with special-status plants. Operation of electrical infrastructure could cause injury or mortality of special-status wildlife from collision or electrocution. Impacts on special-status species resulting from project construction, operations and maintenance activities, and decommissioning would be potentially significant.

To avoid and minimize general construction-related impacts on special-status plants and wildlife, recommended Mitigation Measure BR-1a (Implement Construction Best Management Practices to Avoid and Minimize Potential for Construction-Related Impacts on Special-Status Plants and Wildlife) would require that the project applicant and construction contractor implement the Best Management Practices and Avoidance and Minimization Measures from the South Sacramento Habitat Conservation Plan (SSHCP) during project construction and operation. While the project is not a covered activity under the SSHCP, these measures have been identified as appropriate for the project and would allow for a consistent approach to mitigation in the SSHCP area. Example measures include construction fencing, biological monitors, and environmental awareness training of construction staff. Mitigation Measure BR-1b (Avoid, Minimize, and Mitigate for Impacts on Special-Status Plants) would address potential impacts on special-status plants through avoidance and minimization measures such as pre-construction surveys (and subsequent protection of any occurrences identified during the surveys) and monitoring during construction and operations, as needed. Mitigation Measures BR-1c (Avoid, Minimize, and Mitigate for Impacts on Western Spadefoot), BR-1d (Avoid, Minimize, and Mitigate for Impacts on Northwestern Pond Turtle), BR-1e (Avoid, Minimize, and Mitigate for Impacts on Western Burrowing Owl and Occupied Nesting Habitat), BR-1f (Avoid, Minimize, and Mitigate for Impacts on Swainson's Hawk and Their Nesting and Foraging Habitat), BR-1g (Avoid, Minimize, and Mitigate for Impacts on Tricolored Blackbird), BR-1h (Avoid, Minimize, and Mitigate for Impacts on

Valley Elderberry Longhorn Beetle and Their Habitat), BR-1i (Avoid, Minimize, and Mitigate for Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp), BR-1j (Avoid, Minimize, and Mitigate for Impacts on American Badger), BR-1k (Avoid, Minimize, and Mitigate for Impacts on Nesting Raptors and Migratory Birds), BR-1l (Avoid, Minimize, and Mitigate for Impacts on Bats), BR-1m (Avoid, Minimize, and Mitigate for Impacts on Crotch's Bumble Bee), **and BR-1n (Avoid, Minimize, and Mitigate for Impacts on Ringtail)** would implement avoidance and minimization measures to limit impacts on special-status wildlife species; such measures would include construction monitoring, pre-construction surveys, habitat restoration and worker training. With implementation of Mitigation Measures BR-1a through BR-1~~n~~**m**, impacts on sensitive species would be less than significant.

Project implementation would result in potentially significant impacts on sensitive natural communities and wetlands, as detailed in Chapter 6 under the discussion of Impact BR-2 and Impact BR-3. Mitigation Measure BR-2~~a~~**a** (Avoid, Minimize, and Mitigate for Impacts on Riparian Habitat and Other Sensitive Natural Communities) would be comprised of several measures that would reduce the impacts related to this potentially significant impact. These include requirements such as: the implementation of several mitigation measures, including BR-1a (Implement Construction Best Management Practices to Avoid and Minimize Potential for Construction-Related Impacts on Special-Status Plants and Wildlife), BR-1f (Avoid, Minimize, and Mitigate for Impacts on Swainson's Hawk and Their Nesting and Foraging Habitat), BR-3 (Avoid, Minimize, Restore, and Mitigate for Impacts on State and Federally Protected Wetlands and Other Waters, including Riparian Habitat, through the Development and Implementation of an Aquatic Resources Mitigation Plan); implementation of Valley Needlegrass Grassland Protection Measures; and implementation of the Oak Woodland and Native Tree Mitigation. With implementation of this mitigation measure, impacts on riparian habitat or other sensitive natural communities would be less than significant. Mitigation Measure BR-3 (Avoid, Minimize, Restore, and Mitigate for Impacts on State and Federally Protected Wetlands and Other Waters, including Riparian Habitat, through the Development and Implementation of an Aquatic Resources Mitigation Plan) would provide for avoidance, minimization, and compensation for impacts to wetlands and associated listed branchiopods, which would reduce the impact to less than significant.

Potentially significant impacts on wildlife movement or wildlife corridors discussed under Impact BR-4 would be addressed by implementing Mitigation Measures AG-1 (Implement the Agricultural Management Plan), BR-1e (Avoid, Minimize, and Mitigate for Impacts on Western Burrowing Owl and Occupied Nesting Habitat), BR-1f (Avoid, Minimize, and Mitigate for Impacts on Swainson's Hawk and Their Nesting and Foraging Habitat), and BR-3 (Avoid, Minimize, Restore, and Mitigate for Impacts on State and Federally Protected Wetlands and Other Waters, including Riparian Habitat, through the Development and Implementation of an Aquatic Resources Mitigation Plan) which would retain, restore, and compensate for any losses of grasslands and aquatic features such that local and regional habitat connectivity would be maintained. Therefore, this impact would be less than significant.

Finally, potential conflicts with local ordinances are discussed in Impact BR-5, specifically the County's Swainson's Hawk Ordinance and the County's policies concerning Oak Woodlands. To address this impact, Mitigation Measure BR-1f (Avoid, Minimize, and Mitigate for Impacts on Swainson's Hawk and Their Nesting and Foraging Habitat) would provide compensation for any loss of Swainson's Hawk foraging habitat consistent with the applicable County ordinance standards. As discussed in Chapter 6, without appropriate mitigation for the loss of protected trees and oak woodlands consistent with County policy and County approval to remove protected trees, the project would conflict with local policies protecting trees. The project would be required to implement a Tree Resource Revegetation Plan that is consistent with the Sacramento County General Plan policies CO-140 and CO-141. The implementation of required oak woodlands and native tree mitigation, as described in Mitigation Measure BR-2a (Avoid, Minimize, and Mitigate for Impacts on Riparian Habitat and Other Sensitive Natural Communities), the impact of the proposed project would be considered less than significant because the project is required to avoid impacts to native trees retained within and adjacent to the solar development area, preservation of oak woodland canopy at a 1:1 ratio consistent with Sacramento County General Plan Policy CO-140 or equivalent preservation bank credit purchase, and establish plantings of native trees at a 1:1 tree replacement ratio – all under the direction of a qualified arborist and subject to review, approval, monitoring, and adaptive management directed by Sacramento County, and with required financial assurances to guarantee that an adequate level of funding is available to implement the acquisition, establishment plantings, and long-term maintenance and management of mitigation lands and/or to cover any additional mitigation options. **Additionally, Mitigation Measure BR-2b (Preserve Oak Woodlands and Special-Status Wildlife Habitat) requires permanent conservation of at least 1,150 acres of oak woodlands, wildlife corridors, and habitat for special-status wildlife, subject to approval by the California Department of Fish and Wildlife.** Additionally, Mitigation Measure BR-5 (Address Inconsistencies with Local Policies Protecting Biological Resources) would resolve potential project-related inconsistencies with local policies protecting biological resources and this impact would be less than significant.

CLIMATE CHANGE

As discussed in Chapter 7 under Impact CC-1, greenhouse gas (GHG) emissions generated during project construction and decommissioning activities are anticipated to exceed the annual significance threshold established for GHG emissions. Although the construction-related emissions would be offset within the first year of operations through the renewable energy generated by the project, Mitigation Measure CC-1 (Implement Construction GHG Emission Best Management Practices during Construction Activities) would further reduce construction emissions through best management practices that include improved fuel efficiency of construction equipment, training of equipment operators, recycling or salvage of debris, and use of alternative fuels. With implementation of Mitigation Measure CC-1, this impact would be reduced to less than cumulatively considerable and less than significant.

CULTURAL AND PALEONTOLOGICAL RESOURCES

As detailed in Chapter 8 under Impact CR-2, all precontact indigenous sites identified through background research and field inventory have been excluded from the solar development area through project design. Site visits were also completed with tribal representatives in these areas. The Tribal Cultural Resources are discussed in detail within Chapter 14 “Tribal Cultural Resources”.

There are 73 historic-era resources that intersect the solar development area, including mining sites and features, earthen berms and dams, rock alignments, and ditches. No complex historic-era resources, such as homesteads or other sites with evident potential for buried archaeological resources have been identified in solar development area. These resources are largely functional and/or activity specific; no resources with substantial evident artifact or cultural deposits intersect the solar development area. Most documented archaeological sites intersecting or near the solar development area (n=59) are related to the CRHR-eligible Walltown Historic Mining District (P-34-002157), previously mapped to the northeast of the project site, and are considered contributors to the eligibility of the historic district. The remaining historic-era archaeological resources (n=14) identified within or adjacent to the solar development area are recommended to be ineligible for NRHP/CRHR listing. As described in Chapter 8, historic-era mining sites associated with the Walltown Historic Mining District (P-34-002157) should be assumed potentially eligible for NRHP/CRHR listing under Criterion A/1, Criterion C/3, and Criterion D/4. Given that no artifacts or artifact-bearing features were identified at any of the sites during recordation, there is a very low chance for additional deposits or features to be impacted or otherwise exposed during project activities. However, absent additional mitigation, there remains some minimal potential for project activities to result in a significant impact to undocumented historical resources. Therefore, impacts to the above archaeological resources, and unanticipated archaeological resource discoveries during construction, are considered potentially significant. Mitigation Measures CR-2a (Cultural Resource Management Plan [CRMP]), CR-2b (Construction Monitoring), and CR-2c (Walltown Mining District Historic Study and Interpretive Plan) would reduce the potentially significant project-related impacts on archaeological resources because the mitigation would avoid, document, test, establish communication and monitoring protocols, treat discovered resources appropriately, in accordance with pertinent laws and regulations, and outline a study and interpretive plan to convey information to the public.

Similarly, as discussed in Impact CR-3, no human remains have been identified within the solar development area, and all known precontact archaeological sites with the potential for containing human remains have been excluded from the solar development area through project design. However, if construction activities resulted in disturbance to any burial sites the impact would be potentially significant. Implementation of Mitigation Measures CR-2a (Cultural Resource Management Plan [CRMP]), CR-2b (Construction Monitoring), CR-3a (Treatment of Human Remains), and TCR-1 (Tribal Cultural Resource Avoidance and Minimization Plan) specifies pre-construction preparation and implementation of an awareness training and archaeological monitoring actions required to reduce impacts to unanticipated human remains in the event of accidental discovery during project implementation. Mitigation Measure CR-3a includes appropriate

compliance with California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and other pertinent regulatory requirements. By implementing these mitigation measures, human remains would be identified and protected, and as a result, would reduce the potential impact in the event of the accidental discovery or recognition of any human remains during construction to less than significant.

As described in Impact CR-4 in Chapter 8, the project site is underlain by three paleontologically sensitive rock formations (Meherten, Lone, and Chico Formations). Therefore, earthmoving activities associated with construction and decommissioning could result in accidental damage to, or destruction of, unknown unique paleontological resources. This potentially significant impact would be addressed by implementation of Mitigation Measure CR-4 (Avoid Impacts to Unique Paleontological Resources), which would reduce any impact to less than significant by training construction staff; stopping work if any fossil resource were discovered; and retaining a qualified paleontologist (if fossils were encountered) to provide appropriate fossil evaluation, recovery, curation, and potentially additional on-site monitoring.

HAZARDS AND HAZARDOUS MATERIALS

As discussed in Chapter 9 under Impact HAZ-1, the project proposes the operation of a total of 3.72 acres of battery energy storage system (BESS). Since BESSs are regulated under Chapter 12 of the California Fire Code and given the several instances of large fires that have occurred in the state of California, SB 38 requires every battery energy storage facility in California to have an emergency response and emergency action plan that covers the premises of the facility. Several additional BESS-related safety standards and regulations are described in the “Regulatory Setting” Section of Chapter 9 that would be applicable to the project are described that would reduce the BESS-related fire hazards related to the project. Mitigation Measure HAZ-1 (Prepare an Emergency Response and Emergency Action Plan) would ensure that the applicable emergency response and emergency action plans be developed prior to issuance of grading permits. The plan must establish response procedures for an equipment malfunction or failure; include procedures that provide for the safety of surrounding residents, neighboring properties, emergency responders; and establish notification and communication procedures between the battery storage facility and local emergency management agencies. The plan shall be submitted to the County for review and approval. Implementation of this mitigation measure will bring the impact to less than significant.

Mitigation Measure AQ-3a (Site Investigation for Potential Naturally Occurring Asbestos) would require site investigations for parts of the project site that may contain NOA, and the implementation of this mitigation measure would reduce the impact of fugitive dust potentially containing NOA at the project site from potentially significant to less than significant with mitigation.

The project proposes new facilities in the northwestern portion of the project site that would overlie the Aerojet contaminated groundwater plume. Aerojet is conducting ongoing remediation activities in this area. Construction-related excavation is not anticipated to encounter any contaminated groundwater. Existing groundwater wells on-site would not have sufficient capacity to produce the water required for construction and

decommissioning and the potential for obtaining water through new wells drilled in either the younger Cenozoic units or the older Mesozoic units was evaluated. Mitigation Measure HAZ-2a (Prohibit New Groundwater Wells and Use of Existing Groundwater Wells Within the Contaminant Plume Consultation Zone) would prohibit groundwater wells within the 2,000-foot Consultation Zone established by County Municipal Code 6.28.000(G) and prohibits the use of existing groundwater wells within the 2,000-foot Consultation Zone for project-related water supply. Therefore, implementation of Mitigation Measure HAZ-2a would reduce the potentially significant impact to less than significant.

Implementation of Mitigation Measure HAZ-2b (Prepare and Implement a Health and Safety Plan [HASP]) would reduce the potentially significant impact from encountering previously unknown soil or groundwater contamination at the project site by requiring preparation and implementation of a HASP, consultation with the appropriate regulatory agencies, performance of a Phase II Environmental Site Assessment (ESA) with soil or groundwater testing, and remediation prior to resuming construction. Implementation of Mitigation Measure HAZ-2c (Coordinate with Aerojet to Close, Relocate, or Avoid Monitoring Wells) would reduce the potentially significant impact from damage to, or destruction of Aerojet remediation and monitoring wells by requiring that the project applicant coordinate with Aerojet during the project design phase to ensure that wells are properly avoided and appropriate access to Aerojet is provided, and to ensure that well locations are marked on construction drawings and in the field with installation of exclusionary fencing. Therefore, with implementation of Mitigation Measures HAZ-2a, HAZ-2b, and HAZ-2c, the impact from construction in a Cortese-listed site would be reduced to less than significant.

As described in Chapter 9, implementation of the proposed project would not result in an aircraft safety hazard or a safety hazard for people residing or working in the project area as related to Mather Airport, and this impact would be less than significant. Additionally, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and therefore this impact would be less than significant.

HYDROLOGY AND WATER QUALITY

As discussed in Chapter 10, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and therefore this impact is considered less than significant. As described under Impact HYD-2, the project site overlies two different groundwater resource areas. During project operations, the project would require 10.5 acre-feet per year (AFY) of water over a 35-year period. The Water Supply Assessment for the project concluded that the operational water needs can be met by existing on-site groundwater wells. However, existing on-site groundwater wells could not support the project's construction or decommissioning demand of 253 AF, each. Therefore, the Groundwater Study assumed that water to meet the project's demands for construction and decommissioning (253 AF each) would be from groundwater obtained from Sloughhouse Solar Project wells or the Sacramento County Water Agency (SCWA), or a combination

of the two sources (Dudek 2024b, Dudek 2024c, and SWCA 2024). Due to data gaps regarding on-site hydrogeology and the potential lack of on-site groundwater availability, water demands for construction and decommissioning (253 AF each) were not assumed to be provided by existing on-site groundwater wells. As explained in the Groundwater Study, additional data and analysis would be required to accurately assess the availability of on-site groundwater for construction and decommissioning (Dudek 2024b). Additionally, as discussed in Chapter 9, “Hazards and Hazardous Materials”, and the Groundwater Study prepared for the proposed project, the proposed project would not source groundwater from any area subject to restrictions of the EPA and the SWRCB on groundwater applicable to the Aerojet Superfund remediation site and operable units, including groundwater extraction with the 2,000-foot consultation zone (Dudek 2024a).

The Groundwater Study indicated that if on-site groundwater wells were used for construction and decommissioning water needs, the temporary lowering of groundwater levels due to project well production for construction and decommissioning would likely only be a local effect, but additional studies would be required to evaluate potential interference to nearby wells (Dudek 2024b). Should on-site groundwater be used for construction and decommissioning, additional studies would need to be completed, and this impact is considered potentially significant. Implementation of Mitigation Measure HAZ-1a (Prohibit New Groundwater Wells and Use of Existing Groundwater Wells Within the Contaminant Plume Consultation Zone) and Mitigation Measure HYD-2 (Perform a Groundwater Hydrologic Study If On-site Groundwater Wells are Utilized for Project Construction and Decommissioning Activities) would reduce the impact from groundwater drawdown on neighboring wells by requiring that hydrologic modeling be performed to demonstrate that such drawdown would not occur before issuance of project permit and the project’s impacts from construction and decommissioning water demands related to potential interference with sustainable groundwater management would be reduced.

As discussed in impact HYD-3, a project-specific Level 3 Drainage Study was performed, but did not include the switchyard. Construction impacts to the alteration of drainage patterns or the addition of impervious surfaces that would result in increased erosion, exceed storm drainage systems, substantially degrade water quality, result in increased flooding, or impede or redirect flood flows for all project components would need to be included in a Level 4 Drainage Study. The study would be required to incorporate all project components, including the switchyard. Therefore, this impact would be potentially significant. Implementation of Mitigation Measure HYD-3 (Prepare a Project-specific Level 4 Drainage Study) would ensure the Level 4 study be prepared and approved prior to obtaining a construction permit. With this, the impact would be reduced to less than significant.

Implementation of Mitigation Measures HAZ-1a 2a (Prohibit New Groundwater Wells and Use of Existing Groundwater Wells Within the Contaminant Plume Consultation Zone) and Mitigation Measure HYD-2 (Perform a Groundwater Hydrologic Study If On-site Groundwater Wells are Utilized for Project Construction and Decommissioning Activities) would reduce the potentially significant impact from groundwater contamination by limiting the area where groundwater wells can be drilled and used. Therefore, with implementation of Mitigation Measures HAZ-1a 2a and HYD-2, the project’s impacts from

construction and decommissioning water demands would not conflict with sustainable groundwater management as set forth in the *South American Groundwater Subbasin Groundwater Sustainability Plan* (Sacramento Central Groundwater Authority et al. 2021).

NOISE

Although noise would attenuate with distance, most project construction activities would still exceed the ambient levels and the County's exterior nighttime noise standard. While the majority of construction activities would conform to the County Noise Ordinance, if construction activities were to occur during more noise-sensitive hours outside of those prescribed by the Ordinance, construction source noise levels could result in annoyance and/or sleep disruption to existing noise-sensitive receptors and create a substantial temporary increase in ambient noise levels. As described in Chapter 12, "Noise," blasting would occur during the site preparation and trenching construction phases. The noise level associated with blasting would exceed the existing ambient noise levels. As a result, this impact is considered potentially significant. Mitigation Measures NOI-1a (For Evening and Nighttime Construction (i.e., outside of permitted construction hours (Section 6.68.090[e] of the County of Sacramento Code), Implement Noise-Reducing Construction Practices and Monitor and Record Construction Noise near Sensitive Receptors) and NOI-1b (Prepare and Implement a Blasting Plan) would entail eliminating certain construction activities at night (i.e., pile driving and blasting), using noise enclosures, and locating construction equipment away from sensitive receptors – e.g., given a minimum noise reduction of 6 dB for each doubling of distance, attenuated noise levels of 82 dB at 50 feet would be reduced to 50 dB exterior at 2,000 feet. These mitigation measures would preclude nighttime construction for certain construction activities within the project site (e.g., pile driving and blasting). Notably, areas further interior to the perimeter of project site where construction activities would take place are sufficiently distant from sensitive receptors to comply with the County's interior nighttime noise standards. To help ensure nighttime construction activity does not exceed County noise standards or result in sleep disturbance, construction noise levels would be monitored at or near proximate residences, with activities ceased if measurements exceed the nighttime noise limit of 50 dB. These mitigation measures would be implemented to reduce the impact related to temporary, short-term exposure of sensitive receptors to construction noise from potentially significant to less than significant.

In addition to ambient noise, short-term construction and decommissioning activities, such as blasting and pile driving, have the potential to expose sensitive receptors to groundborne noise and vibration levels that would exceed applicable standards that indicate human disturbance and potential structural damage. Due to this, the Barton Ranch residents could be exposed to excessive groundborne vibration related to human annoyance because this noise sensitive receptor is within the project site (but outside of the solar development area). The impact is potentially significant. Mitigation Measures NOI-1b (Prepare and Implement a Blasting Plan) and NOI-2a (Implement Vibration Control Measure) would implement a blasting plan that includes optional temporary relocation for the Barton Ranch residence for the duration of blasting activities within 0.5 miles of this receptor and vibration control measures, respectively. Mitigation Measure NOI-2b (Additional Vibration Controls for Blasting to Avoid Human Annoyance) would

implement additional vibration controls related to impacts to the on-site sensitive receptor(s) that would reduce the impact to less than significant.

As discussed in impact NOI-3, the proposed project would introduce non-transportation noise sources from the operation and maintenance of the solar panels. The highest operational noise levels would occur from the inverter and Heating Ventilation and Air Conditioning (HVAC) system both of which are anticipated to be operational during nighttime hours. Mitigation measure NOI-3 would ensure that the applicant provides detailed design demonstrating that operation of the proposed project facilities would not exceed County noise standards. Implementation of this measure would reduce the impact to less than significant.

TRAFFIC AND CIRCULATION

As discussed in Chapter 13, primary access to the project site would be from Scott Road. As described under Impact TC-1, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. As described under Impact TC-2, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (B). Additionally, as described under Impact TC-4, the project would not result in inadequate emergency access during construction, operations, or decommissioning.

Impact TC-3 explains that, given the scale of the project and rural setting in which the project would be constructed and decommissioned, the temporary addition of oversized vehicles, haul trucks, and worker vehicles could increase traffic hazards during the construction and decommissioning phases. The temporary addition of oversized vehicles, haul trucks and worker vehicles could increase traffic hazards, and the resulting impact would be potentially significant. To address potential traffic hazards during construction and decommissioning, Mitigation Measure TC-3 (Prepare and Implement a Traffic Control Plan), requires preparation of a traffic control plan for review and approval by the County Department of Transportation. The measures to be included in the traffic control plan include signage, traffic cones, and flaggers to help ensure safe and efficient movement of traffic through the affected area, with a focus on safety for cyclists on Scott Road. In addition, the traffic control plan would provide for notification of emergency responders regarding the planned construction activities. With the implementation of Mitigation Measure TC-3, the traffic hazards impact would be reduced to less than significant.

WILDFIRE

As discussed in Chapter 15 under Impact WF-1, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan. As described under Impact WF-2, the project site is currently used for year-round sheep and cattle grazing. Operation of the project site would include new solar generating facilities co-located with dryland pasture for the continuation of grazing activities. An Agricultural Management Plan has been developed to manage grassland on-site with provisions to minimize fire risk as Mitigation Measure AG-1 which is detailed in Chapter 4, "Agricultural Resources." Wildfire risks during construction, operation, and decommissioning would be offset by compliance with fire safety and wildfire suppression measures. However, installation of

the project components in the previously undisturbed agricultural field would introduce structures that could make grazing less efficient and the temporary stockpiling of wood chip during site clearing, before the wood chips are reused and distributed on-site, could increase the amount of fuel for wildfires if vegetation and organic materials are not properly maintained on-site in a way that could exacerbate wildfire risk, which could result in a potentially significant impact. Implementation of Mitigation Measures WF-2a (Demonstrate Compliance with the California Fire Code, California Building Code, and SB 38 Requirements, and Manage Vegetation On-site) and WF-2b (Fire Hazard Reduction Measures for Temporary Wood Chip Stockpiling) would reduce the impact to less-than significant. In demonstrating **consistency** with California Fire Code requirements, California Building Code requirements, and SB 38 and that ignition-resistant building materials have been incorporated into project designs, the exacerbation of wildfire risks would be reduced. In addition, management and safety practices such as selecting stockpile locations at least 100 feet away from structures, vegetation, and other combustible materials, establishing and maintaining firebreaks around stockpile areas by clearing vegetation and other combustible materials, among other measures, would further reduce wildfire risks.

EFFECTS FOUND NOT TO BE SIGNIFICANT

As provided in the prior chapters of this document, the following environmental topic was the subject of detailed analysis, which determined that implementation of the proposed project impacts that are less than significant.

LAND USE

As discussed in Chapter 11, “Land Use and Planning,” the proposed project would not physically divide an established community. Additionally, as discussed under Impact LUP-1, consistency issues between implementation of the proposed project and the County General Plan or other land use plans and policies (i.e., South Sacramento HCP, and the Mather Airport Land Use Compatibility Plan) are related to land use regulations, which are, in part, based on avoiding or otherwise restricting uses that would adversely impact resources at the project site or adjacent land uses. While EIRs must discuss inconsistencies between a proposed project and applicable plans, plan consistency is not generally a CEQA issue. Chapter 11, “Land Use and Planning,” discusses the County General Plan policies relevant to the proposed project that are listed in this chapter’s “Regulatory Setting” Section and are evaluated in this chapter.

As described in Chapter 11, “Land Use and Planning,” specific impacts and project consistency issues are discussed in other resource and issue areas that are addressed in each technical chapter of this document, as appropriate. The technical chapters provide a detailed analysis of other relevant physical environmental effects that could result from implementation of the proposed project and identify mitigation measures, as necessary, to reduce impacts. While the proposed project would result in significant and unavoidable impacts to visual resources, TCRs, and cumulative tree impacts, as described above, County General Plan Policy PF-66 permits the Board of Supervisors and County Planning

Commission to approve development projects for energy resources that are contrary to any of the policies of the Public Facilities Element when justification is provided through findings. In accordance with Policy PF-66, findings would be adopted as part of the Final EIR for the proposed project. Implementation of the proposed project would not conflict with adopted County General Plan policies or other land use plans, policies, or regulations that would generate adverse physical impacts beyond those addressed in detail in the environmental chapters of this document (i.e., agricultural resources, air quality, biological resources, cultural resources, etc.).¹ Therefore, this impact would be less than significant, and no mitigation is required.

OTHER ENVIRONMENTAL TOPICS

The topic areas listed below were analyzed in accordance with Appendix G of the California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations Section 15000 et seq.). The impact analysis that follows specifically addresses each applicable environmental checklist item from Appendix G of the CEQA Guidelines to determine the proposed project's impacts. As presented in the sections that follow, the analysis determined that the proposed project would result in less than significant impacts or no impacts on the environment for the following resource topics.

- Energy
- Geology, Seismicity, and Soils
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

ENERGY

Based on Appendix G of the CEQA Guidelines, an impact related to energy is considered significant if the proposed project would do any of the following.

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

Construction of the proposed project would result in the consumption of energy in the form of transportation fuels (diesel and gasoline) during the construction phase. Fuel consuming activities would include the use of heavy-duty construction equipment, vendor and haul truck trips for material transport, and worker commute trips to and

¹ "The issue of whether a proposed project is consistent with a county's general plan is not a CEQA issue..." (*The Highway 68 Coalition v. County of Monterey, et al.* [6th Dist. 2017] Cal.App.5th).

from the project site. Table SI-1 summarizes the estimated construction-related energy consumption that would occur over the anticipated construction duration.

Table SI-1: Construction-Related Energy Consumption

Fuel Type	Total Fuel Usage (gallons)	Annual Fuel Usage ¹ (gallons)	Annual Energy Consumption (MMBtu)
Diesel	400,963	11,456	1,582
Gasoline	95,244	2,721	340

Source: Estimated by AECOM in 2024 using the GHG emissions presented in Appendix AQ-1. See Appendix AQ-1 for detailed methodology and calculations.

Notes:

MMBtu/year = million British thermal units per year

¹ Since construction-related energy demand would cease upon completion of construction, energy demand associated with construction of the proposed project was amortized over the project lifetime of 35 years.

Fuel consumption rates would vary over the construction duration depending on the intensity of construction-related activities in terms of amount and duration of equipment use and number of vehicle trips serving each particular construction phase. The proposed construction-related activities and associated equipment use are considered to be necessary components of the construction phase of the project. Related fuel consumption and electricity use would be temporary, ceasing after the completion of construction, and would not represent a significant demand on available fuel, beyond normal construction fuel usage. In addition, the construction contractor would be required, in accordance with recommended Mitigation Measure CC-1 (Implement Construction GHG Emission Best Management Practices during Construction Activities, see Chapter 7, "Climate Change") and the California Air Resources Board Airborne Toxic Control Measure for Diesel-Fueled Commercial Motor Vehicle Idling, to minimize the idling time of construction equipment by shutting equipment off when it is not in use or reducing the idling time. Per Mitigation Measure CC-1, construction contractors would also be required to maintain and properly tune all construction equipment in accordance with the manufacturer's specifications as well as use the proper size of equipment for the job, which would limit wasteful and unnecessary energy consumption. Based on these considerations, construction of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Once constructed, the proposed project would provide a photovoltaic (PV) solar power and battery energy storage facility that would provide new power production capacity of up to 200 megawatts (MWs). Operational and maintenance activities associated with the proposed project would include up to 10 daily vehicle trips and an additional 32 daily trips to account for water being trucked in for panel washing and grazing activities (which would not occur daily at the site), for a conservative maximum total of 42 daily vehicle trips. Vehicles used for these operational and maintenance related trips traveling to the project site could be diesel, gasoline, or electric-powered vehicles. As detailed in Table SI-2, such activities could result in the consumption of up to 1,087 gallons of diesel, 5,349 gallons of gasoline per year, and 2,026 kilowatt-hours per

year; these totals represent a conservative worst-case year of vehicle and equipment use reflective of maximum daily operations and maintenance requirements. Based on the size of the battery energy storage building, it is estimated that the electricity consumption associated with the battery energy storage facility would be approximately 1,236,000 kilowatt-hours per year. These operational and maintenance activities are considered necessary for the efficiency and reliable operations of the proposed facilities. In addition, the proposed project would increase the region's overall power generation capacity and portfolio of eligible renewable resources contributing to its overall power mix. When considered in the context of the proposed renewable resource power that would be generated as a result of the proposed project, the project would generate much more energy, and from a renewable source, than would be required to run the operations and maintenance components of the proposed operations.

Table SI-2. Operational Energy Use and Generation

Energy Consuming Source	Energy Requirement	Unit	Annual Energy Consumption (MMBtu)
Building Operations (Electricity Consumption)	1,236,000	kWh/year	4,217
Operational and Maintenance Trips - Diesel	1,087	gallons/year	150
Operational and Maintenance Trips - Gasoline	5,349	gallons/year	669
Operational and Maintenance Trips - Electricity	2,026	kWh/year	7

Source: Estimated by AECOM in 2024 using the information presented in Appendix AQ-1. See Appendix AQ-1 for detailed methodology and calculations.

Notes:

gallons/year = gallons per year; kWh/year = kilowatt-hours per year; MMBtu/year = million British thermal units per year.

The project is anticipated to be decommissioned after approximately 30² years of operations. Energy consumed during project decommissioning would be roughly proportionate to the amount consumed during project construction activities. However, future decommissioning activities are likely to employ more efficient equipment compared to construction activities due to increasingly stringent regulatory requirements and the associated improvements in technology and efficiency over time. Moreover, decommissioning would occur in a manner that maximizes recycling of project components and allows for a return of the project site to productive agricultural uses. As a result, decommissioning of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

In summary, although project implementation would result in net energy consumption associated with the construction phase of the project, as well as minor fuel

² Project decommissioning activities were assumed to occur 30 years after the project becomes operational for purposes of air quality modeling. This does not change the current anticipated facility operational life of 35 years, as noted in Chapter 2, "Project Description".

consumption to support operational and maintenance activities, such activities are necessary and would be conducted in an efficient manner. In addition, once operational, the project's ultimate purpose as a power generation facility would increase the region's renewable power resources and overall generation capacity, resulting in a net increase in energy resources. Consistent with the goals included in Appendix F of the CEQA Guidelines, the proposed project would contribute to the overall goal of decreasing reliance on fossil fuels and increasing reliance on renewable energy sources. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy, and this impact would be **less than significant**.

2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The federal government, the state, and local jurisdictions have policies, regulations, and plans established to promote renewable energy and energy efficiency.

Senate Bill (SB) 100 requires all electricity retailers in the state, including publicly-owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators, to achieve the Renewables Portfolio Standard of 60 percent renewable energy by 2030 and requires that all of the state's electricity come from carbon-free resources by 2045. The proposed project would provide a source of renewable energy to achieve the Renewables Portfolio Standard of 60 percent by 2030 set by SB 100 and help the state reach its goal to be carbon neutral by 2045, as well as contribute to Measure GHG-03 from the County's Climate Action Plan, which indicates that the County will support the Sacramento Municipal Utility District (SMUD) in executing its 2030 Zero Carbon Plan by coordinating with SMUD to identify sites for renewable energy generation and storage projects on County-owned properties and other potential sites in the unincorporated county (Sacramento County 2024) goals of reducing the reliance on non-renewable energy sources and supporting the development and use of renewable sources of energy, including, but not limited to, solar.

Furthermore, the proposed project supports the County's General Plan Energy Element (Sacramento County 2017) goal of shifting toward a greater share of renewable sources of energy and action measures of utilizing solar energy systems within the Sacramento area. Therefore, the proposed project would not obstruct a state or local plan for renewable energy or energy efficiency, and this impact would be **less than significant**.

GEOLOGY, SEISMICITY, AND SOILS

Based on Appendix G of the CEQA Guidelines, an impact related to geology, seismicity, and soils is considered significant if the proposed project would do any of the following.

1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or based on other

substantial evidence of a known fault, strong seismic ground shaking, liquefaction, or seismically-induced landslides.

The project site is situated primarily in the rolling foothills along the west side of the Sierra Nevada; the northwest corner of the project site is situated at the eastern margin of the Sacramento Valley (Gutierrez 2011); this area historically has not been seismically active. The nearest active faults, including those that are classified under the Alquist-Priolo Earthquake Fault Zone Act, are approximately 60 miles east near Lake Tahoe, approximately 60 miles north near Lake Oroville, and approximately 60 miles west in the Coast Ranges (Jennings and Bryant 2010, California Geological Survey 2022). The nearest known fault is the Bear Mountains Fault Zone, approximately 15 miles northeast of the project site, which is not classified as “active” (Jennings and Bryant 2010). Terracon Consultants, Inc. (Terracon) calculated that the peak horizontal ground acceleration for the project site (which considers the potential size and location of earthquakes and the resulting ground motions that can affect a particular site) would be 0.251g, which indicates that a very low level of seismic ground shaking is anticipated (Terracon 2021). Therefore, hazards from surface fault rupture and strong seismic ground shaking are unlikely.

The project site is situated on rolling land and with elevations that range from 170 to 275 feet above mean sea level. However, the finished grades would generally follow existing grades (Terracon 2021). Since the potential for strong seismic ground shaking is low, seismically-induced landslides would not represent a hazard. Based on a review of the *Preliminary Geotechnical Engineering Report* (Terracon 2021) prepared for the proposed project, the project site is unlikely to experience hazards from liquefaction because of the anticipated depth to groundwater and the relatively stiff/dense subsurface soils and shallow depth to bedrock. For the same reason, Terracon (2021) concluded that lateral spreading is also unlikely. Therefore, these impacts would be **less than significant**.

2. Result in substantial soil erosion or the loss of topsoil.

Project-related construction would involve earthmoving activities, including excavating, grading, and drilling for pile foundations. Soil disturbance during construction activities would increase the potential for erosion, particularly during the winter rainy season. However, the project applicant is required to comply with the County's Land Grading and Erosion Control Ordinance (Sacramento County Municipal Code Chapter 16.44). Because the project would involve clearing and grubbing more than one acre of land, a grading permit is required for compliance with the ordinance. As part of the permit application, plans must be submitted to the County showing the location, implementation schedule, and maintenance schedule of all erosion control measures and sediment control measures to be implemented or constructed prior to, during, or after the proposed activity (Municipal Code Section 16.44.090). Furthermore, because the proposed project would disturb more than one acre of land, the project applicant is required by law to prepare a Stormwater Pollution Prevention Plan (SWPPP) and implement site-specific Best Management Practices (BMPs) specifically designed to prevent erosion and downstream sedimentation, and

to protect water quality. The SWPPP and BMPs must be submitted to the Central Valley Regional Water Quality Control Board (RWQCB), in compliance with the statewide National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order WQ 2022-0057-DWQ, NPDES Permit No. CAS000002). Therefore, this impact would be **less than significant**.

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

As previously discussed in (1) above, landslides would not represent a hazard at the project site.

Terracon (2021) reported that cohesionless, sandy soils were encountered at various locations across the site. Such soils have the tendency to cave and slough during excavations. Therefore, formwork may be needed for foundation excavations in those areas.

The PV solar panels would be supported by W-section galvanized steel piles or similar design. Based on the results of site-specific soil borings, Terracon (2021) determined that the project site soils would be suitable for support of pilings, although pre-drilling may be required in the hillsides where shallow bedrock is present.

Transmission towers, substation bus supports, end poles, and related equipment would be supported on drilled shaft foundations. The *Preliminary Geotechnical Engineering Report* contains site-specific drilled shaft foundation design parameters and recommendations to ensure the stability of proposed facilities (Terracon 2021).

Based on the geotechnical engineering analyses, subsurface exploration, and laboratory test results, Terracon (2021) recommended that inverters within the solar fields and transformers within substation be supported on shallow foundation systems. The *Preliminary Geotechnical Engineering Report* contains design parameters and recommendations for these shallow foundation systems to ensure the stability of proposed facilities (Terracon 2021).

Aggregate surface and asphalt pavement recommendations for the proposed access road are also addressed in the *Preliminary Geotechnical Engineering Report* (Terracon 2021).

Unstable soil conditions could be present during construction in the winter rainy season, including subsidence and liquefaction from heavy equipment working on soils with a low bearing strength on top of shallow, perched groundwater during the winter. The *Preliminary Geotechnical Engineering Report* (Terracon 2021) contains recommendations to address this issue such as ceasing earthmoving activities during periods of heavy rain, using lighter equipment, and parking heavy equipment in areas that are not subject to perched groundwater.

Finally, the County would perform a review of project plans and implement on-site inspections to ensure compliance with recommendations in the final geotechnical report. Therefore, this impact would be **less than significant**.

4. Be located on expansive soil, creating substantial direct or indirect risks to life or property.

Based on the results of site-specific soil borings, the majority of near-surface soils encountered at the site within the proposed substation and solar array areas consisted of low to non-plastic soils, which may be used as engineered fill, provided they are stripped of any deleterious materials. However, borings in three locations encountered near-surface expansive soils. These potentially expansive soils should not be used as engineered fill beneath foundations or in roadway areas (Terracon 2021). The *Preliminary Geotechnical Engineering Report* recommended that a geotechnical engineer should be retained throughout the project's construction phase to determine whether on-site soils are suitable for use as engineered fill in proposed foundation and roadway locations (Terracon 2021). Expansive soils (where encountered) could either be excavated and removed, or treated with lime to reduce expansion. The County would perform a review of project plans and implement on-site inspections to ensure compliance with recommendations in the final geotechnical report. Therefore, this impact would be **less than significant**.

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

The proposed project may include the construction of permanent restroom facilities. If restroom facilities were installed, an on-site septic system would be required and the applicant would be required to follow the County Department of Environmental Management's (2021) septic system permitting process, which, at the project site, would require a site-specific soils investigation, the results of which would be used to inform an engineered septic design that meets County requirements to protect human health and the environment. Therefore, this impact would be **less than significant**.

Potential impacts to unique paleontological resources are evaluated in Chapter 8, "Cultural and Paleontological Resources".

MINERAL RESOURCES

Based on Appendix G of the CEQA Guidelines, an impact related to mineral resources is considered significant if the proposed project would do any of the following.

1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.

The loss of access to regionally important mineral deposits as a result of land uses that preclude mining is one of the issues that the California Surface Mining and Reclamation Act of 1975 (SMARA) was framed to address. SMARA mandates a two-

phased mineral resource conservation process called classification–designation. Under SMARA, the State Mining and Geology Board may designate certain mineral deposits as being regionally significant to satisfy future needs. The State Mining and Geology Board’s decision to designate an area is based on a classification report prepared by the California Geological Survey (CGS) (formerly California Division of Mines and Geology) and on input from agencies and the public. CGS’ priority for mineral land classification studies is based on areas that are most likely to urbanize in the future, with the goal of establishing an awareness of the availability of important resources by communicating with the appropriate lead agencies regarding the presence, location, and significance of mineral deposits within a particular region.

The project site is situated within the designated Greater Sacramento Area Production-Consumption Region for Portland cement concrete-grade aggregate, which includes all designated lands within the marketing area of the active aggregate operations supplying the Greater Sacramento urban center (Dupras 1999, O’Neal and Gius 2018). In compliance with SMARA, CGS has established the classification system shown in Table SI-3 to denote both the location and significance of key extractive resources.

Table SI-3: California Geological Survey Mineral Land Classification System

Classification	Description
MRZ-1	Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.
MRZ-2	Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.
MRZ-3	Areas containing inferred mineral occurrences of undetermined mineral resource significance.
MRZ-4	Areas where available data is inadequate for assignment to any other mineral resource zone category.

Note: MRZ = Mineral Resource Zone

Source: Dupras 1999

A variety of historic and active mining operations have been carried out in the vicinity of the project site. Historic placer and dredger mining activities for gold were conducted along ancestral channels of the American River from the late 1800s through the 1950s. A few small, scattered piles of cobbles and short, historic-era abandoned mine shafts indicate that a few areas of the project site were tested for gold mining potential, and there are historic records of two small gold mining claims including the former Martin J. Quinn Ranch Gold Mine (on the north side of Carson Creek, southwest of the Barton Ranch buildings), and a former placer gold deposit recorded along Deer Creek on the west side of Scott Road (The Diggings 2024). However, a review of the mineral land classification maps for the project site prepared by CGS indicate that the project site is not classified for gold resources (Dupras 1999, O’Neal and Gius 2018).

As a result of large-scale historic dredger mining activities for gold, there are extensive pile of tailings (composed of cobble, gravel, and silt) throughout the vicinity of the project site to the east, north, and south, and several of these areas are being activity mined for Portland cement concrete (PCC) grade aggregate. However, these resources are not present within the project site, which is classified by CGS as MRZ-1 and MRZ-3 (areas of no known mineral resources; and areas where mineral resources are inferred, but are not specifically known to be present) (O'Neal and Gius 2018). Regionally important known mineral resource deposits are classified by CGS as MRZ-2.

There is a large deposit of kaolin clay southwest of the project site in the Michigan Bar area, which has been mined continuously since the 1860s and which is the largest active kaolin clay mining site in the greater Sacramento region. Kaolin clay is extracted from the lone Formation, and is widely used in a variety of applications including ceramics, porcelain, earthenware, curved roof tiles, plastics, linoleum, cosmetics, and pharmaceuticals. CGS has indicated that based on the amount of known kaolin clay deposits and the rate at which mining has been occurring, sufficient quantities of this resource are available for many decades (at least 50 years into the future) (Dupras 1999). The lone Formation outcrops in a north to south-trending band through the project site, primarily along the west side of Coyote Creek (on the west side of Scott Road) (see Plate CR-2 in Chapter 8, "Cultural and Paleontological Resources"). A portion of this area, at the southern end of the outcrop near the Barton Ranch buildings, has been classified as MRZ-3 meaning that kaolin resources are inferred, but are not known to be present (Dupras 1999). Project-related facilities in this area would consist of solar panels on pole-mounted foundations. The proposed project lifespan is projected to be 35 years, at which point decommissioning activities would occur, including the removal of the solar panels and pole foundations. At that point in time, if a mining entity desired to pursue exploratory operations to determine whether or not kaolin clay resources were in fact present, and then to mine the resources if they exist, such activities could occur. However, the project site is not classified by CGS as containing any known regionally significant deposits of kaolin clay resources (i.e., MRZ-2) (Dupras 1999). Finally, although blasting activities may be necessary at the project site in some areas of hard bedrock to install the poles and foundations for the solar panels, blasting would not be necessary within the lone Formation, and thus blasting would not result in a loss of existing kaolin clay resources (if any such deposits are present).

Therefore, the proposed project would not result in the loss of availability of any known regionally important mineral resources (gold, PCC-grade aggregate, or kaolin clay), and thus there would be **no impact**.

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

The Conservation Element of the Sacramento County General Plan (Sacramento County 2017) indicates that the County's locally important mineral resource recovery sites are the same as the regionally important mineral sites designated by CGS.

Therefore, for the same reasons explained in criterion (1) above, the proposed project would not result in the loss of availability of any known locally important mineral resources (gold, PCC-grade aggregate, or kaolin clay), and thus there would be **no impact**.

POPULATION AND HOUSING

Based on Appendix G of the CEQA Guidelines, an impact related to population and housing is considered significant if the proposed project would do any of the following.

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

The proposed project would not directly or indirectly induce substantial unplanned population growth in Sacramento County. The project does not propose development of additional housing or commercial or industrial businesses that could induce population growth, nor would it remove any obstacle to population growth. Typical growth-inducing factors might be the extension of urban services or transportation infrastructure to a previously unserved or underserved area, or the removal of major barriers to development from construction of utility infrastructure. The applicant has entered into an agreement to supply the Sacramento Municipal Utility District (SMUD) with the renewable energy generated by the project. The proposed project is anticipated to fulfill existing energy demands and would not result in the establishment of electrical service to currently unserved areas (see below for the Growth Inducement section that provides further discussion of growth-inducing impacts).

Construction of the proposed project would occur over approximately 18 months. The number of workers expected on-site during construction of the proposed project would vary over the construction period and would average 250 workers per day. Decommissioning and site restoration activities are expected to require a similar workforce as construction and occur over 12 months. The majority of workers is expected to come from the local labor pool and not relocate from other areas for the relatively short construction period. The U.S. Census Bureau estimates that in 2022 there were 52,441 persons employed in the construction industry in Sacramento County (U.S. Census Bureau 2022). Given the size and proximity of the existing labor pool of nearby construction workers and the temporary construction period, project construction would not cause a substantial influx of construction personnel that would result in unplanned population growth. This also applies to project decommissioning, which would require a similarly sized labor force. Upon completion of construction, the facility would be primarily operated remotely through a local solar operations and maintenance company, facilitated by the project Supervisory Control and Data Acquisition system. Therefore, the proposed project would not directly or indirectly induce substantial unplanned population growth in an area, and **no impact** would occur.

2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

There is one residence within the project site, but it is outside of the solar development area and would not be demolished as part of the project. Therefore, the proposed project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere; therefore, **no impact** would occur.

PUBLIC SERVICES

Based on Appendix G of the CEQA Guidelines, an impact related to public services is considered significant if the proposed project would do any of the following.

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

FIRE PROTECTION

The California Department of Forestry and Fire Protection (CAL FIRE) Battalion 1 provides fire protection services to the project site and surrounding area. As discussed in Chapter 14, "Wildfire", the proposed project would incorporate California Fire Code, California Health and Safety Code, Senate Bill (SB) 38, and California Public Resources Code (PRC) requirements into facility designs. Typical fire and safety precautions would be taken, such as prohibiting on-site fires; reporting any fires, even if they have been extinguished; maintaining access to emergency vehicles; maintaining vehicles in good working order; and maintaining access to fire hydrants, emergency water tanks, and emergency turnouts.

Because the proposed project includes a battery energy storage system (BESS), the project would be required to comply with SB 38 and would include an emergency response and emergency action plan that cover the premises of the facility. Under SB 38, the owner or operator of the facility must coordinate with local emergency management agencies, unified program agencies, and local first responders to develop the plan and must submit the plan to the County and, if applicable, the city where the facility is located. As discussed in Chapter 9, "Hazards and Hazardous Materials", the project would comply with current BESS Safety Standards that are summarized in the "Regulatory Setting" Section of Chapter 9. Additionally, implementation of Mitigation Measure HAZ-1 (Prepare an Emergency Response and Emergency Action Plan) would ensure there is an emergency plan that would establish response procedures for an equipment malfunction or failure, including procedures that provide for the safety of surrounding residents, neighboring properties, emergency responders, and establish notification and communication procedures between the battery storage facility and local emergency management agencies. Additionally, as discussed in Chapter 15, "Wildfire", implementation of Mitigation Measure WF-2a (Demonstrate Compliance with the California Fire Code, California Building Code, and SB 38 Requirements, and Manage Vegetation On-site) would ensure the project is compliant with the requirements of SB 38.

The project applicant is required to comply with Federal and State Occupational Health and Safety Administration regulations during construction and decommissioning in order to minimize the likelihood of workplace injuries and accidents requiring emergency medical attention. Project design would incorporate applicable State and local requirements to reduce the dependence on CAL FIRE equipment and personnel by reducing fire hazards and reducing the potential for workplace accidents.

Increases in long-term demand for fire protection services typically are associated with substantial permanent increases in population. Under the proposed project, the population in the project area would not increase as a result of new housing or employment opportunities. Therefore, the proposed project would not require new fire protection facilities or the expansion of existing fire protection facilities to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. Therefore, this impact would be **less than significant**.

POLICE PROTECTION

The project site is within the service area of the Sacramento County Sheriff's Department Central Division, which provides law enforcement services for the unincorporated areas of southern Sacramento County, the Delta, and Galt, as well as Rancho Murieta, Herald, Wilton, Walnut Grove, and the City of Isleton (Sacramento County Sheriff's Department 2024). It is not anticipated that the proposed project would result in a substantial increase in the demand for police protection services. Typical crime and safety issues during construction and operation could include trespassing, theft of materials, and vandalism. Access would be controlled through locked security gates at several entrances. To ensure the safety of the public and the facility and minimize the potential for assistance from the Sacramento County Sheriff's Department, the property would be fenced and high-voltage warning signs posted. The fence would be monitored periodically to detect any intrusion into the property.

Under the proposed project, the population in the project area would not increase as a result of new housing or employment opportunities; therefore, the proposed project would not require additional Sacramento County Sheriff's Department staffing to maintain the officer-to-population service ratio or response times. Thus, the proposed project would not affect the Sacramento County Sheriff's Department performance objectives and would not result in the construction of new police protection facilities or the expansion of existing police protection facilities. **No impact** would occur.

SCHOOLS

The proposed project would not result in new housing that would generate new students or increase the demand for school services and facilities. Therefore, **no impact** would occur.

PARKS

The applicant has coordinated with the Prairie City State Vehicle Recreation Area to modify kart-track facilities to better accommodate the construction of the proposed

project gen-tie line. Changes were necessary to accommodate the placement of a gen-tie pole via moving bleachers and non-permanent garage-pit area as well as the track's office. Other improvements are not necessary for gen-tie construction and operation, but are a commitment by the applicant to improve the user experience for go-kart track users beyond what is required for the gen-tie line. The track modifications are anticipated to occur during the 18-month construction window, but ultimately would be completed at the timing and discretion of California State Parks. Temporary closures of the track are anticipated to be necessary to accommodate construction of the gen-tie, and would be coordinated with park officials, as necessary. The improvements would involve the movement of temporary infrastructure such as bleachers, relocation of the track office, removal of approximately 276 feet of existing track and addition of approximately 403 feet of new track. The on-site canopy/structure and office/retail modular units associated with the track would be moved from its current location approximately 100 feet north. The improvements are entirely contained within the area currently fenced for the cart track or in the adjacent parking lot. Track improvements would be carried out at the discretion of state parks, and state parks will be responsible for any additional surveys, permits, or permissions associated with the improvements. The potential temporary minor interruption in the availability of these facilities at the Prairie City State Vehicle Recreation Area would not create demand for recreational uses that would cause physical deterioration at other existing State Vehicle Recreation Areas that would represent a significant adverse environmental impact.

The population in the project area would not increase as a result of new housing or employment opportunities. Therefore, the proposed project would not require construction of new parks to meet Sacramento County parkland standards. This impact would be **less than significant**.

OTHER PUBLIC FACILITIES

The population in the project area would not increase as a result of new housing or employment opportunities. Therefore, the proposed project would not increase demand for other public facilities. **No impact** would occur.

RECREATION

Based on Appendix G of the CEQA Guidelines, an impact related to recreation is considered significant if the proposed project would do any of the following.

1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

The proposed project would not result in a net increase of residents within the area. Thus, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. In addition, there are no recreational facilities within the project vicinity. Thus, there are no parks whose access

would be restricted or affected in any way during construction or operation of the proposed project, thereby leading the increased use and subsequent accelerated physical deterioration of other parks within the area. Therefore, the proposed project would not result in a substantial increase in the existing demand for parks and other recreational facilities and **no impact** would occur.

2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

As mentioned above under the “Parks” in the “Public Facilities” Section above, the applicant has coordinated with the Prairie City State Vehicle Recreation Area to modify kart-track facilities to better accommodate the construction of the proposed project gen-tie line. Changes were necessary to accommodate the placement of a gen-tie pole via moving bleachers and non-permanent garage-pit area as well as the track’s office. Other improvements are not necessary for gen-tie construction and operation, but are a commitment by the applicant to improve the user experience for go-kart track users beyond what is required for the gen-tie line. The track modifications are anticipated to occur during the 18-month construction window, but ultimately would be completed at the timing and discretion of California State Parks. Temporary closures of the track are anticipated to be necessary to accommodate construction of the gen-tie, and would be coordinated with park officials, as necessary. The improvements would involve the movement of temporary infrastructure such as bleachers, relocation of the track office, removal of approximately 276 feet of existing track and addition of approximately 403 feet of new track. The on-site canopy/structure and office/retail modular units associated with the track would be moved from its current location approximately 100 feet north. The improvements are entirely contained within the area currently fenced for the cart track or in the adjacent parking lot. Track improvements would be carried out at the discretion of state parks, and state parks will be responsible for any additional surveys, permits, or permissions associated with the improvements.

The proposed project would not include the construction of new recreational facilities; however, it would include the reconfiguration of the kart-track facilities that are part of the Prairie City State Vehicle Recreation Area, as requested by California State Parks and as described above. In addition, the proposed project would not result in population growth within Sacramento County, and therefore, would not generate increased demand for recreation facilities. Therefore, the proposed project would not require the construction or expansion of recreational facilities, and this impact would be **less than significant**.

UTILITIES AND SERVICE SYSTEMS

Based on Appendix G of the CEQA Guidelines, an impact related to utilities and service systems is considered significant if the proposed project would do any of the following.

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

WATER SUPPLY

As summarized in the Groundwater Resource Impact Analysis (Groundwater Study, included as Appendix HYD-1), previous well yield studies included borehole testing in the older Mesozoic bedrocks units at the project site. The results indicated that although initial groundwater level depths were generally shallow (groundwater was obtained relatively near the surface), the drawdowns for the given pumping rates indicated relatively low specific capacities (meaning the well yields were low). The project's annual operational demand of 10.5 AFY equates to approximately 6.6 gallons per minute, and therefore the Groundwater Study concluded that one or more of the sample boreholes that were previously drilled on the project site in the Mesozoic bedrock units would be able to support the project's yearly operational demand of 10.5 AFY, but would not support the project's construction and decommissioning demand (i.e., 253 AF each) (Dudek 2024a).

Therefore, the Groundwater Study assumed that water to meet the project's demands for construction and decommissioning (253 AF each) would be from groundwater obtained from Sloughhouse Solar Project wells or the Sacramento County Water Agency (SCWA), or a combination of the two sources (Dudek 2024b, Dudek 2024c, and SWCA 2024). Due to data gaps regarding on-site hydrogeology and the potential lack of on-site groundwater availability, water demands for construction and decommissioning (253 AF each) were not assumed to be provided by existing on-site groundwater wells. As explained in the Groundwater Study, additional data and analysis would be required to accurately assess the availability of on-site groundwater for construction and decommissioning (Dudek 2024b). Additionally, as discussed in Chapter 9, "Hazards and Hazardous Materials", and the Groundwater Study prepared for the proposed project, the proposed project would not source groundwater from any area subject to restrictions of the EPA and the SWRCB on groundwater applicable to the Aerojet Superfund remediation site and operable units, including groundwater extraction with the 2,000-foot consultation zone (Dudek 2024a).

As described in Chapter 10, "Hydrology and Water Quality," on-site groundwater in older Mesozoic bedrock that could be used to supply the project's 10.5 AFY operational water demand would not result in land subsidence, would not result in adverse effects on groundwater dependent ecosystems, and would not result in substantial depletion of groundwater storage or groundwater level drawdown at nearby wells. Therefore, the project's operational groundwater needs (10.5 AFY over a 35-year period) can be met by on-site groundwater without adverse effects to the sustainable yield of the South American Subbasin or neighboring wells in the Mesozoic bedrock units. Therefore, the project's impact from yearly operational groundwater demands is considered **less than significant**.

Off-site sources of groundwater to meet the project's construction and decommissioning water demands (253 AFY for both construction [18-month period] and decommissioning [12-month period]) have been identified as using imported water via water trucks from the SCWA or Sloughhouse Solar Project wells (Dudek 2024b, Dudek 2024c, SWCA 2024). As indicated in personal communication between Sacramento County and SCWA, SCWA provides water to local contractors for

construction needs through fill stations where the contractor pays for the water. These fill stations are included in SCWA's water supply master plan and supporting groundwater sustainability plan for the groundwater basin and SCWA could provide 253 AFY for both construction and decommissioning for the proposed project (personal communication, SCWA 2024). Additionally, in a memorandum prepared for the proposed project regarding the use of groundwater from the Sloughhouse Solar Project wells, it was concluded that the Sloughhouse Solar Project wells would have adequate yield to supply the required 253 AFY of water for construction and decommissioning activities for the proposed project. As indicated in that memorandum, the per-acre groundwater use is 0.65 AFY per acre within the Cosumnes Subbasin. Under sustainable conditions, assuming the estimated overdraft of 10,000 AFY, the sustainable per-acre groundwater use within the Cosumnes Subbasin would be approximately 0.60 AFY per acre. The 253 AF, one-year extraction is approximately 0.31 AF per acre, about half of the Cosumnes Subbasin per-acre sustainable use (Dudek 2024c).

No new transmission pipelines would be constructed as part of the proposed project. The proposed project would not require or result in the relocation or construction of new or expanded water treatment facilities. Please see Chapter 10, "Hydrology and Water Quality," of this EIR for the additional analysis related to water supply.

WASTEWATER FACILITIES

The proposed project may include the construction of permanent restroom facilities. If restroom facilities were installed, an on-site septic system would be required and the applicant would be required to follow the County Department of Environmental Management's (2021) septic system permitting process, which, at the project site, would require a site-specific soils investigation, the results of which would be used to inform an engineered septic design that meets County requirements to protect human health and the environment. The proposed project would not require or result in the relocation or construction of new or expanded wastewater collection beyond a small on-site septic system, conveyance, or treatment facilities.

STORMWATER DRAINAGE

On-site drainage facilities would be required in order to comply with County and Central Valley RWQCB requirements to appropriately retain/detain stormwater runoff. Please see Chapter 10, "Hydrology and Water Quality," of this EIR for the analysis related to stormwater drainage.

ELECTRIC POWER

The proposed project is a solar facility that would include arrays of solar PV modules and support structures, inverters to convert direct current electricity to alternating current electricity, power transformers, an on-site substation and switchyard, battery energy storage facilities, and a gen-tie line to generate and distribute electricity. Permanent electrical service for lighting would be provided by SMUD.

The energy from the solar energy generation and energy storage systems would be transported from the on-site substation to SMUD's 230-kV powerlines. The route of the gen-tie line would extend approximately 1.3 miles from the facility's on-site substation to the western terminus of the gen-tie line where it would interconnect into SMUD facilities (see Plate PD-2 and Plate PD-4 in Chapter 2, "Project Description"). The gen-tie line would use existing dirt and paved access roads where available, but improvements, such as widening or clearing existing dirt roads, and new road sections may be required for construction. These areas would be restored after construction is completed.

TELECOMMUNICATIONS FACILITIES

The project would utilize telephone and internet services provided via overhead or underground lines, microwave tower, or via cellular service obtained from a local provider. The communication system may include above or below ground fiber optic cable. No relocations of existing telecommunication structures would occur.

CONCLUSION

The proposed project would not include new development that requires new or expanded water, wastewater treatment, or natural gas facilities. Construction of the on-site drainage system and electrical and telecommunications facilities would result in physical environmental impacts that are addressed in each technical section of this document, as appropriate. Where development of the proposed project would result in potentially significant or significant environmental impacts, mitigation measures are identified to reduce those impacts to less-than-significant levels. There are no additional potentially significant or significant impacts associated with construction of the proposed project beyond those comprehensively addressed throughout the other sections and chapters of this document. Therefore, impacts related to relocation of or new or expanded utility infrastructure would be **less than significant**.

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

A water supply assessment (WSA) was prepared by Dudek (2024) for the proposed project to determine whether the projected available water supplies would meet the proposed project's water demand. Per the assessment conducted in the WSA, the estimated water demand of the construction and operational phases of the project is insubstantial compared to the proposed groundwater source and the surplus water anticipated by the SCWA. Groundwater supply is buffered from short-term impacts of wet and dry climate cycles, and therefore the project's groundwater supply would remain largely unaffected by the proposed project in normal-year, single-dry-year, and multiple-dry-year conditions over the 20-year projection. The proposed project would require water for use during construction, operations, and decommissioning, as shown in Table SI-4.

Table SI-4: Groundwater Demand for Proposed Solar Facilities

Time Period	Estimated Water Demand
Construction (18 months)	253 AF
Operation and Maintenance (35 years)	10.5 AFY
Decommissioning Phase (12 months)	253 AF
Total Project Water Demand	516.5 AF
Total Solar Facilities Water Demand Amortized Over 20 Years¹	22.4 AFY
Total Solar Facilities Water Demand Amortized Over 35-Year Project Life	24.5 AFY

Notes:

AF = acre feet; SB = Senate Bill

¹ Based on the 20-year timeframe specified by SB 610; does not include decommissioning water demand since the solar facilities would still be operational at the end of that time.

Source: Dudek 2024a

As summarized in the Groundwater Study (included as Appendix HYD-1), previous well yield studies included borehole testing in the older Mesozoic bedrocks units at the project site. The results indicated that although initial groundwater level depths were generally shallow (groundwater was obtained relatively near the surface), the drawdowns for the given pumping rates indicated relatively low specific capacities (meaning the well yields were low). The project's annual operational demand of 10.5 AFY equates to approximately 6.6 gallons per minute, and therefore the Groundwater Study concluded that one or more of the sample boreholes that were previously drilled on the project site in the Mesozoic bedrock units would be able to support the project's yearly operational demand of 10.5 AFY, but would not support the project's construction and decommissioning demand (i.e., 253 AF each) (Dudek 2024a).

Therefore, the Groundwater Study assumed that water to meet the project's demands for construction and decommissioning (253 AF each) would be from groundwater obtained from Sloughhouse Solar Project wells or the Sacramento County Water Agency (SCWA), or a combination of the two sources (Dudek 2024b, Dudek 2024c, and SWCA 2024). Due to data gaps regarding on-site hydrogeology and the potential lack of on-site groundwater availability, water demands for construction and decommissioning (253 AF each) were not assumed to be provided by existing on-site groundwater wells. As explained in the Groundwater Study, additional data and analysis would be required to accurately assess the availability of on-site groundwater for construction and decommissioning (Dudek 2024b). Additionally, as discussed in Chapter 9, "Hazards and Hazardous Materials", and the Groundwater Study prepared for the proposed project, the proposed project would not source groundwater from any area subject to restrictions of the EPA and the SWRCB on groundwater applicable to the Aerojet Superfund remediation site and operable units, including groundwater extraction with the 2,000-foot consultation zone (Dudek 2024a).

The WSA describes that the project proponent would rely on SCWA and/or groundwater imported from the Sloughhouse Solar Project for the construction and

decommissioning phases of the proposed project. A separate memorandum was prepared by Dudek (2024) to evaluate the impacts of extracting 253 AF in a single year from a single Sloughhouse Solar well. Per the memorandum, groundwater well records kept by the Department of Water Resources indicate that the historical Sloughhouse Solar on-site groundwater well yields greater than 1,000 gallons per minute (gpm) and typical yields in excess of 650 gpm throughout the Cosumnes Subbasin, a more than adequate yield for that required to supply the project's construction water demand over 12 months (12 months is a conservative assumption, as construction of the proposed project would occur over 18 months).

The Sloughhouse Solar Project water would be used for the construction and decommissioning phases only, if necessary. Given the results of the WSA, Groundwater Study, and Sloughhouse Solar Project Water Memorandum prepared by Dudek, the analysis is sufficient to demonstrate water availability over the proposed lifetime of the project, as well as the SB 610 mandated 20-year projection. The WSA analysis shows that the above-mentioned sources can supply the project's water demand. Based on the analysis above, the project would have no significant effect on the identified water sources over the project's 35-year life. In addition, the project is consistent with the SGMA and the Basin GSP because the project's water demand would not materially impact the sustainability goals, undesirable results, minimum thresholds, or measurable objectives of the GSP. Hence this impact would be **less than significant**.

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

The proposed project would be operated remotely, with no dedicated on-site staff. The proposed project may include construction of permanent restrooms for use of employees during the project's operational phase. If restroom facilities were installed, an on-site septic system would be required, and the applicant would be required to follow the County Department of Environmental Management's (2021) septic system permitting process and would not tie into an existing wastewater treatment facility. Therefore, the proposed project would not result in a determination that a wastewater treatment provider has inadequate capacity to serve the project's demand in addition to the provider's existing commitments. **No impact** would occur.

4. 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.

Construction of the proposed project would require site preparation and clearing/grading, tree removal, and underground work (trenching) and generation of various construction-period wastes, cardboard, wood pallets, copper wire, scrap metal, common trash, and wood wire spools. In addition, approximately 7,500 cubic yards of excess grading material would require off-site disposal. Preliminarily, the Ward Borrow site has been identified as a suitable location for disposal of the excess

grading material. The Ward Borrow site is located approximately six miles south of the project site and is a permitted and approved mining operation authorized through California Dept of Conservation, Division of Mine Reclamation.

The California Green Building Standards Code (CALGreen) (Title 24, Part 11 of the California Code of Regulations) requires all construction contractors to reduce construction waste and demolition debris by 65 percent.³ Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials would be sorted on-site or mixed; and identifying diversion facilities where the materials collected would be taken. The code also specifies that the amount of materials diverted should be calculated by weight or volume, but not by both. In addition, CALGreen requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

In addition, Sacramento County requires construction contractors to comply with its Construction and Demolition Debris Program (Article 6, Chapter 6.20 of the Sacramento County Code). Under this program, as part of a building permit application, project applicants must complete a waste management plan that identifies the types of waste materials; the manner in which debris would be managed on-site; the volume of construction/demolition debris that would be recycled, sent to a landfill, or reused; how the materials would be transported (i.e., franchised hauler, independent recycler, or self-hauling); and the County-certified receiving and sorting facility that would be used.

During the operations phase, minimal amounts of solid waste would be generated by staff during periodic maintenance activities, and this solid waste would be collected and transported to a licensed off-site landfill or recycling facility for disposal.

At the end of the project's operational life, decommissioning would occur in accordance with Sacramento County's decommissioning requirements as documented in an approved decommissioning plan. Project components that are no longer needed would be removed from the site and recycled or abandoned in place for all underground conductors. The majority of glass and steel would be processed for transportation and delivery to an off-site recycling center. All steel, aluminum, and copper would be recycled, and panels would be recycled in accordance with the PV manufacturer recycling program. The concrete to a minimum of 12 inches below grade, foundation, and parking area would be broken up and removed from the site to an appropriately licensed disposal facility. Transformers using insulating oils would be

³ The most recent standards included California Green Building Standards Code (CALGreen Code) (Title 24, Part 11 of the California Code of Regulations) became effective on January 1, 2023. The CALGreen Code was developed to enhance the design and construction of buildings, and the use of sustainable construction practices, through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental air quality (California Building Standards Commission 2022).

removed from the site and recycled or disposed of at an appropriately licensed disposal facility. Similar to construction, contractors would be required to comply with the most recently adopted CALGreen standards and Sacramento County Code.

The Florin-Perkins Public Disposal Transfer/Processing Facility, Sierra Waste Recycling and Transfer Station, and L and D Landfill have been certified as Construction and Demolition Debris Sorting Facilities by Sacramento County (Sacramento County 2024). Both the Florin-Perkins Public Disposal Transfer/Processing Facility and Sierra Waste Recycling and Transfer Station have maximum permitted throughputs of 1,000 tons per day, and the L and D Landfill Transfer and Processing Facility has a maximum permitted throughput of 4,125 tons per day (CalRecycle 2024a, 2024b, 2024c).

Non-recyclable materials could be disposed of at Kiefer Landfill or L and D Landfill. Kiefer Landfill is classified as a Class III municipal solid waste landfill facility and is permitted to accept general residential, commercial, and industrial refuse for disposal, including municipal solid waste, construction and demolition debris, asbestos, green materials, and other nonhazardous designated debris (CalRecycle 2024c). L and D Landfill is classified as a Class II and III landfill that is permitted to accept municipal solid waste, construction and demolition debris, green materials, clean and dirty concrete, clean soil, appliances, and electronic waste (L and D Landfill 2024).

Table SI-5 shows the maximum capacity, remaining capacity, and closure date of the Kiefer Landfill and L and D Landfill. Combined, these landfills have a large volume of landfill capacity (116 million cubic yards) available to serve the proposed project. The closure dates of the Kiefer Landfill and L and D Landfill are anticipated to be approximately January 1, 2064, and December 31, 2030, respectively.

Table SI-5: Primary Landfills

Facility (County)	Location	Capacity
Kiefer Landfill (Sacramento County)	12701 Kiefer Boulevard Sloughhouse, CA 95683	Maximum permitted capacity: 117.4 million cubic yards Remaining capacity: 112.9 million cubic yards Closure date: January 1, 2064
L and D Landfill (Sacramento County)	8635 Fruitridge Road Sacramento, CA 95826	Maximum permitted capacity: 20.5 million cubic yards Remaining capacity: 3.1 million cubic yards Closure date: December 31, 2030

Sources: CalRecycle 2024c, 2024d

The proposed project would be required to comply with all applicable federal, State, and local solid waste statutes and regulations, including compliance with the CALGreen Code and the County's Construction and Demolition Debris program. The Kiefer Landfill and L and D Landfill have sufficient landfill capacity available to accommodate the solid-waste disposal of the proposed project. Therefore, impacts related to sufficient landfill capacity would be **less than significant**.

5. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

As discussed above under Item 4, the proposed project would comply with all applicable solid waste statutes and regulations, including CALGreen and Article 6 (Construction and Demolition Debris) of Chapter 6.20, Title 6, of the Sacramento County Code. **No impact** would occur.

CUMULATIVE IMPACTS AND ANALYSIS

INTRODUCTION AND LIST OF CUMULATIVE RELATED PROJECTS

The CEQA Guidelines Section 15355 defines a cumulative impact as “two or more individual effects which, when considered together, are considerable.” An individual effect need not itself be significant to result in significant cumulative effects; the impact is the result of the incremental effects of the project combined with the effects of “other closely related past, present, and reasonably foreseeable probable future projects.”

The requirements for a cumulative analysis are described in CEQA Guidelines Section 15130. A cumulative analysis “need not provide as great detail as is provided for the effects attributable to the project alone.” The analysis should focus on analyzing the effects of the project to which other projects contribute, to the extent practical and reasonable. These other projects may be identified either through the provision of a list of cumulative projects, or via a summary of projections contained in an adopted General Plan or an adopted EIR. The proposed project area is rural in nature and located outside the Urban Services Boundary of the General Plan where future development is focused. This EIR uses the list approach to analyze the potential cumulative impacts of other reasonably foreseeable projects and the contribution to such impacts from the proposed project. The analysis of the cumulative effects of the project also takes into consideration the effects of the covered activities described in the South Sacramento Habitat Conservation Plan (SSHCP) EIR. The significance criteria used for this analysis are the same as those used throughout the topical chapters of this document.

The cumulative related projects within a 5-mile radius of the project site that are considered in the cumulative analysis are listed in Table SI-6 below.⁴

⁴ In addition to one solar project that is beyond this five-mile distance.

Table SI-6: Cumulative Related Projects

Project No.	Project Name (County Control Number)	Location	Description	Status
Unincorporated Sacramento County				
1	Prairie City State Vehicular Recreation Area Proposed Road and Trail Management Plan (Approximately 3.5 miles away from project site)	South of White Rock Road, between Sunrise Boulevard and Prairie City Road	The Prairie City State Vehicle Recreation Area (SVRA) Road and Trail Management Plan (RTMP) provides a specific and detailed management direction for the off-highway vehicle (OHV) route systems within nine management areas in Prairie City SVRA, guiding their future development, operation and maintenance. Future development under the RTMP would design, construct, and maintain sustainable routes, trails, and related facilities for OHV use consistent with relevant guidelines and regulations. Nonmotorized trails for mountain biking and hiking are also proposed in the RTMP.	IS/MND submitted Aug 2024
2	Cordova Hills (PLNP2008-00142) (Approximately 3.9 miles away from project site)	4715 Grant Line Road, Rancho Cordova, CA 95742	A 2,669-acre urban development area east and adjacent to Rancho Cordova.	Under Construction
3	Grant Line East Mine Use Permit Amendment (PLNP2021-00135 and 95-0658) (Approximately 3 miles away from project site)	3500 Grant Line Road, Rancho Cordova, CA 95742	Extend existing aggregate mining operations through July 2046. No new or expanded activities are proposed	In Planning Process
4	13333 White Rock Road Cell Tower Modification (PLNR2022-00018) (Approximately 2.65 miles away from project site)	13333 White Rock Rd, Rancho Cordova, CA 95742	An Eligible Facilities Request for modifications to an existing wireless facility located at 13333 White Rock Road in the Cosumnes community.	Closed

Project No.	Project Name (County Control Number)	Location	Description	Status
5	White Rock North Mine Project (Approximately 3.8 miles away from project site)	12520 Folsom Blvd, Rancho Cordova, CA 95742	Implementation Permit pursuant to the Aerojet SPA, Reclamation Plan, and Use Permit and Development Agreement for surface mining over a 20-year period on a 2,125-acre portion of the Aerojet campus, located between Folsom Blvd and White Rock Road in the County.	Pre-Application
6	Aerojet Special Planning Area Amendment (Approximately 3 miles away from project site)	13000 White Rock Rd, Rancho Cordova, CA 95742	A Zoning Ordinance Amendment to add an M-1 zoned property to the Aerojet SPA and establish a landfill use for the property.	Pending
7	Oveja Ranch Solar Project (Approximately 8 miles southwest of the project site)	South of Florin Road, northwest of Grant Line Road, and west of Eagles Nest Road	A photovoltaic (PV) solar power and battery storage facility on a 400-acre project site in southern Sacramento County to provide 75 megawatts (MW) of power to the grid. In addition to a PV solar power and battery storage facility, the project would include a generation substation and interconnection lines to the grid. At the end of the project's life (30-35 years), the site would be decommissioned.	Notice of Preparation of an EIR issued and draft environmental impact report under preparation
8	South Sacramento Habitat Conservation Plan (SSHCP)	The SSHCP encompasses a 317,000-acre area in south Sacramento County	The SSHCP encompasses a 317,000-acre area in south Sacramento County and its purpose is to streamline federal and state permitting for development and infrastructure projects while conserving habitat. The Plan includes Clean Water Act permits issued by the Army Corps of Engineers and Endangered Species Act permits issued by the U.S. Fish and Wildlife Service (USFWS). Instead of permitting through several separate state and federal agencies, most actions in the Plan Area can be permitted through the County Office of Planning and Environmental Review.	Approved

Project No.	Project Name (County Control Number)	Location	Description	Status
<u>9</u>	<u>Mather South Community Master Plan</u>	<u>848 acres that is generally bounded by the Mather Golf Course and Mather Lake to the north, the Folsom South Canal to the east, Kiefer Boulevard to the south and the Mather Preserve and Zinfandel Drive to the west</u>	<u>Development proposes 3,522 residential dwelling units, a 28-acre Environmental Education Campus, a 21-acre Research and Development Campus, 21 acres of commercial retail, 43 acres of parkland, and 210 acres of open space.</u>	<u>Approved 2020</u>
<u>10</u>	<u>NewBridge Specific Plan</u>	<u>Bounded on the east by Sunrise Boulevard, to the south by Jackson Road, to the north by Kiefer Boulevard, and the west boundary is 2,000 feet west of Eagles Nest Road.</u>	<u>Proposes 1,095 acres of residential, commercial, public/quasi public development and parks and open space.</u>	<u>Approved 2020</u>
<u>11</u>	<u>Sloughhouse Solar Project</u>	<u>South of Jackson Highway, southeast of the Cosumnes River, west of Dillard Road, and south of Meiss Road in the Cosumnes community</u>	<u>50-megawatt (MW) solar energy facility on an approximately 380- acre project site</u>	<u>Approved 2024, in construction</u>
City of Rancho Cordova				
9	Juniper Creek Energy Storage Project (Approximately 4.5 miles away from project site)	APN 067-0780-011-0000	200-megawatt Battery Energy Storage System (BESS) project	MND submitted 2023, Construction to last 12-months, operational by end of 2025

Project No.	Project Name (County Control Number)	Location	Description	Status
10	Grant Line Road Safety & Freight Mobility Project (part of Capital SouthEast Connector: D2 Expressway project) (Approximately 3 miles away from project site)	Grant Line Road between Douglas Road and White Rock Road	Reconstruct and widen Grant Line Road from two lanes to four lanes between Douglas Road and White Rock Road and signalize the Raymer Way intersection	Design underway
11	Grantline 208 Elementary School (Approximately 4 miles away from project site)	APN 067-1080-007	Project elements include classroom buildings, kindergarten building, multi-purpose building, library, administration building, hard courts, playgrounds, fields, parking areas, pickup and drop-off areas, and related school signage, crosswalks, and pedestrian improvements.	MND submitted, construction to start March 2025 lasting 1-year.
12	Heritage Falls Specific Plan (Approximately 3.5 miles away from project site)	West of Grant Line Road approximately 0.75 miles south of White Rock Road and approximately 0.80 miles north of Douglas Road within the City of Rancho Cordova	Rezone to change the project site's zoning designation from AG-80 (Agricultural) and IR (Industrial Reserve) to Residential and Public/Open Space designations. The applicant has also requested approval of a tentative subdivision map	IS completed in 2008 No construction yet
13	North Douglas II Specific Plan (Approximately 3.5 miles away from project site)	Approximately 0.8 miles north of Douglas Road and 0.6 miles west of Grant Line Road	The proposed project involves a rezone, tentative subdivision map, special development permit, design review, and development agreement. The site consists of approximately 41.5 acres which would be rezoned from AG-80 (Agricultural) to 15.8 acres of RD-10 (low density residential) and 25.7 acres of O (Open Space). The tentative subdivision map would create 153 single family homes, pedestrian paseos, a neighborhood park, open space, and a wetland preserve.	MND completed in 2006. No construction yet.

Project No.	Project Name (County Control Number)	Location	Description	Status
14	Sun Creek Specific Plan (Approximately 4.8 miles away from project site)	Located in southern Rancho Cordova	Development of approximately 1,264 acres. Sunrise Boulevard bounds the Plan Area on the west and Grantline Road bounds it on the east. The future extension of Chrysanthy Boulevard will form the north boundary of the eastern most portion of the plan, and Kiefer Boulevard runs east to west through the Plan Area.	Approved
15	Sunridge Specific Plan (Approximately 4.8 miles away from project site)	Located in southern Rancho Cordova	2,606 acres south of Douglas Road, east of Sunrise Boulevard, and north of Grantline Road	Completed
16	Westborough at Easton Specific Plan (Approximately 5 miles west of the project site)	Approximately 1,550 acres of land area along the eastern edge of Rancho Cordova, and south of the American River, Highway 50, Folsom Boulevard, and the Folsom South Canal	The Specific Plan proposes 7,130 residential units, approximately 340 acres of commercial uses, three schools, approximately 83 acres of parks, approximately 17 acres of neighborhood green space, approximately 260 acres of open space, and approximately 57 acres of preserve land for sensitive biological species.	Notice of Preparation of an EIR issued and draft environmental impact report under preparation
City of Folsom				
17	Folsom Plan Area Specific Plan (Approximately 4.9 miles away from project site)	Located in southern Folsom	Mixed use development in the approximately 3,500-acre Folsom South of U.S. 50 Specific Plan area	Under Construction
<u>Unincorporated El Dorado County</u>				
<u>1</u>	<u>Creekside Village Specific Plan</u>	<u>West of Latrobe Road, south of Investment Boulevard, directly adjacent to the southern boundary of the El Dorado Hills Business Park, appropriately four miles east of the proposed project site</u>	<u>918 acres of primarily low-density residential development, with other residential development, retail, parks, and open space</u>	<u>Draft EIR</u>

Project No.	Project Name (County Control Number)	Location	Description	Status
<u>2</u>	<u>Community for Health and Independence Project</u>	<u>South of the City of Folsom and on either side of the El Dorado-Sacramento County line</u>	<u>1,416 acres of primarily residential development, with some commercial development and parks and open space</u>	<u>Pre-application</u>
<u>3</u>	<u>Gateway Specific Plan</u>	<u>East of Latrobe Road and north of U.S. Highway 50</u>	<u>97.74 acres of research and development, commercial, multi-family residential development and parks and open space</u>	<u>Processing</u>

Sources:

City of Rancho Cordova (<https://www.cityofranhocordova.org/departments/community-development/planning/planning-division-document-library>)

City of Folsom (<https://www.folsom.ca.us/government/community-development/planning-services/folsom-plan-area>)

CEQAnet (<https://ceqanet.opr.ca.gov/>)

El Dorado County: <https://edhapac.org/documents/gateway-el-dorado-specific-plan-pre-app-pa24-0009/>.

CUMULATIVE IMPACT ANALYSIS METHODOLOGY

Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. CEQA Guidelines Section 15130(a)(3) states that an EIR may determine that a project's contribution to a significant cumulative impact would be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency shall identify facts and analysis supporting its conclusion that the contribution would be rendered less than cumulatively considerable.

For purposes of this EIR, the project would have a significant cumulative effect if it meets either one of the following criteria:

- The cumulative effects of related projects (past, current, and probable future projects) without the project are not significant but the project's incremental impact is substantial enough, when added to the cumulative effects, to result in a significant impact; or
- The cumulative effects of related projects (past, current, and probable future projects) without the project are already significant and the project represents a considerable contribution to the already significant effect. The standards used herein to determine "considerable contribution" are that the impact either is substantial or exceeds an established threshold of significance.

The analysis herein evaluates whether, after adoption of project-specific mitigation, the residual impacts of the project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects.

CUMULATIVE IMPACT ANALYSIS

AESTHETICS

In order for a cumulatively significant impact related to degradation of visual character or quality to occur, one or more of the related projects considered in this cumulative analysis would have to be located within the viewshed of the proposed project site with the exception of the implementation. None of the projects considered in this cumulative analysis would introduce any features that would be prominently visible from the project site. Thus, there would be **no cumulative impact** related to degradation of visual character or quality.

Light spillover can result in nighttime glare effects, and also contributes to a decrease in views of the night sky. Nighttime lighting in the project vicinity is limited, emanating solely from the Prairie City State Vehicular Recreation Area and motor vehicle headlights on Scott Road. New nighttime lighting associated with the related cumulative projects is distant from the project site and any nighttime glare associated with the related cumulative projects would not be visible from the project site. New nighttime lighting associated with some of the related projects considered in this cumulative analysis would contribute to a regional decrease in the ability to view the night sky (skyglow effects). Therefore, the related projects would result in a significant cumulative impact from new sources of nighttime lighting. The project's operational phase would require only minor nighttime security lighting at the substation, office, and battery storage buildings. Nighttime operational lighting at the project site would be motion-activated, shielded, and oriented to focus illumination on the desired areas, thereby minimizing light spillover. Therefore, the project's operational nighttime lighting would result in a **less-than-cumulatively-considerable contribution** to the cumulatively significant impact from new sources of substantial skyglow.

Nighttime lighting is frequently necessary during construction of larger projects, and may be necessary for one or more of the related projects considered in this cumulative analysis. However, for a cumulative impact to occur, nighttime lighting associated with related cumulative projects would have to be present either at the same time or in the same locations at the proposed project. As noted above, none of the related cumulative projects propose features that would be visible from the project site. Thus, there would be **no cumulative impact** related to disturbance from nighttime construction lighting.

Large arrays of PV panels have the potential to result in substantial daytime glare from reflected sunlight, which can cause visual discomfort or retinal damage for nearby viewers and interfere with aircraft operations (depending on the direction of flight in relationship to PV panel orientation). A glare analysis performed for the project found that the proposed PV arrays at the project site would not result in hazardous glare. Dudek performed a glare analysis for the proposed project (Dudek 2023) and as described in Chapter 3, "Aesthetics," the modeling results demonstrated that the proposed solar panels would not result in hazardous glare (i.e., the potential for after-images in human vision) from any of the proposed solar panel arrays at any of the modeled receptors. The

related cumulative projects listed in Table SI-6 would not create substantial sources of glare and therefore there is **no significant cumulative glare impact**.

AGRICULTURAL RESOURCES

The proposed project would not conflict with, and no impact would occur to the following agricultural resources topics: existing zoning for agricultural use, existing Williamson Act contract, existing zoning for or cause rezoning of forest land, timberland, or zoned timberland production, result in the loss of forest land or conversion of forest land to non-forest use, or indirectly result in the conversion of agricultural land to non-agricultural use. Therefore, the project would have no potential to combine with the cumulative projects listed in Table SI-6 above to result in a significant physical environmental impact related to these topics. Thus, there would be **no cumulative impact** related to these agricultural resources topics.

As discussed in Chapter 4, "Agricultural Resources", there are approximately 1,412 acres of existing livestock (sheep and cattle) grazing land that would be used for new solar generating facilities at the proposed project site. Sacramento County General Plan Policy AG-5 states there is an impact to farmland if a project converts over 50 acres to a non-agricultural use. While the applicant proposes to maintain the site in grazing during operation of the facility, should grazing be discontinued or the site is otherwise converted to a non-agricultural use, the impacts would be potentially significant based on Sacramento County General Plan Policy AG-5. The applicant would be required to implement Mitigation Measure AG-1 (Implement the Agricultural Management Plan) which would reduce project-related impacts related to the conversion of agricultural resources to non-agricultural use since it would require continued agricultural use (i.e., grazing) of the project site through the operational life of the project and maintain the site's soil characteristics. Additionally, after decommissioning of the proposed project is complete, the site would be required to be restored to agricultural land in accordance with Sacramento County's decommissioning requirements. In Sacramento County, any project that would convert over 50 acres of farmland to non-agricultural use would be required to mitigate the loss, per the Sacramento County General Plan Agricultural Element, Policy AG-5. The related cumulative projects would be required to comply with this policy and implement mitigation measures as required by the General Plan to reduce impacts related to the conversion of agricultural land to non-agricultural use, which would reduce the significant cumulative impact. With implementation of Mitigation Measure AG-1, the proposed project result in a **less-than-cumulatively-considerable contribution** to cumulative impacts related to the conversion of agricultural land to non-agricultural use.

AIR QUALITY

The geographic scope for the cumulative analysis of air quality impacts is considered to be the Sacramento Valley Air Basin (SVAB). It is appropriate to consider the entire air basin because air emissions can travel substantial distances and are not confined by jurisdictional boundaries; rather, they are influenced by large-scale climatic and topographical features.

As discussed in Chapter 5, “Air Quality”, the Sacramento Metropolitan Air Quality Management District’s (SMAQMD’s) CEQA Guide contains guidance for analyzing construction and operational impacts. As described in the SMAQMD CEQA Guide, the SMAQMD approach to thresholds of significance is key to determining whether a project’s individual emissions would result in a cumulatively considerable adverse contribution to the SVAB’s existing air quality conditions (SMAQMD 2021). Sacramento County is currently in nonattainment for ozone and PM₁₀ with respect to the California Ambient Air Quality Standards, and in nonattainment for ozone and PM_{2.5} with respect to the National Ambient Air Quality Standards. As such, a significant cumulative adverse air quality impact exists within Sacramento County with respect to ozone precursors (i.e., oxides of nitrogen [NO_x] and reactive organic gases [ROG]) and particulate matter (i.e., PM₁₀ and PM_{2.5}).

As described in Chapter 5, project construction and decommissioning activities would result in NO_x and PM₁₀ emissions that would exceed SMAQMD-recommended threshold of significance for NO_x and the non-zero threshold for PM₁₀. Mitigation Measures AQ-2a (Implement Basic Construction Emission Control Practices [Best Management Practices] and Enhanced Fugitive PM Dust Control Practices during Construction and Decommissioning), AQ-2b (Reduce Off-Road Equipment Exhaust-Related Emissions during Construction and Decommissioning), AQ-2c (Submit Construction and Decommissioning Emissions Control Plans), AQ-2d (Off-site Construction and Decommissioning Mitigation), and AQ-2e (Implement Best Management Practices for Reducing Operational PM Emissions) would reduce construction- and decommissioning-related emission and would ensure additional off-site mitigation through participation in the SMAQMD’s off-site mitigation fee program in the case that emissions would still exceed the SMAQMD thresholds. Therefore, with implementation of Mitigation Measures AQ-2a through AQ-2e, construction- and decommissioning-related emissions would be reduced to a level below the thresholds of significance and the proposed project’s contribution to the significant cumulative impact would **be less than cumulatively considerable**.

As described in Chapter 5, operation of the proposed project would generate PM emissions that would exceed SMAQMD’s zero threshold for PM emissions; therefore, implementation of Mitigation Measure AQ-2e (Implement Best Management Practices for Reducing Operational PM Emissions) would be required in order to use the SMAQMD non-zero thresholds of significance for operational PM emissions. With implementation of Mitigation Measure AQ-2e, the proposed project’s operational PM emissions would not exceed the applicable PM project-level thresholds and would **be less than cumulatively considerable**.

Based on CGS Special Publication 192 and the SMAQMD’s applicability map, portions of the project site likely contain NOA and have already been delineated by SMAQMD as parcels that are subject to CARB’s ATCM for Construction, Grading, Quarrying and Surface Mining Operations (see Plate AQ-1), unless it is demonstrated by a geotechnical report that NOA is not present. Other areas of the project site (shown in orange on Plate AQ-1) may also contain NOA, and if so, would also be subject to the ATCM. As shown on Plate AQ-1, areas surrounding the project site, including where some of the cumulative

projects listed in Table SI-6 may also be located, would be in areas subject to CARB's ATCM for Construction, Grading, Quarrying, and Surface Mining Operations. The proposed project would implement Mitigation Measure AQ-3a (Site Investigation for Potential Naturally Occurring Asbestos) and cumulative projects in the area would be required to implement similar mitigation measures to be in compliance with CARB's ATCM. Implementation of Mitigation Measure AQ-3a (and similar measures) would reduce human health hazards associated with generation of fugitive dust that potentially contains NOA. If the site investigation determines that NOA is present on the project site, then implementation of a District-approved dust mitigation plan would reduce the impact from human health hazards related to generation of airborne NOA during construction or decommissioning. Cumulative projects that are located in areas that contain NOA would also be subject to similar measures required by CARB's ATCM. Therefore, the proposed project would result in a **less-than-cumulatively-considerable contribution** to any cumulative impact related to airborne asbestos.

BIOLOGICAL RESOURCES

This cumulative impact analysis evaluates the contribution of the project to the collective impact on the environment from implementation of the project combined with other related past, present, and reasonably foreseeable projects that could affect similar biological resources. For species and resources for which modeled suitable habitat data are available from the SSHCP, a "regional project analysis area" consisting of the northeastern portion of the SSHCP Plan Area (i.e., Preserve Planning Units 1 and 5 and the portion of the SSHCP Plan Area in between) was used to evaluate the impact context for biological resources (see Chapter 6, "Biological Resources," of this EIR for more detail). The Preserve Planning Units are spatially representative of regional biological resources, with each Preserve Planning Unit capturing specific habitats and areas of importance for a suite of species characteristic of that portion of the SSHCP Plan Area.

The following rare plants were observed during project surveys in 2023 and 2024 within and near the solar development area that could be affected by project activities: spiked western rosinweed, valley brodiaea, Ahart's dwarf rush, and pincushion navarretia. Implementation of grazing regimes or other vegetation management actions as part of the Agricultural Management Plan (see Mitigation Measure AG-1), if incompatible with the life cycle of spiked western rosinweed, could reduce the long-term persistence of this species on the site. The proposed project would impact approximately 44–~~25~~**25** percent of documented occurrences across its currently known range, this would be considered a potentially significant impact. However, Mitigation Measure BR-1b (Avoid, Minimize, and Mitigate for Impacts on Special-Status Plants) would avoid, minimize, and mitigate impacts on special-status plants, ensuring a **less-than-cumulatively considerable contribution** to the cumulative impact on rare plants of past, present, and future development.

The proposed project would impact upland and aquatic habitat for Western Spadefoot, including approximately 289 acres (1.19 percent) of impacts within the Mather Core Recovery Area. Implementation of Mitigation Measure BR-1c (Avoid, Minimize, and Mitigate for Impacts on Western Spadefoot) would avoid, minimize, and mitigate for

impacts to this species, and the project would have a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

The proposed project's temporary and permanent impacts from the proposed project represent less than 1 percent of suitable aquatic habitat (981 acres) and approximately 3 percent of suitable upland habitat (42,743 acres) for Northwestern Pond Turtle in the regional project analysis area, and implementation of BR-1d (Avoid, Minimize, and Mitigate for Impacts on Northwestern Pond Turtle) would avoid, minimize, and mitigate any impact to individuals, ensuring a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

The proposed project would remove approximately 1,064 acres of suitable nesting/foraging habitat for burrowing owl, which represents approximately 2 percent of suitable habitat (59,433 acres) for this species in the regional project analysis area. Implementation of BR-1e (Avoid, Minimize, and Mitigate for Impacts on Western Burrowing Owl and Occupied Nesting Habitat) would avoid, minimize, and mitigate for impacts to this species, and the project would have a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

The proposed project would result in approximately 911 acres of permanent loss of foraging habitat for Swainson's hawk (Table BR-10), representing 2 percent of 57,088 acres of foraging habitat potentially available to this species in the regional project analysis area. Compliance with the Sacramento County Swainson's Hawk Ordinance would require the project to mitigate for this permanent loss of foraging habitat at no net loss of the existing foraging habitat value and Mitigation Measure BR-1f (Avoid, Minimize, and Mitigate for Impacts on Swainson's Hawk and Their Nesting and Foraging Habitat) would further avoid impacts to individuals, ensuring that the proposed project would have a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

The proposed project could impact tricolored blackbird through the temporary or permanent removal of habitat and while implementation of the Agricultural Management Plan would preclude re-establishment of the small amount of nesting habitat impacted in the solar development area, it would restore areas of temporary impact to grasslands that would be expected to retain foraging habitat value for this species throughout operations. However, Mitigation Measures AG-1 (Implement the Agricultural Management Plan), BR-1a (Implement Construction Best Management Practices to Avoid and Minimize Potential for Construction-Related Impacts on Special-Status Plants and Wildlife), and BR-1g (Avoid, Minimize, and Mitigate for Impacts on Tricolored Blackbird) would mitigate impacts to habitat and avoid, minimize, and mitigate for impacts on tricolored blackbird, and would ensure a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

Valley elderberry longhorn beetle has not been previously documented within the project site. However, five occurrences have been recorded within five miles, and there are

elderberry shrubs suitable for inhabitation that could be indirectly impacted by the proposed project. Mitigation Measures BR-1a (Implement Construction Best Management Practices to Avoid and Minimize Potential for Construction-Related Impacts on Special-Status Plants and Wildlife) and BR-1h (Avoid, Minimize, and Mitigate for Impacts on Valley Elderberry Longhorn Beetle and Their Habitat) would avoid disturbance to habitat and ensure a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

The proposed project would impact approximately 8.59 acres of vernal pool and other seasonally inundated habitats that provide potentially suitable habitat for special-status aquatic invertebrates. Implementation of Mitigation Measures BR-1i (Avoid, Minimize, and Mitigate for Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp) and BR-3 (Avoid, Minimize, Restore, and Mitigate for Impacts on State and Federally Protected Wetlands and Other Waters, including Riparian Habitat, through the Development and Implementation of an Aquatic Resources Mitigation Plan) would compensate for the potential loss of aquatic habitats that cannot be avoided, ensuring a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

Though it has not been documented within the solar development area, the proposed project could impact American badger if the species is denning in or near the construction footprint during ground disturbance and the project would impact potential habitat (i.e., annual grassland, blue oak woodland) within the solar development area. However, implementation of Mitigation Measures BR-1a (Implement Construction Best Management Practices to Avoid and Minimize Potential for Construction-Related Impacts on Special-Status Plants and Wildlife) and BR-1j (Avoid, Minimize, and Mitigate for Impacts on American Badger) would avoid, minimize, and mitigate for impacts on American badger and ensure a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

The proposed project would impact potential grassland nesting habitat for migratory bird species, such as northern harrier and grasshopper sparrow, as well as oak woodland/forest and riparian supporting trees suitable for several raptor species. The loss of potential foraging habitat for grassland- and woodland/riparian-associated birds could potentially contribute to a local reduction in nesting success. However, compliance with the County of Sacramento Swainson's Hawk Mitigation Program (see Mitigation Measure BR-1f [Avoid, Minimize, and Mitigate for Impacts on Swainson's Hawk and Their Nesting and Foraging Habitat]) and Mitigation Measure BR-2a (Avoid, Minimize, and Mitigate for Impacts on Riparian Habitat and Other Sensitive Natural Communities), which requires tree preservation and establishment, would ensure a **less-than-cumulatively considerable contribution** to any cumulative impact because mitigation in this EIR requires preservation of grassland habitat elsewhere in the county and tree and canopy preservation and replanting. Mitigation Measure BR-1k (Avoid, Minimize, and Mitigate for Impacts on Nesting Raptors and Migratory Birds) would further reduce project impacts on nesting raptors and migratory birds.

Though no active bat roosts or signs of occupation were detected during surveys, the proposed project would impact isolated trees (and snags) near seasonal ponds or other aquatic habitat that provide nearby foraging opportunities for native bats. There could be direct impacts if bats are in or adjacent to the solar development area during site preparation or construction. Impacts to habitat would be minor and Mitigation Measures BR-1a (Implement Construction Best Management Practices to Avoid and Minimize Potential for Construction-Related Impacts on Special-Status Plants and Wildlife) and BR-1l (Avoid, Minimize, and Mitigate for Impacts on Bats) would ensure a **less-than-cumulatively considerable contribution** to any cumulative impact of past, present, and future development.

Though Crotch's bumble bee has not been documented within the solar development area, the proposed project would impact a total of 462 potential nesting locations (e.g., existing burrows, down woody debris, tree cavities, etc.) and numerous suitable floral resources were identified throughout the solar development area and vicinity during focused surveys. Though the loss of grassland and woodland vegetation could reduce available floral food resources for this species, Mitigation Measure AG-1 (Implement the Agricultural Management Plan) would incorporate pollinator plants into the seed mix that could benefit this species, Mitigation Measure BR-1f (Avoid, Minimize, and Mitigate for Impacts on Swainson's Hawk and Their Nesting and Foraging Habitat) requires preservation of grassland habitat, and BR-1m (Avoid, Minimize, and Mitigate for Impacts on Crotch's Bumble Bee) would avoid, minimize, and mitigate for impacts on Crotch's bumble bee, ensuring a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

Though it has not been documented within the solar development area, the proposed project could impact ringtail if the species is denning in or near the construction footprint during ground disturbance and the project would impact potential habitat (i.e., riparian woodland, blue oak woodland) within the solar development area. However, implementation of Mitigation Measures BR-1a (Implement Construction Best Management Practices to Avoid and Minimize Potential for Construction-Related Impacts on Special-Status Plants and Wildlife) and BR-1n (Avoid, Minimize, and Mitigate for Impacts on Ringtail) would avoid, minimize, and mitigate for impacts on ringtail and ensure a less-than-cumulatively considerable contribution to the cumulative impact of past, present, and future development.

As detailed under Impact BR-2 in Chapter 6 of this EIR, "Biological Resources," the project would combine with other past, present, and future projects to impact sensitive natural communities, including vernal pools, waters of the U.S. and of the State, grassland bird habitat, riparian habitat, valley needlegrass grassland, and oak woodlands. A very small amount of vernal pools and wetlands and other waters would be permanently impacted, but Mitigation Measure BR-3 (Avoid, Minimize, Restore, and Mitigate for Impacts on State and Federally Protected Wetlands and Other Waters, including Riparian Habitat, through the Development and Implementation of an Aquatic Resources Mitigation Plan) would avoid, minimize and compensate for potential impacts, ensuring a less-than-cumulatively considerable contribution to the cumulative impact of past,

present, and future development. The proposed project would also impact annual grassland and associated open habitats, but these habitats would be restored upon completion of project construction as a result of required implementation of the Agricultural Management Plan (see Mitigation Measure AG-1 in Chapter 4, "Agricultural Resources") and compliance with the County of Sacramento Swainson's Hawk Mitigation Program (see Mitigation Measure BR-1f [Avoid, Minimize, and Mitigate for Impacts on Swainson's Hawk and Their Nesting and Foraging Habitat]) would require preservation of grassland habitat elsewhere in the County, ensuring a less-than-cumulatively considerable contribution to the cumulative impact of past, present, and future development. The proposed project would largely avoid impacts to riparian habitat within the project site except for approximately four acres where roads and medium voltage overhead lines would cross these creeks or associated intermittent tributaries, and several locations where solar field developments (and adjacent temporary work areas) extend into the edge of riparian zones. Mitigation Measure BR-2a (Avoid, Minimize, and Mitigate for Impacts on Riparian Habitat and Other Sensitive Natural Communities), which requires tree preservation and establishment, **and Mitigation Measure BR-2b (Preserve Oak Woodlands and Special-Status Wildlife Habitat), which requires preservation of 1,150 acres of oak woodlands through conservation easements,** would ensure a **less-than-cumulatively considerable contribution** to cumulative impacts to riparian trees by requiring avoidance, preservation of oak woodland canopy at a 1:1 ratio, and replanting.

The project would result in the permanent loss of approximately 287 acres of oak woodland/forest land cover and the associated removal of up to 4,787 trees, representing a loss of 54.61 acres of oak canopy area from the solar development area. Mitigation Measure BR-2a (Avoid, Minimize, and Mitigate for Impacts on Riparian Habitat and Other Sensitive Natural Communities) **and Mitigation Measure BR-2b (Preserve Oak Woodlands and Special-Status Wildlife Habitat)** includes a requirements to implement oak woodland and native tree mitigation. ~~These~~ is mitigation **measures** would avoid impacts to native trees retained within and adjacent to the solar development area, preserve oak woodland canopy at a 1:1 ratio, ~~and~~ establish plantings of native trees at a 1:1 tree replacement ratio, **and preserve at least 1,150 acres of oak woodlands, wildlife corridors and habitat of Special Status Wildlife Species in perpetuity through grants of conservation easements approved by the CDFW.** The Sacramento County General Plan Update Final EIR (Sacramento County 2011) recognized that even with implementation of projects consistent with General Plan policies such as CO-140, the significant impacts on native trees and tree canopy could be reduced, but not to a less-than-significant level at the scale of the County, because there would still be a substantial temporal loss of trees/tree canopy in the intervening years between when the seedlings are planted and when they mature to a condition that fully replaces the mature trees lost. So, while the project's proposed mitigation would be sufficient to reduce the project-level impact to less than significant, the temporal loss of oak species prior to replacement contributes to the ongoing regional and statewide loss of oak woodlands. This temporal loss is a significant cumulative impact, and the temporal loss of 54.61 acres of oak canopy area is **cumulatively considerable**. There is no feasible mitigation available. This impact is **significant and unavoidable**.

The proposed project would impact grasslands in the solar development area that provide nursery and migratory habitat for common wildlife species. However, implementation of the Agricultural Management Plan (see Mitigation Measure AG-1) would re-establish grassland conditions in and around the solar panels within the solar development area and Mitigation Measures BR-1e (Avoid, Minimize, and Mitigate for Impacts on Western Burrowing Owl and Occupied Nesting Habitat), BR-1f (Avoid, Minimize, and Mitigate for Impacts on Swainson's Hawk and their Nesting and Foraging Habitat), and BR-3 (Avoid, Minimize, Restore, and Mitigate for Impacts on State and Federally Protected Wetlands and Other Waters, including Riparian Habitat, through the Development and Implementation of an Aquatic Resources Mitigation Plan) would require compensation that would minimize local and regional habitat losses and maintain habitat for connectivity, ensuring a less-than-cumulatively considerable contribution to the cumulative impact of past, present, and future development. Though Coyote Creek and Carson Creek corridor provide habitat movement corridors, the project has been designed to avoid development along the two main creek corridors and the functions along the Coyote/Carson Creek habitat connectivity area would be maintained, ensuring a **less-than-cumulatively considerable contribution** to the cumulative impact of past, present, and future development.

CLIMATE CHANGE

The discussion of GHG emissions generated by proposed project construction in Chapter 7, "Climate Change", is inherently a cumulative impact discussion. GHG emissions from one project cannot, on their own, result in changes in climatic conditions; therefore, the emissions from one project must be considered in the context of their contribution to cumulative global emissions, which is a significant cumulative impact. Total construction-related GHG emissions are estimated to be approximately 7,320 MT CO₂e over the 18-month construction period and would exceed the SMAQMD construction-related threshold of 1,100 MT CO₂e per year. Decommissioning activities would generate approximately 1,853 MT CO₂e over the one-year decommissioning period and would also exceed the SMAQMD threshold of 1,100 MT CO₂e per year. It is also estimated that carbon sequestration capacity would be lost by the removal of trees during project construction (Dudek 2025). However, as discussed in Chapter 7, "Climate Change", a portion of the carbon sequestration capacity of the project site would be restored by new tree planting.

The proposed project's contribution as a GHG-free energy resource is also important to acknowledge as a valuable long-term benefit of the proposed project. As a GHG-free energy resource, proposed project operations would serve to increase SMUD's renewable energy supply, reduce GHG emissions associated with SMUD's power generation, and assist in achieving SMUD's 2030 Net Zero Carbon Plan goal and State RPS requirements. As detailed in Chapter 7, if the renewable electricity generated by the project were to be used instead of electricity generated by SMUD's current sources projected to the 2025 calendar year, the proposed project would provide a potential offset of up to 69,798 MT CO₂e in the first year of operation. Over the expected 35-year life of the project, these annual avoided emissions would vastly exceed the emissions associated with the project's short-term construction activities.

In consideration of this overall GHG reduction and because the proposed project would also implement Mitigation Measure CC-1 (Implement Construction GHG Emission Best Management Practices during Construction Activities) to reduce construction-related exhaust emissions to the maximum extent feasible, the proposed project **would not have a considerable** contribution to the significant cumulative impact of global climate change.

CULTURAL AND PALEONTOLOGICAL RESOURCES

There are no unique geologic features within or adjacent to the project site. Therefore, the project would have no potential to combine with the cumulative projects listed in Table SI-6 above, to result in a significant physical environmental impact related to unique geologic features. Thus, there would be **no cumulative impact** related to these cultural and paleontological resources topics.

Cumulative development in Sacramento County could significantly impact historical and archaeological resources. The archaeology of the archaeological and historical resources in their original contexts is crucial in developing an understanding of the past social, economic, and technological character of cultural resources. Based on past, present, and future development in Sacramento County, the loss of archaeological and historical resources is considered a significant cumulative impact.

The boundaries of a site or resource with historical or archaeological value could extend beyond project boundaries. As a result, a meaningful approach to preserving and managing cultural information should focus on the likely distribution of cultural resources, rather than on project or parcel boundaries. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains. However, proper planning and appropriate mitigation can help to capture and preserve the knowledge of such resources and can provide opportunities for increasing understanding of past environmental conditions, cultures, historical land use or other information not found in the historic record, by recording data about significant cultural resources discovered and preserving artifacts found. Based on the finding of the records search, literature search, Native American outreach, and field survey, implementation of Mitigation Measures CR-2a (Cultural Resource Management Plan [CRMP]), CR-2b (Construction Monitoring), and CR-2c (Walltown Mining District Historic Study and Interpretive Plan) would be required. Further, implementation of Mitigation Measure CR-3a (Treatment of Human Remains) would be required to reduce impacts to unanticipated human remains in the event of accidental discovery during project implementation. These mitigation measures would ensure that the project applicant documents and preserves cultural resources, or human remains, that have been identified or may be encountered during construction of this project. Other cumulative projects would be required to implement similar measures to document and protect unanticipated discovery of cultural resources or human remains. These mitigation measures limit the cumulative contribution of impacts to cultural resources within Sacramento County and with mitigation, the project would have a **less-than-cumulatively-considerable contribution** to the cumulative impact associated with the regional loss of archaeological and historical resources or unanticipated discovery of human remains.

Fossil discoveries resulting from excavation and earth-moving activities associated with development have and will continue to occur throughout the state. The value or importance of different fossil groups varies depending on the age and depositional environment of the rock unit that contains the fossils, their rarity, the extent to which they have already been identified and documented, and the ability to recover similar materials under more controlled conditions (such as for a research project). Unique, scientifically-important fossil discoveries are relatively rare, and the likelihood of encountering them is site-specific and is based on the specific geologic rock formations that are present at any given project site. These geologic formations vary from location to location.

Sacramento County includes a variety of rock formations such as the Pliocene–Miocene age Mehrten Formation, the Eocene age Lone Formation, and the Upper Cretaceous age Chico Formation. Due to the large number of vertebrate fossils and plant fossil assemblages that have recovered from these rock formations, they are considered to be of high paleontological sensitivity. Therefore, earthmoving activities associated with the projects considered in this cumulative analysis could damage or destroy unique paleontological resources that may be present in these rock formations, and potentially within other paleontologically sensitive formations as well. Therefore, the proposed project, in combination with the cumulative projects listed above in Table SI-6 could result in a significant cumulative impact. Construction of the proposed project would result in earthmoving activities in the paleontologically sensitive Mehrten, Lone, and Chico Formations. Implementation of Mitigation Measure CR-4 (Avoid Impacts to Unique Paleontological Resources) requires education of construction workers about fossils prior to the start of earthmoving activities, and halting construction activities if fossil evidence is encountered and consulting with a qualified paleontologist who would recommend appropriate actions including fossil recovery and future on-site monitoring. Therefore, the proposed project would result in a **less-than-cumulatively-considerable contribution with mitigation** to cumulatively significant impacts from destruction of or damage to unique paleontological resources.

ENERGY

Impacts related to electricity would be restricted to the SMUD service area, since they are the electricity provider for the area occupied by the proposed project. Energy impacts associated with equipment and vehicle use is generally restricted to the average travel radius of commuting workers and vehicle trips associated with equipment delivery, since these are the areas in which energy sources would be demanded and supplied for the proposed project. The proposed project would use energy sources during construction, operation and maintenance, and decommissioning, thus, could contribute to potential cumulative impacts during any of these phases.

The proposed project would increase the region's overall power generation capacity and portfolio of eligible renewable resources contributing to its overall power mix. When considered in the context of the proposed renewable resource power that would be generated as a result of the proposed project, the project would generate much more energy, and from a renewables source, than would be required to run the operations and maintenance components of the proposed operations. In short, the proposed project

would serve the cumulative demand on energy resources in the area. In addition, the proposed project would also assist California utilities in meeting their obligations under State energy storage targets. **No significant adverse cumulative effect would result** relating to electricity use. The project would support state and local goals and plans for renewable energy, including those outlined in SMUD's 2030 Zero Carbon Plan.

No existing significant adverse conditions related to efficiency of fuel use were identified that would be worsened or intensified by the proposed project. Past, present, and reasonably foreseeable future projects within close proximity to the proposed project site could require gasoline or diesel but would not combine with the fuel demands of the proposed project to cause a significant adverse cumulative impact relating to the wasteful, inefficient, or unnecessary consumption or use of fuel. Under these conditions, the proposed project's less-than-significant impact relating to wasteful, inefficient, or unnecessary consumption or use of fuel would **not be cumulatively considerable**.

GEOLOGY, SEISMICITY, AND SOILS

The project site is situated primarily in the rolling foothills along the west side of the Sierra Nevada; the northwest corner of the project site is situated at the eastern margin of the Sacramento Valley (Gutierrez 2011); this area historically has not been seismically active. The project site is situated on rolling land and with elevations that range from 170 to 275 feet above mean sea level. However, the finished grades would generally follow existing grades (Terracon 2021). Since the potential for strong seismic ground shaking is low, seismically-induced landslides would not represent a hazard. Based on a review of the *Preliminary Geotechnical Engineering Report* (Terracon 2021) prepared for the proposed project, the project site is unlikely to experience hazards from liquefaction because of the anticipated depth to groundwater and the relatively stiff/dense subsurface soils and shallow depth to bedrock. For the same reason, Terracon (2021) concluded that lateral spreading is also unlikely. Both the proposed project and the related projects considered in this cumulative analysis could be exposed to moderate hazards from seismic ground shaking, as well as hazards from construction in unstable or expansive soil. Both the related projects and the proposed project would be subject to the same design and engineering requirements of the California Building Standards Code (CBC), which include an analysis of slope instability, liquefaction, and surface rupture attributable to faulting or lateral spreading, plus an evaluation of lateral pressures on basement and retaining walls, liquefaction and soil strength loss, and lateral movement or reduction in foundation soil-bearing capacity. The CBC also regulates the analysis of expansive soils for foundations and grading work. It also requires that measures to reduce damage from seismic effects and expansive soils be incorporated in structural design. Since the cumulative related projects are required to implement applicable portions of the CBC, this would serve to reduce any potential cumulative impact. The project's compliance with applicable building code requirements would ensure a **less-than-cumulatively-considerable contribution** to any cumulative impacts from seismic or geologic hazards.

Implementation of the related projects considered in this cumulative analysis, and the proposed project, would result in substantial earthmoving activities that would disturb soils and could result in soil erosion, if not properly controlled. All of the cumulative projects

that disturb one acre or more are required by law to prepare a SWPPP and implement site-specific BMPs that are specifically designed to prevent construction-related erosion. The cumulative projects and the proposed project would also be required to obtain a County grading permit, which requires submittal of a soils report and a geotechnical report, along with detailed grading plans for County review and approval, showing how erosion would be reduced. Permit conditions would be imposed by the County (such as straw wattles and watering of the soil surface during construction) to reduce potential erosion impacts. Since the cumulative related projects are required a SWPPP and comply with grading permit conditions, this would serve to reduce any potential cumulative impact. The proposed project would implement relevant existing requirements and standards, and as a result, would have a **less-than-cumulatively-considerable contribution** to any cumulative impact related to soil erosion.

HAZARDS AND HAZARDOUS MATERIALS

All of the related projects considered in this cumulative analysis, along with the proposed project, would involve the use, temporary storage, and transport of small amounts of hazardous substances used during construction, such as fuels, lubricants, oils, and paint. All materials must be used and stored in compliance with federal, state, and local ordinances, laws, regulations and policies related to hazardous materials, including the County's requirements for handling and transport of hazardous materials. None of the substances would be acutely hazardous. The Phase I ESA prepared for the project site did not identify any recognized environmental concerns other than the Aerojet contaminated groundwater plume and the White Rock Dump North (Dudek 2024a). The proposed project and the related projects considered in this cumulative analysis would not include any usual conditions related to use, storage, or transport of minor amounts of hazardous materials such that an increased likelihood for accidental spills would occur. Furthermore, if any accidental spills were to occur or if any previously unknown hazardous materials were encountered and released into the environment during construction activities, the effects would be site-specific, and therefore the related projects considered in this cumulative analysis would not combine to form cumulatively considerable impacts. Further, there are no schools within 0.25 miles of the project site. As discussed in Chapter 9, "Hazards and Hazardous Materials," under "BESS-related Fire Hazards", there have been recent incidents of large fires that have occurred at battery energy storage systems in California and other states due to inadequate safety protocols. SB 38 requires every battery energy storage facility in California to have an emergency response and emergency action plan that covers the premises of the facility. Additionally, the project would incorporate additional safety standards and regulations as described above in the "Additional BESS-related Safety Standards Section" and implement Mitigation Measure HAZ-1 (Prepare an Emergency Response and Emergency Action Plan), which would reduce the impact from potential hazards associated with the proposed battery storage system. Thus, there would be a **less-than-cumulatively-considerable contribution** related to any cumulative impacts related to routine transport, use, or disposal of hazardous materials or reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials.

As shown in Plate HAZ-1 (Aerojet Superfund Site and Operable Units), there is a large area near the project site that overlies the contaminated areas associated with the Aerojet Superfund Site. Aerojet is conducting ongoing groundwater remediation activities in the project area via groundwater extraction and treatment (GET) wells, and also operates groundwater monitoring wells, with oversight from the Central Valley RWQCB and USEPA. An existing GET well is situated in the immediate vicinity of the proposed access road from the proposed switchyard to the existing SVRA access road (which would also provide access to the project site; additional project-related improvements are proposed along the road, including installation of electrical towers). Additional GET wells and monitoring wells are situated in the vicinity of the proposed substation, BESS, and solar panels to the north. Another GET well and adjacent monitoring well are located adjacent to a small spring in the central portion of the project site. Furthermore, construction of the western end of the proposed access road at Grant Line Road would occur approximately 400 feet from a Cortese-listed site (the White Rock Dump North), which also includes a contaminated groundwater plume. Project-related facilities and facilities that would be required for cumulative projects in the area have the potential to interfere with remediation activities by damaging or destroying existing remediation and/or monitoring wells during the construction process, and during project operation if proposed facilities are not properly sited. Similar to the proposed project, cumulative projects listed above in Table SI-6 would require mitigation measures similar to Mitigation Measures HAZ-2a (Prohibit New Groundwater Wells and Use of Existing Groundwater Wells Within the Contaminant Plume Consultation Zone), HAZ-2b (Prepare and Implement a Health and Safety Plan), and HAZ-2c (Coordinate with Aerojet to Close, Relocate, or Avoid Monitoring Wells) to reduce any potential impacts related to the Aerojet Superfund Site. The implementation of these mitigation measures for the proposed project and similar conditions for other projects within the area that may include contaminated groundwater plumes would reduce the impacts related to construction in a Cortese-listed site. Therefore, the proposed project would result in a **less-than-cumulatively-considerable contribution** to any cumulative impact related to construction in a Cortese-listed site.

As discussed above under Cumulative Impacts related to Air Quality, based on CGS Special Publication 192 and the SMAQMD's applicability map, portions of the project site likely contain NOA and have already been delineated by SMAQMD as parcels that are subject to CARB's ATCM for Construction, Grading, Quarrying and Surface Mining Operations (see Plate HAZ-3), unless it is demonstrated by a geotechnical report that NOA is not present. Other areas of the project site (shown in orange on Plate HAZ-3) may also contain NOA, and if so, would also be subject to the ATCM. As shown on Plate HAZ-3, areas surrounding the project site, including where some of the cumulative projects listed in Table SI-6 may also be located, would be in areas subject to CARB's ATCM for Construction, Grading, Quarrying, and Surface Mining Operations. The proposed project would implement Mitigation Measure AQ-3a (Site Investigation for Potential Naturally Occurring Asbestos) and cumulative projects in the area would be required to implement similar mitigation measures to be in compliance with CARB's ATCM. Implementation of Mitigation Measure AQ-3a (and similar measures) would reduce human health hazards associated with generation of fugitive dust that potentially contains NOA. If the site investigation determines that NOA is present on the project site, then implementation of a District-approved dust mitigation plan would reduce the impact from human health

hazards related to generation of airborne NOA during construction or decommissioning. Cumulative projects that are located in areas that contain NOA would also be subject to similar measures required by CARB's ATCM. Therefore, the proposed project would result in a **less-than-cumulatively-considerable contribution** to any cumulative impact related to airborne asbestos.

Three of the related projects considered in this cumulative analysis (Riverview Subdivision Map Extension, Rancho Murieta North, and Sloughhouse Solar Facility Project) are located in the vicinity of the Rancho Murieta Airport. Land use compatibility for the Rancho Murieta Airport is determined by the *ALUC Airport Land Use Policy Plan* (Sacramento ALUC 1992). The other related projects considered in this cumulative analysis (except the OE3 Training Center project) are located in the vicinity of Mather Airport. Land use compatibility for Mather Airport is determined by the Sacramento ALUC's *Mather Airport Land Use Compatibility Plan* (ESA 2022). The related projects could result in cumulatively significant impacts related to aircraft safety hazards. The project site is 6.3 miles from the nearest Mather Airport runways and within the Mather Airport Influence Area, Review Area 2. The proposed switchyard and gen-tie route would be immediately adjacent to, but outside of, the Mather Airport's 14 CFR Part 77 Airspace Protection Surfaces boundary. The proposed substation would be approximately 0.75 mile southeast of the Airspace Protection Surfaces boundary. Therefore, the proposed project components would not represent a violation of CFR Part 77 Subpart B imaginary airspace surfaces associated with Mather Airport. Further, implementation of the proposed project would not result in an aircraft safety hazard or a safety hazard for people residing or working in the project area as related to Mather Airport. Therefore, the proposed project would result in a **less-than-cumulatively-considerable contribution** to any cumulative impact related to aircraft safety hazards for Mather Airport. The project site is approximately 4.5 miles north of the Rancho Murieta Airport. The tall facilities at the proposed on-site substation, gen-tie route, and switchyard would be approximately 7.5 miles north of the Rancho Murieta Airport. Therefore, the proposed project would have **no cumulative impact** related to Rancho Murieta Airport.

All projects in Sacramento County, including those listed in Table SI-6, would be required to obtain written authorization from the Sacramento County Department of Transportation for construction of roadway improvements where lane closures would be required, including encroachment permits. The Right of Way Management Section acts as the lead agency in the review process and is responsible for the coordination and management of the review process. Traffic Control Plans and/or Detour Plans are reviewed and managed by the Right of Way Management Section and are required for all construction work within the road right of way which modifies vehicular, bicycle, and/or pedestrian traffic patterns. Similar to the proposed project, related cumulative projects that would require an encroachment permit, include roadway improvements, or lane closures would be subject to the Sacramento County Department of Transportation regulations and design standards, and would be required to apply for applicable permits with permit conditions that would reduce any impacts related to emergency response or evacuation plans. Traffic Control Plans for project-related construction of the access roads planned as part of the proposed project would be prepared and implemented by the applicant and reviewed and approved by the County to ensure the safe and efficient movement of traffic

and emergency vehicles through construction work zones. Therefore, the proposed project would result in a **less-than-cumulatively-considerable contribution** to cumulatively significant impacts related to impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

HYDROLOGY AND WATER QUALITY

CONSTRUCTION-RELATED DEGRADATION OF WATER QUALITY OR INTERFERENCE WITH IMPLEMENTATION OF THE BASIN PLAN

Water quality in the vicinity of the project site is under the jurisdiction of the Central Valley RWQCB, which is charged with protecting beneficial uses of surface water and groundwater as identified in the Sacramento and San Joaquin River Basin Plan. Construction activities associated with the proposed project and the related cumulative projects would create the potential for soil erosion and sedimentation of drainage systems, both within and downstream of the project site and related cumulative project sites. The construction process may also result in accidental release of pollutants to Carson Creek or Little Deer Creek. However, as noted above under “Hazards and Hazardous Materials,” all hazardous substances must be used and stored in compliance with federal, state, and local ordinances, laws, regulations and policies related to hazardous materials, including the County’s requirements for handling and transport of hazardous materials. Soil erosion and accidental spills of hazardous materials could result in downstream sedimentation and degradation of water quality. However, as discussed in detail in Chapter 10, “Hydrology and Water Quality”, the project applicant is required by law to prepare and implement a SWPPP with appropriate BMPs, such as source control, revegetation, and erosion control, to maintain surface and groundwater quality conditions in adjacent receiving waters. Just as with the proposed project, the related projects considered in this cumulative analysis would also be required to adhere to applicable requirements designed to prevent water quality degradation including SWPPPs with BMPs, and grading plans and implementation of County or local city grading permit terms, which would reduce the potential for a cumulative impact. Adherence to existing requirements would ensure that the proposed project would result in a **less-than-cumulatively-considerable** contribution to any cumulative impact related to temporary, short-term construction-related degradation of water quality or interference with implementation of the Basin Plan.

OPERATIONAL DEGRADATION OF WATER QUALITY OR INTERFERENCE WITH IMPLEMENTATION OF THE BASIN PLAN

Development of the project site and development of the related cumulative project sites could change the long-term potential for contaminant discharges because new impervious surfaces would be created, and thus there would be a potential for increased long-term discharges of urban contaminants (e.g., oil and grease, fuel, trash, pesticides, fertilizers). As detailed in Chapter 10 of this EIR, “Hydrology and Water Quality,” the proposed project would be required to implement a variety of strategies and practices – both during construction and during operation of the proposed project – that would protect water quality. Long-term water quality impacts from project operation must be reduced using site design and source control measures to help keep pollutants out of stormwater

as required by the State Water Resources Control Board. In addition, the proposed project would be required to implement best management practices for stormwater consistent with the California Stormwater Quality Association Industrial/Commercial Best Management Practices Handbook or its equivalent, including annual reporting of any structural control measures and treatment systems. These project design features are requirements of regulatory permits and would also be made enforceable through County conditions of approval and would protect water quality as required by the Basin Plan. Implementation of the related projects considered in this cumulative analysis would be required to meet similar requirements, including compliance with the Sacramento Areawide NPDES Municipal Separate Storm Sewer System (MS4) Permit, and stormwater pre-treatment measures contained in the Sacramento Stormwater Quality Partnership's (SSQP) Sacramento Region Stormwater Quality Design Manual (SSQP 2021), for those projects that are within the Sacramento Areawide NPDES MS4 Permit boundary, which would reduce cumulative impacts. Implementation of applicable design requirements, best management practices, and permit conditions would ensure that the proposed project would result in a **less-than-cumulatively-considerable contribution** to any cumulative impact related to degradation of water quality or interference with implementation of the Basin Plan.

EXCEEDANCE OF DRAINAGE SYSTEMS RESULTING IN HYDROMODIFICATION OR FLOODING

The proposed project would add a minor amount of impervious surfaces and the related cumulative projects would add impervious surfaces that can increase runoff volumes and dry weather flows, increase the frequency and number of stormwater runoff events, and increase long-term cumulative duration of flows, as well as increased peak flows. Exceedance of drainage infrastructure capacity results in hydromodification, which intensifies the erosion and sediment transport process, and often leads to changes in stream channel geometry, and streambed and streambank properties, which can result in degradation and loss of riparian habitat, and downgradient sediment deposition. In addition, operational stormwater discharges, if not properly detained, can result in on-site and/or off-site flooding. There is no existing stormwater drainage system at the project site. The project applicant has commissioned a drainage study (called a "Level 3 Drainage Study") to evaluate impacts of stormwater runoff relative to the existing drainage patterns and floodplains. As shown in the drainage study, construction of the proposed project would not alter the existing drainage patterns and under a 100-year storm would either not increase flow rates or would result in only a minor increase. The drainage study also included hydraulic modeling for the areas where solar panels and the associated access roads would be installed, with a focus on five of the proposed road crossings of creeks, finding that culvert crossings would allow for proposed drainage patterns to be consistent with existing conditions. Proposed development would not encroach on the existing 100-year floodplains along affected creeks or on the any FEMA floodplain. Mitigation Measure HYD-3 requires Level 4 drainage study that also addresses the proposed switchyard. County requirements and similar city requirements would apply to the related cumulative projects and would reduce cumulative impacts related to the alteration of drainage patterns, increased erosion, exceeding storm drainage system capacity, degrading water quality, increased flooding, or changes in flood flows. Compliance with existing County standards and implementation of Mitigation Measure HYD-3 would ensure that the

proposed project would have a **less-than-cumulatively-considerable contribution** to cumulative impacts associated with exceedance of stormwater drainage systems, hydromodification, and flooding.

GROUNDWATER SUSTAINABILITY

As required by the Sustainable Groundwater Management Act (SGMA), groundwater sustainability plans (GSPs) have been prepared and were submitted to DWR and as detailed in Chapter 10 of this EIR, "Hydrology and Water Quality," with the limited yearly operational groundwater demands and the small amount of new impervious surfaces added, the proposed project would not conflict with the South American Groundwater Subbasin Groundwater Sustainability Plan. The related cumulative projects would be subjected to a similar evaluation relative to the applicable groundwater sustainability plan, thereby reducing any cumulative impact. The proposed project would result in a less-than-cumulatively-considerable contribution to cumulative impacts associated with groundwater sustainability.

LAND USE

The proposed project would not physically divide an established community. Therefore, the project would have no potential to combine with the cumulative projects listed in Table SI-6 above to result in a significant physical environmental impact related to this topic. Thus, there would be **no cumulative impact** related to this land use topic.

The proposed project is categorized as Commercial II Solar Facilities by the Sacramento County Zoning Code and approval of a Use Permit is required for this use under the AG-80 zoning designation. Implementation of the proposed project would require the project applicant to submit a Use Permit application for review and approval by the Sacramento County Board of Supervisors. As a condition of the Use Permit, the project applicant would be required to meet all use regulations for Commercial II Solar Facilities provided in Section 3.6.6.C in Chapter 3 of the Sacramento County Zoning Code. The Sacramento County Board of Supervisors would evaluate the proposed project's effects on adjacent properties and potential conflicts with the AG-80 zoning designation to ensure compatibility of the proposed project with surrounding uses and zoning (Sacramento County 2023). Therefore, the proposed project in combination with cumulative projects would not result in a significant cumulative impact related to a conflict with a land use plan, policy, or regulations adopted for the purpose of mitigating an environmental impact. Conflicts with existing land use plans and policies are policy issues and do not, in themselves, give rise to a significant physical impact related to land use under CEQA. The proposed project would have **no cumulative contribution** to any significant cumulative impact related to land use policy consistency. To the extent that the proposed project results in physical environmental effects that could combine with those of cumulative projects, the cumulative impact on the environment is addressed under each topic section in this chapter.

NOISE

When evaluating cumulative noise and vibration impacts, it is important to note that noise and vibration are localized occurrences; as such, they decrease rapidly in magnitude as the distance from the source to the receptor increases. Therefore, only those related projects that are in the direct vicinity of the proposed project site are relevant in a cumulative context.

The proposed project would not expose people to excessive noise levels from an airport or private airstrip. The project site is not within the boundaries of the Mather Airport Land Use Compatibility Plan or associated noise contours, or in an area exposed to excessive aircraft-generated noise levels (e.g., not within the 60 dB L_{dn}/CNEL contour of any airport). Therefore, the project would have no potential to combine with the cumulative projects listed in Table SI-6 above to result in a significant physical environmental impact related to excessive noise from an airport. Thus, there would be **no cumulative impact** related to this noise topic.

As discussed in Chapter 12, “Noise,” compliance with applicable noise regulations and mitigation from environmental documents prepared for related projects would reduce construction-related noise impacts from other projects in the immediate vicinity of the project site. Construction projects occurring simultaneously would not result in cumulative noise or vibration impacts unless sites are being developed adjacent to one another and expose sensitive receptors to significant noise levels at the same time. Noise-sensitive land uses in the vicinity of the project site include the residential property at 3850 Scott Road in the central part of the project site. With the implementation of Mitigation Measures NOI-1a (For Evening and Nighttime Construction (i.e., outside of permitted construction hours (Section 6.68.090[e] of the County of Sacramento Code), Implement Noise-Reducing Construction Practices and Monitor and Record Construction Noise near Sensitive Receptors) and NOI-1b (Prepare and Implement a Blasting Plan), impacts from temporary exposure of sensitive receptors to nighttime noise and blasting noise would be reduced. Additionally, the implementation of Mitigation Measures NOI-2a (Implement Vibration Control Measures) and NOI-2b (Additional Vibration Controls for Blasting to Avoid Human Annoyance) would require additional measures to reduce the impacts to on-site residential receptors to levels below the human annoyance vibration thresholds. Additionally, by including the option to offer the option of temporary relocation for the residents 3850 Scott Road within the project site for the duration of blasting activities within 0.5 miles of this receptor, short-term exposure of sensitive receptors to construction vibration (annoyance) would be reduced. Because the closest sensitive uses are approximately 50 feet of the project site on Scott Road, and there are no other projects within close proximity of the proposed project, any other construction occurring simultaneously would not be cumulatively considerable. Therefore, a cumulatively significant impact would not occur, and the proposed project would have **no cumulatively considerable contribution** to impacts associated with short-term construction-related noise and vibration.

Adding traffic to the local roadway network would result in increase in traffic noise levels in the vicinity of the project site. The related cumulative projects would result in an

increase in traffic volumes on the local roadway network and, consequently, an increase in noise levels from traffic sources along affected roadway segments. This is a significant cumulative impact. Generally, when traffic volumes increase by 100 percent, a 3-dB increase in traffic noise can be expected in the area. The number of workers expected on-site during the construction of the project would vary over the 18-month construction period and would likely average 476 construction workers (952 total trips per day) during the peak construction phase, Photovoltaic (PV) System Installation. Deliveries of equipment and supplies to the site would also vary over the construction period but have the potential to range from 4 to 954 trips during the 10-month site preparation phase, averaging approximately 20 daily trips including the 16 daily vendor truck trips. These number of trips added to existing traffic volumes along the existing nearby roadways would result in a noise increase of up to 2 dB at the nearest noise-sensitive uses from Scott Road centerlines. This level of noise increase is not considered perceptible. Therefore, project-related construction traffic would **have a less-than-cumulatively considerable contribution** to any cumulative temporary transportation noise impact.

The proposed project would be operated remotely through a local solar operations and maintenance company once constructed. The estimated 4 to 10 daily trips generated during operations would have no perceivable impact to daily noise levels. One to four times per year, panel washing would occur for up to two weeks. This activity would involve limited equipment and approximately 10 staff and an additional 32 trips per day were also included to account for water being trucked in for panel washing and sheep/goat grazing activity. The limited number of daily trips would not appreciably increase traffic volumes and impact the local or regional circulation system. Therefore, project-related operational traffic would **have a less-than-cumulatively considerable contribution** to any cumulative transportation noise impact.

UTILITIES AND SERVICE SYSTEMS

WASTEWATER AND STORMWATER

The proposed project may include the construction of permanent restroom facilities. If restroom facilities were installed, an on-site septic system would be required and the applicant would be required to follow the County Department of Environmental Management's (2021) septic system permitting process, which, at the project site, would require a site-specific soils investigation, the results of which would be used to inform an engineered septic design that meets County requirements to protect human health and the environment. Therefore, implementation of the related projects considered in this cumulative analysis, if they would require permanent wastewater service, would result in a cumulatively less-than-significant impact, and the proposed project would result in a **less-than-cumulatively-considerable contribution** to cumulative wastewater impacts.

As discussed in detail in Chapter 10, "Hydrology and Water Quality", the project applicant is required by law to prepare and implement a SWPPP with appropriate BMPs, such as source control, revegetation, and erosion control, to maintain surface and groundwater quality conditions in adjacent receiving waters. Just as with the proposed project, the related projects considered in this cumulative analysis would also be required to adhere

to applicable requirements designed to prevent water quality degradation including SWPPPs with BMPs, and grading plans and implementation of County or local city grading permit terms, which would reduce cumulative impacts. The proposed project would result in a **less-than-cumulatively-considerable contribution** to cumulative stormwater impacts.

WATER SUPPLY

The State of California has enacted legislation that is applicable to the consideration of larger projects under CEQA. SB 610 (Chapter 643, Statutes of 2001; Section 21151.9 of the California PRC and Section 10910 et seq. of the California Water Code) requires the preparation of water supply assessments for large developments, as defined in this legislation. A water supply assessment was prepared for the proposed project. The cumulative projects that are classified as large projects would also be required to complete a water supply assessment to determine whether the projected available water supplies would meet the proposed project's water demand.

As shown in Table SI-4, the proposed solar facilities would require a total of 516.5 AF of groundwater over the projected 35-year project life. Averaged over the 35-year project life, the proposed solar facilities would require approximately 10.5 AFY of groundwater during operations, which would be served by existing on-site groundwater wells and/or from Sacramento County Water Agency sources.

As discussed in the "Utilities and Service Systems" Section above, the Groundwater Study explains that the results of previous well yield studies within the project site indicated that although initial groundwater level depths were generally shallow (groundwater was obtained relatively near the surface), the drawdowns for the given pumping rates indicated relatively low specific capacities (meaning the well yields were low). The project's annual operational demand of 10.5 AFY equates to approximately 6.6 gallons per minute, and therefore the Groundwater Study concluded that one or more of the sample boreholes that were previously drilled on the project site in the Mesozoic bedrock units would be able to support the project's yearly operational demand, but would not support the project's construction and decommissioning demand (i.e., 253 AF each) (Dudek 2024a).

Therefore, the Groundwater Study assumed that water to meet the project's demands for construction and decommissioning (253 AF each) would be from groundwater obtained from Sloughhouse Solar Project wells or the Sacramento County Water Agency (SCWA), or a combination of the two sources (Dudek 2024b, Dudek 2024c, and SWCA 2024). Due to data gaps regarding on-site hydrogeology and the potential lack of on-site groundwater availability, water demands for construction and decommissioning (253 AF each) were not assumed to be provided by existing on-site groundwater wells. As explained in the Groundwater Study, additional data and analysis would be required to accurately assess the availability of on-site groundwater for construction and decommissioning (Dudek 2024b). Additionally, as discussed in Chapter 9, "Hazards and Hazardous Materials", and the Groundwater Study prepared for the proposed project, the proposed project would not source groundwater from any area subject to restrictions of the EPA and the SWRCB

on groundwater applicable to the Aerojet Superfund remediation site and operable units, including groundwater extraction with the 2,000-foot consultation zone (Dudek 2024a).

Additionally, as described in the proposed project's Water Supply Assessment and Groundwater Study, due to data gaps regarding on-site hydrogeology and the potential lack of on-site groundwater availability, water demands for construction and decommissioning (253 AF each) were not assumed to be provided by existing on-site groundwater wells. The proposed project would instead rely on groundwater obtained from Sloughhouse Solar Project wells or the Sacramento County Water Agency (SCWA), or a combination of the two sources.

As described in Chapter 10, "Hydrology and Water Quality," on-site groundwater in older Mesozoic bedrock that could be used to supply the project's 10.5 AFY operational water demand would not result in land subsidence, would not result in adverse effects on groundwater dependent ecosystems, and would not result in substantial depletion of groundwater storage or groundwater level drawdown at nearby wells. Therefore, the project's operational groundwater needs (10.5 AFY over a 35-year period) can be met by on-site groundwater without adverse effects to the sustainable yield of the South American Subbasin or neighboring wells in the Mesozoic bedrock units. However, off-site sources of groundwater to meet the project's construction and decommissioning water demands (253 AFY for both construction [18-month period] and decommissioning [12-month period]) have been identified as using imported water via water trucks from the Sacramento County Water Agency or Sloughhouse Solar Project wells (Dudek 2024b, Dudek 2024c, SWCA 2024). As indicated in personal communication between Sacramento County and SCWA, SCWA provides water to local contractors for construction needs through fill stations where the contractor pays for the water. These fill stations are included in SCWA's water supply master plan and supporting groundwater sustainability plan for the groundwater basin and SCWA could provide 253 AFY for both construction and decommissioning for the proposed project (personal communication, SCWA 2024). Additionally, in a memorandum prepared for the proposed project regarding the use of groundwater from the Sloughhouse Solar Project wells, it was concluded that the Sloughhouse Solar Project wells would have adequate yield to supply the required 253 AFY of water for construction and decommissioning activities for the proposed project. As indicated in that memorandum, the per-acre groundwater use is 0.65 AFY per acre within the Cosumnes Subbasin. Under sustainable conditions, assuming the estimated overdraft of 10,000 AFY, the sustainable per-acre groundwater use within the Cosumnes Subbasin would be approximately 0.60 AFY per acre. The 253 AF, one-year extraction is approximately 0.31 AF per acre, about half of the Cosumnes Subbasin per-acre sustainable use (Dudek 2024c).

As with the proposed project, the related projects that are considered large projects in this cumulative analysis would also be required to adhere to applicable requirements designed to prevent water supply issues and would need to prepare a water supply assessment showing the availability of water supply in normal, dry, and multiple dry years, which would reduce cumulative impacts. As summarized above and detailed in Chapter 10 of this EIR, the proposed project would result in a **less-than-cumulatively-considerable contribution** to water supply impacts.

SOLID WASTE

Although the cumulative development projects in combination with the proposed project would incrementally increase total waste generation from the County, it is anticipated that the increasing rate of diversion County-wide through recycling, composting, and other methods would result in a decreasing share of total waste requiring landfill disposal. Cumulative development throughout the County would be subject to the same recycling and composting requirements, and the same construction demolition and debris ordinances that are applicable to the proposed project.

As discussed in the “Utilities and Service Systems” Section above, Table SI-4 shows the maximum capacity, remaining capacity, and closure date of the Kiefer Landfill and L and D Landfill. Combined, these landfills have a large volume of landfill capacity (116 million cubic yards) available to serve the proposed project and cumulative projects. The closure dates of the Kiefer Landfill and L and D Landfill are anticipated to be approximately January 1, 2064, and December 31, 2030, respectively. Given the future long-term capacity available at these two landfills, the proposed project, in combination with cumulative projects, would have less-than significant cumulative impacts related to solid waste. Therefore, implementation of the related projects considered in this cumulative analysis would result in a cumulatively less-than-significant impact, and the proposed project would result in a **less-than-cumulatively-considerable contribution** to solid waste impacts.

TRAFFIC AND CIRCULATION

When determining whether the overall transportation and traffic impacts from related projects would be cumulatively significant and whether the project’s incremental contribution to any significant cumulative impacts would be cumulatively considerable, projects that are in the vicinity of the proposed project are relevant in a cumulative context.

As discussed in the “Traffic and Circulation” section in Chapter 13, the proposed project would implement Mitigation Measure TC-3 (Prepare and Implement Traffic Control Plan), which requires that the applicant prepare and implement a traffic control plan to reduce construction-related traffic and transportation impacts. Construction projects would result in cumulative transportation and traffic impacts if sites are being developed in close proximity to one another and occurring simultaneously and using the same roadways for construction traffic. Possible future development within the proposed project area could result in an increase in traffic volumes on the local roadway network and, consequently, an increase in traffic volumes along affected roadway segments.

The existing traffic volumes on Scott Road at White Rock Road range from 2,395 to 2,767 total trips per day (Sacramento County 2024). Up to 20 daily construction-related truck trips for delivery of materials would be spread over an 8-hour workday during the construction period. In addition, a maximum of 476 worker trips would occur during the a.m. and p.m. hours before and after each workday during the peak construction phase, resulting in a total of up to 972 daily vehicle and truck trips added each day to local roadways during the peak construction phase. On average, that number would be lower; the number of workers expected on-site during construction of the proposed project would

vary over the construction period and would average 250 workers per day (resulting in a total of up to 500 daily vehicle trips). Project construction trips represent a short-term increase in daily traffic of about 36 to 42 percent on Scott Road. The effect on daily and peak-hour traffic volumes would be temporary, limited to the estimated 18-month construction period, and the additional vehicles would not substantially alter existing roadway capacity. Given the limited duration of construction activity, project construction is not anticipated to conflict with any applicable plan, policy, or ordinance related to the transportation system that could result in a substantial adverse environmental effect. According to County's *Transportation Analysis Guidelines*, the LOS C or D capacity for a two-lane, rural roadway with access and characteristics similar to Scott Road typically ranges from 3,400 to 6,000 vehicles per day (Sacramento County 2010). Even with the temporary increase in construction traffic, total daily volumes on Scott Road would remain below this capacity range, suggesting that the roadway would continue to operate at an acceptable service level during construction. Therefore, a cumulatively significant impact would not occur, and the proposed project would have a **less-than-cumulatively-considerable contribution** to any cumulative impact associated with short-term construction-related traffic.

The Sacramento County *Transportation Analysis Guidelines* (Sacramento County 2020) provide that if a project meets the County's screening criteria, a detailed CEQA transportation analysis of VMT would not be required. The screening criteria for projects that are expected to result in less than significant VMT impacts are presented in Table 3-1 of the County's *Transportation Analysis Guidelines*; the applicable criteria from the guidelines as they relate to the proposed project include:

- Small projects that generate less than 237 ADT – The project is consistent with a “small project” based on trip generation. Daily trip generation during operation of the project would be up to 42 trips per day. This is well below the threshold of 237 average daily trips provided in the County guidelines. Operational impacts would generate less than the daily trips threshold.
- Local-Serving Public Facilities/Services including utilities – The power generated by the proposed solar facilities would connect with the Sacramento Municipal Utility District's (SMUD's) 230 kV powerlines. The project meets the screening criteria as a local-serving public utility and solar energy facility.

Because VMT analysis is intended to capture the long-term impacts of a proposed project, construction activities are not typically subject to VMT analysis. As a result, no analysis of construction VMT is warranted (Sacramento County 2020, page 10). Moreover, the project's operational characteristics meet the above screening criteria as both a small project and a local-serving utility, and thus detailed CEQA transportation analysis of operational VMT is not required.

The proposed project would be operated remotely through a local solar operations and maintenance company once constructed. The estimated 4 to 10 daily trips generated during operations is not considered substantial. One to four times per year, panel washing would occur for up to two weeks. However, this activity would involve limited equipment

and approximately 10 staff and an additional 32 trips per day were also included to account for water being trucked in for panel washing and sheep/goat grazing activity. The limited number of daily trips would not have the potential to substantially increase traffic volumes and impact the local or regional circulation system. Therefore, the proposed project would have a **less-than-cumulatively-considerable contribution** to any cumulative impact associated operational traffic.

TRIBAL CULTURAL RESOURCES

Cumulative development in Sacramento County may result in cumulatively significant impacts to TCRs due to continuing disturbance of undeveloped areas which could potentially contain TCRs that extend beyond project boundaries that contain tribal value and knowledge for California Native American tribes culturally affiliated with a geographic area. Development in Sacramento County that has occurred in the past may have resulted in adverse impacts to previously unidentified tribal cultural resources. State and federal laws related to tribal cultural resources, such as Assembly Bill 52 provide a mechanism for consultation between California Native American tribes and lead agencies to address potential impacts of development activities on known and/or unknown tribal cultural resources. However, the adverse effects on tribal cultural resources on past, present, and future development is a significant cumulative impact. The proposed project would diminish the integrity of the Tosewin Tribal Cultural Landscape, which has been significantly impacted by historical and modern development of the area. The project's impact would be **cumulatively considerable**.

Mitigation Measure TCR-1 (Tribal Cultural Resource Avoidance and Minimization Plan) would provide Native American tribes an opportunity to be involved in awareness training of construction personnel, notification of pending ground disturbing activities and opportunity to monitor such activity with the authority to stop work if warranted, as well as involvement in decisions regarding the identification, treatment, and disposition of TCRs. As explained by the United Auburn Indian Community, the continued removal of native heritage oak species, as would occur under the proposed project, is considered a destruction of the overall cultural landscape that not only speaks to the history of pre-contact Sacramento Valley, but also impacts contemporary Nisenan residents on a spiritual level. Mitigation Measure BR-2a (Avoid, Minimize, and Mitigate for Impacts on Riparian Habitat and Other Sensitive Natural Communities) **and Mitigation Measure BR-2b (Preserve Oak Woodlands and Special-Status Wildlife Habitat)** includes—a requirements to implement oak woodland and native tree mitigation. ~~These~~ **mitigation measures** would avoid impacts to native trees retained within and adjacent to the solar development area, preserve oak woodland canopy at a 1:1 ratio, ~~and~~ establish plantings of native trees at a 1:1 tree replacement ratio, **and preserve no less than 1,150 acres of oak woodlands through conservation easements**. However, notwithstanding these mitigation requirements, the project would result in the development of significant new infrastructure and visual impacts that would substantially alter the setting and feeling of contributing elements of the Tosewin Tribal Cultural Landscape. There is no additional feasible mitigation. The impact is **cumulatively considerable and significant and unavoidable**.

WILDFIRE

As stated in Chapter 15, “Wildfire”, Appendix G of the CEQA Guidelines determines wildfire impacts based on whether a proposed project would occur within or near an SRA or on lands classified as very high fire hazard severity zones. The proposed project site is within an SRA and most of the project site classified as a Moderate Fire Hazard Severity Zone and a portion of the southeastern area designated as a Hight Fire Hazard Severity Zone (Plate WF-1 and Plate WF-2).

The proposed project would not create conditions that cause downstream runoff, post-fire slope instability, or drainage changes that would expose people or structures to significant risks. Therefore, the project would have no potential to combine with the cumulative projects listed in Table SI-6 above to result in a significant physical environmental impact related to these topics. Thus, there would be **no cumulative impact** related to these wildfire topics.

As discussed in the Chapter 13 of this EIR, “Traffic and Circulation,” the proposed project would be required to implement Mitigation Measure TC-3 (Prepare and Implement Traffic Control Plan). This plan would limit the potential for traffic hazards to occur during construction by providing sufficient warning to motorists passing by the project site and features such as flaggers and traffic cones that would minimize conflicts with construction vehicles and equipment. Cumulative projects with the potential to impair an adopted emergency response plan or emergency evacuation plan would also be required to notify emergency responders of the planned construction activities and would prepare a traffic control plan to limit the potential for traffic hazards to occur during construction or operations. Therefore, implementation of the related projects considered in this cumulative analysis would result in a cumulatively less-than-significant impact, and the proposed project result in a **less-than-cumulatively-considerable contribution** with respect to impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

Both the proposed project and the related projects considered in this cumulative analysis would be required to comply with all laws, plans, policies, and regulations related to fire safety and wildfire suppression, including requirements from the California Public Resources Code Sections 4290, 4292, 4427, 4428, 4431, and 4442. Strict adherence to the applicable Public Resources Code requirements would ensure that wildfire risks are minimized. As mentioned above, the proposed project would be within an SRA. The proposed project site is within an SRA and most of the project site classified as a Moderate Fire Hazard Severity Zone and a portion of the southeastern area designated as a Hight Fire Hazard Severity Zone (Plate WF-1 and Plate WF-2). Construction, operation, and decommissioning would be offset by compliance with fire safety and wildfire suppression measures identified Chapter 15, “Wildfire”. Adherence to these safety measures, when considered together, would minimize the risk of increased frequency, intensity, or size of wildfires and decrease the risk of exposure of people or structures to wildfire. All of the project facilities would be installed, operated, and maintained following all applicable design, safety, and fires standards. Implementation of Mitigation Measure WF-2a (Demonstrate Compliance with the California Fire Code, California Building Code,

and SB 38 Requirements, and Manage Vegetation On-site) would reduce the risk of wildfire damage and would be incorporated into the project design. Compliance with fire and building codes would be required during design review for all of the cumulative projects listed above. Additionally, as described in Chapter 9 of this EIR, “Hazards and Hazardous Materials,” the project would also comply with the additional current BESS Safety Standards and Regulations that would apply to the BESS portion of the project. Therefore, implementation of the related projects considered in this cumulative analysis would result in a cumulatively less-than-significant impact, and the proposed project result in a **less-than-cumulatively-considerable contribution** to impacts from wildfire hazards.

GROWTH INDUCEMENT

An EIR must discuss the ways in which a proposed project could foster economic or population growth or the construction of additional housing in the vicinity of the project, and how that growth would, in turn, affect the surrounding environment (see CEQA Guidelines Section 15126.2[d]).

The proposed project would provide a renewable source of electricity utilizing existing adjacent electrical distribution system facilities. No new land uses or geographic areas would be served by implementation of the proposed project that would otherwise not receive service without the project. The project is consistent with both County and SMUD goals that seek to substitute non-renewable sources of energy with renewable sources, such as the solar energy that would be provided by the proposed project. For these reasons, the additional energy provided by the project would not remove any barrier to growth.

With implementation of the project, no new housing would be developed or commercial retail activity generated that could induce growth. Moreover, the project does not propose any new transportation, water, wastewater, or other infrastructure that could induce or facilitate additional growth. The relatively limited demand for workers during construction and limited staff required for operation do not have the potential to induce demand for housing and result in unplanned growth. Finally, no change to the County’s development policies would result from project implementation. Therefore, the proposed project would not result in growth inducing impacts.

IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA requires that EIRs assess whether a project would result in significant irreversible changes to the physical environment. The CEQA Guidelines discuss three categories of significant irreversible changes that should be considered, which are listed below.

- Changes in Land Use Which Commit Future Generations
- Irreversible Damage from Environmental Accidents

- Consumption of Nonrenewable Resources

Development of the proposed project site would alter the existing land use from agricultural use only to renewable energy production co-located with agricultural use (grazing). The proposed project has an anticipated operational period of 35 years, after which a decommissioning plan would be implemented. As a result, the project site would be restored to conditions that would be substantially similar to the existing baseline agricultural conditions. Therefore, no irreversible change to land use would result. The proposed project would commit finite energy sources to the construction of the proposed facility. However, once operational the project would provide a substantial new source of renewable energy for a period of approximately 35 years. Finally, the limited use of hazardous materials during project construction and operation would occur in compliance with all federal, state, and local regulations governing the use, transport, and handling of such materials. As a result, no irreversible damage from accidents is anticipated as a result of project implementation.

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