

Section 3.13

Utilities and Service Systems

This section addresses potential utilities and service systems impacts that may result from construction and/or operation of the proposed project. The following discussion addresses the existing utilities and service systems conditions in the project area, identifies applicable regulations, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from project implementation, as applicable.

Information in this section is largely based on project-specific technical reports including the *Preliminary Hydrology Study & Flood Analysis* (2018a; see **Appendix I-1**) and the *Addendum to Preliminary Hydrology Study & Hydraulics Report* (2018b; see **Appendix I-2**), both prepared by Joseph E. Bonadiman & Associates. Specific information regarding groundwater resources was obtained from the *Water Supply Assessment* prepared by Tetra Tech (2018a; see **Appendix I-3**). All reports referenced above were peer reviewed by Michael Baker International.

ENVIRONMENTAL SETTING

Lands affected by the project are largely comprised of active or formerly active agriculture lands, as well as existing infrastructure associated with the nearby Coolwater Generating Station (no longer in service) and an associated transmission corridor. Railroad infrastructure and other supporting infrastructure used to deliver coal to the power plant is present. The project site also contains utility-related uses on land owned by Southern California Edison (SCE). Private lands in the central and eastern portions of the site consist of agricultural lands that produce primarily alfalfa and pistachios, sparsely spaced rural residential dwellings, previously disturbed and now fallow farmland, and some undeveloped desert land.

WATER

According to the County's General Plan, the County's domestic water sources are supplied through both local and imported water. It is estimated that, on average, 85% of domestic water for the County is supplied by local sources with the balance of 15% being imported purchased water (County 2007b). Supply percentages differ depending upon the geographic area. Imported water is primarily purchased from the Metropolitan Water District (MWD) of Southern California and the State Water Project (the California Aqueduct) as a supplemental source to local water supplies.

The project site lies within the Baja Subarea of the Mojave Basin, within the boundary of the Mojave Water Agency (MWA) Service Area; refer to **Exhibit 3.9-1, Baja Subarea**, for location. Groundwater sources within the basin primarily consist of recharge from the Mojave River, imported water from the State Water Project (SWP), subsurface flows from the Centro Subarea, and return flow from urban runoff and from irrigation activities (e.g., percolation through the ground surface). The project site is not connected to a public water system and there are no public water systems that can serve the project site. Rather, the site lies within an adjudicated water basin and groundwater is actively managed to achieve sustainability. Existing groundwater wells are present on the project site. The wells are operational and available to serve future on-site land uses.

A Stipulated Judgment was issued by the Superior Court in January of 1996 (Superior Court, Judgment after Trial for City of Barstow, et al vs. City of Adelanto, et al Case No. 208568, January 10, 1996) to address water supply shortages in the Mojave Basin Area where the proposed project is located. The adjudication of the Mojave Basin Area was the legal process that allocated the right to produce water from the natural water supply. As mandated in the Judgment, the MWA was appointed as the Basin Watermaster and tasked with the responsibility of sustainably managing water supplies in the Basin.

The Judgment determines water rights for each major producer [defined as a person or entity using 10 acre-feet per year (AFY) or more] based on their historical production. These rights are referred to as Base Annual Production (BAP). Specifically, BAP rights were assigned per court Judgment to each major producer; refer to Attachment A of **Appendix I-3**. The BAP represents the highest possible production for a given producer. There are seven landowners within the project area. The sum of the total BAP for all current project site landowners is 27,054 AFY. The MWA, as the court-appointed Watermaster, establishes Free Production Allowances (FPA) annually to maintain proper water balances. The Watermaster has recommended the FPA for the Baja Subarea be set at 35 percent of the BAP (7,682 AF for the landowners of the project site) for 2018-2019 (Tetra Tech 2018a).

The adjudication of the affected subbasin provides for a number of goals including: 1) to protect and allocate the rights of water producers; and 2) to protect the water supply and ensure its sustainability and availability in the future. It accomplishes these goals by first assigning rights to the producers and then by controlling the amount of water that can be produced by those rights to ultimately bring groundwater levels into balance (i.e. the inflow to the basin matches the outflow) and then maintain that balance. The adjudication considers changes to the needs of production and allows for flexibility to accommodate those changes. Additionally, the adjudication created an ongoing process where groundwater reports are provided to the court on a regular basis to ensure long-term stability of basin water supplies.

The MWA also implements its *2014 Groundwater Level Monitoring Plan* which includes details for the monitoring of wells used to measure groundwater levels. The Plan is actively monitored by MWA to ensure that established water supply goals continue to be met over the long-term.

WASTEWATER

The majority of residential properties located within the County's Desert Region (in which the project site is located) are on private sewage treatment systems (septic tanks). However, there are limited service sewerage agencies serving the region including the Victor Valley Regional Wastewater Agency, the City of Adelanto and the City of Barstow (County 2007b).

The project site is not currently served by a public wastewater treatment service provider. Wastewater disposal for the project area occurs via private septic systems.

STORMWATER

Under current conditions, on-site drainage on the project site is conveyed as natural overland flow along very gradual slopes and relatively unconcentrated, shallow channelization, with the exception of drainage improvements associated with the existing on-site railroad spur, Coolwater Generating Station, decommissioned/removed solar facilities and Barstow-Daggett Airport. Existing on-site paved and dirt roads do not have any associated storm drain facilities.

SOLID WASTE

The County of San Bernardino Solid Waste Management Division is responsible for operation and management of the County's solid waste disposal system. The system consists of six regional landfills, eight transfer stations, and five community collection centers (County 2007b). The County contracts with Burrtec Waste Industries for disposal site operations and maintenance. The County's Solid Waste Management Division also administers the County's solid waste handling franchise program and the refuse collection permit program, which authorize and regulate trash collection by private haulers in the unincorporated area (County 2007b).

All landfills and transfer stations owned and operated by the County have drop-off sites for recyclable materials. Permitted disposal capacity is available at the Barstow, California Street, Colton, Fort Irwin, Landers, Marine Corps Air Ground Combat Center, Mid-Valley, San Timoteo, and Victorville Landfills (County, 2007b). Recent expansion of the Barstow, Victorville, and California Street Landfills is anticipated to provide the County with a minimum of 20 additional years of capacity (County 2007b).

The regional landfills closest to the project site are the Barstow Landfill, located approximately 11 miles to the southwest, and the Victorville Landfill, located approximately 32 miles to the southwest (San Bernardino County Department of Public Works 2018).

REGULATORY FRAMEWORK

FEDERAL

Safe Drinking Water Act

Passed in 1974 and amended in 1986 and 1996, the Safe Drinking Water Act grants the EPA the authority to set drinking water standards. Drinking water standards apply to public water systems that provide water for human consumption through at least 15 service connections or regularly serve at least 25 individuals. There are two categories of drinking water standards: the National Primary Drinking Water Regulations and the National Secondary Drinking Water Regulations. The National Primary Drinking Water Regulations are legally enforceable standards that apply to public water systems. These standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water. The National Secondary Drinking Water Regulations are nonmandatory guidelines for certain substances that do not present a risk to public health.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), which amends the Solid Waste Disposal Act of 1965, was enacted in 1976 to address municipal and industrial solid waste generated nationwide. The act gives the EPA the authority to control hazardous waste from “cradle to grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA also sets forth a framework for the management of nonhazardous solid wastes. The federal Hazardous and Solid Waste Amendments to the RCRA were adopted in 1984 and were aimed at waste minimization and phasing out land disposal of hazardous waste, as well as providing guidance for corrective action of releases. The amendments also allowed for increased enforcement authority for the EPA, more stringent hazardous waste management standards and a comprehensive underground storage tank program. Amendments to the RCRA in 1986 further enabled the EPA to address environmental hazards relative to underground tank storage of petroleum and other hazardous substances (EPA 2012).

REGIONAL

Urban Water Management Plan

Public water systems are required by the California Water Code to prepare Urban Water Management Plans (UWMP) to carry out “long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water” (Water Code Section 10610.2). UWMPs are prepared using input from multiple water systems operating in a region and include assessment of the reliability of water supply over a 20-year period and account for known and projected water demands during that time, including during normal, single-dry, and multiple-dry water years.

An UWMP for 2015 has been created by the MWA and covers the entire MWA service area. The project site lies within an adjudicated water basin, and therefore, groundwater within the basin is actively managed to achieve sustainability. As part of the UWMP, an analysis was performed to determine if MWA has adequate water supplies to meet demands during average, single-dry and multiple-dry years over the next 25 years. The report concluded that there would be adequate water supplies for such conditions over the time period considered (Tetra Tech 2018a).

Stipulated Judgment (Watermaster City of Barstow et al, v. City of Adelanto et al, Riverside County Superior Court Case No. 208568)

The Mojave Basin is an adjudicated basin. Pumping of groundwater from the basin is governed by a 1996 Stipulated Judgment issued by the Riverside County Superior Court. For purposes of defining and implementing a physical solution, the Mojave Basin Area consists of five distinct but hydrologically interrelated "Subareas." Each Subarea was found to be in overdraft to some extent due to the use of water by all of the producers in that Subarea. In addition, some Subareas were found to historically have received at least a part of their natural water supply as water flowing to them from upstream Subareas either on the surface or as subsurface flow. To maintain that historical relationship, the average annual obligation of any Subarea to another is set equal to the estimated average annual natural flow (excluding storm flow) between the Subareas over the 60-year period 1930-31 through 1989-90. If the Subarea obligation is not met, producers of water in the upstream Subarea must provide makeup water to the downstream Subarea.

To maintain proper water balances within each Subarea, the Judgment establishes a decreasing Free Production Allowance (FPA) in each Subarea during the first five years and provides for the Court to review and adjust, as appropriate, the FPA for each Subarea annually thereafter. The FPA is allocated among the Producers in the Subarea based on each Producer's percentage share of the FPA. All water produced in excess of any Producer's share of the FPA must be replaced by

the Producer, either by payment to the Watermaster of funds sufficient to purchase replacement water, or by transfer of unused FPA from another Producer.

Each Producer's percentage share of FPA in a Subarea was determined by first verifying the maximum annual water production (termed Base Annual Production or BAP) for each Producer during the five-year (1986-90) Base Period and then calculating each Producer's percentage share of the total of all such BAP in the Subarea. All such percentage allocations are of equal priority.

Producers within each Subarea are allowed to produce as much water as they need annually to meet their requirements, subject to compliance with the Physical Solution set forth in the Judgment. An underlying assumption of the Judgment is that sufficient water will be made available to meet the needs of the Basin in the future from a combination of natural supply, imported water, water conservation, water reuse and transfers of FPA among Producers.

STATE

Safe Water Drinking Act

Similar to the federal act, California implements the state's Safe Drinking Water Act (Health and Safety Code Section 116270 et seq.) to ensure public health and safety relative to clean drinking water. Under this act, the California Department of Public Health has the authority to protect public drinking water by adopting contaminant levels not to be exceeded in potable water supplies. Such thresholds are equal to or more stringent than established at the federal level under the EPA.

State Water Resources Control Board

Created by the California legislature in 1967, the five-member State Water Resources Control Board (SWRCB) allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Quality Control Boards (RWQCBs) located in the major watersheds of the state. The joint authority of water allocation and water quality protection enables the SWRCB to provide comprehensive protection for California's waters. The SWRCB is responsible for implementing the Clean Water Act and issues National Pollutant Discharge Elimination System (NPDES) permits to cities and counties through the regional boards. The project site lies within the jurisdiction of the Lahontan RWQCB (Region 6).

California Water Plan

Water Code Sections 10004 through 10013 describe the components and characteristics of the California Water Plan prepared by the California Department of Water Resources. The plan

addresses the coordinated control, protection, conservation, development, and utilization of the state's water resources. Updated every 5 years, the most recent water plan is the California Water Plan Update 2013.

Senate Bill 610 (SB 610) amended Water Code sections 10910 and 10912 to create a direct relationship between water supply and land use.

The California Water Code, as amended by SB 610, requires that a water supply assessment (WSA) address the following questions:

- Is there a public water system that will service the project?
- Is there a current urban water management plan (UWMP) that accounts for the project demand?
- Is groundwater a component of the supplies for the project?
- Are there sufficient supplies to serve the project over the next 20 years?

Senate Bill 610 requires water suppliers to prepare a WSA for inclusion in the California Environmental Quality Act (CEQA) process for new development. Section 15155 of the CEQA Guidelines details the types of projects that require a WSA per SB 610. A WSA is required if (among other conditions):

- A project would result in the construction of more than 500 residential units and/or require a water demand equivalent to, or greater than, a 500-dwelling-unit project;
- A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A commercial office building that would employ more than 1,000 persons or have more than 250,000 square feet of floor space;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A project would include a hotel or motel, or both, having more than 500 rooms;
- A mixed-use project that includes one or more of the projects specified above; and/or
- For public water systems with fewer than 5,000 service connections, a project that meets the following criteria:

1. A proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of a public water system's existing service connections; or
2. A mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

Because the proposed project is an industrial facility occupying more than 40 acres of land, a WSA has been prepared for the project and is included in **Appendix I-3** of this EIR (Tetra Tech 2018a).

California Integrated Waste Management Act

Assembly Bill (AB) 939 established the California Integrated Waste Management Act of 1989 (Public Resources Code Sections 42900–42927) which required all California cities and counties to reduce the volume of solid waste deposited in landfills by 50 percent by the year 2000. It also requires that cities and counties continue to remain at 50 percent or higher for each subsequent year. The act is intended to reduce, recycle and reuse solid waste generated to the maximum extent feasible.

The act requires each California city and County to prepare, adopt and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element (SRRE) that demonstrates how the jurisdiction will meet the act's mandated diversion goals. Each jurisdiction's SRRE must include specific components as defined in Public Resources Code Sections 41003 and 41303. In addition, the SRRE must include a program for management of solid waste generated in the jurisdiction consistent with the following hierarchy: (1) source reduction; (2) recycling and composting; and (3) environmentally safe transformation and land disposal. The SRRE is required to emphasize and maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste to be disposed of by transformation and land disposal (Public Resources Code Sections 40051, 41002, and 41302).

State-Mandated Solid Waste Diversion

As landfills reach their capacities and new landfill sites become increasingly difficult to establish, the need to reduce solid waste generation is significant. State law currently requires that local jurisdictions divert at least 50 percent of their solid waste from landfills through recycling, conservation and composting. The County of San Bernardino is required to comply with state regulations.

LOCAL***San Bernardino County General Plan***

The following goals, policies and programs from the County General Plan Circulation and Infrastructure Element are applicable to the proposed project:

Circulation and Infrastructure Element

GOAL CI 11 The County will coordinate and cooperate with governmental agencies at all levels to ensure safe, reliable, and high-quality water supply for all residents and ensure prevention of surface and ground water pollution.

Policy CI 11.12 Prior to approval of new development, ensure that adequate and reliable water supplies and conveyance systems will be available to support the development, consistent with coordination between land use planning and water system planning.

GOAL CI 12 The County will ensure adequate wastewater collection, treatment, and disposal consistent with the protection of public health and water quality.

Policy CI 12.12 Prior to approval of new development, ensure that adequate and reliable wastewater systems will be available to support the development, consistent with coordination between land use planning and wastewater system planning.

Policy CI 12.12 Cooperate with local wastewater/sewering authorities to monitor future development to ensure that development will proceed only when sufficient capacity or approved alternative wastewater treatment systems can be provided.

GOAL CI 14 The County will ensure a safe, efficient, economical, and integrated solid waste management system that considers all wastes generated within the County, including agricultural, residential, commercial, and industrial wastes, while recognizing the relationship between disposal issues and the conservation of natural resources.

Policy CI 14.1 Utilize a variety of feasible processes, including source reduction, transfer, recycling, land filling, composting, and resource recovery to achieve an integrated and balanced approach to solid waste management.

Policy CI 14.5 Coordinate with agencies at the state level, including the California Integrated Waste Management Board, counties and cities within the southern California region, and other interested agencies or persons in the public or private sectors to ensure effective solid waste management.

Renewable Energy Element

The County adopted a Renewable Energy and Conservation Element (RECE) for inclusion in the San Bernardino County General Plan in August 2017. The element includes land use guidance regarding new renewable energy projects within the County. Relevant goals and policies of the RECE pertaining to utilities are identified below.

Policy D/CI 4.3 Commercial and industrial development in rural areas shall ensure that adequate infrastructure is provided.

Conservation Element

Policy CO 5.2 The County Water Masters will continue to monitor the County's adjudicated groundwater basins to ensure a balanced hydrological system in terms of withdrawal and replenishment of water from groundwater basins.

Policy CO 5.3 The County will promote conservation of water and maximize the use of existing water resources by promoting activities/measures that facilitate the reclamation and reuse of water and wastewater.

IMPACT ANALYSIS AND MITIGATION MEASURES

THRESHOLDS FOR DETERMINATION OF SIGNIFICANCE

The following thresholds of significance are based, in part, on CEQA Guidelines Appendix G. For the purposes of this EIR, the proposed project is evaluated against the following thresholds for the potential to result in a significant impact:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed.
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Comply with federal, state, and local statutes and regulations related to solid waste.

PROJECT IMPACTS AND MITIGATION

EXCEED WASTEWATER TREATMENT REQUIREMENTS OF THE REGIONAL WATER QUALITY BOARD

Impact 3.13-1 The project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Impacts would be less than significant.

The project site is overseen by the Lahontan Region RWQCB. Water quality standards for water bodies in the region are primarily contained in the Water Quality Control Plan for the Lahontan Region - Region 6 (Lahontan RWQCB 2016).

During project construction, portable toilets would be installed on-site for use by the construction crew. Sanitation waste would be disposed of in accordance with applicable sanitation waste management practices at an off-site facility.

Water used for dust suppression and earthwork activities would be directly applied to on-site soils and no runoff from the site is anticipated due to existing soil conditions. Refer also to Section 3.9, Hydrology and Water Quality, of this EIR for additional discussion.

During project operation, water would be required for panel washing activities and general maintenance. The frequency of panel washing would generally be determined based on soiling of the solar PV panels and expected benefit from cleaning. Should cleaning be necessary, water would be sprayed on the solar PV panels to remove dust. Water for panel washing would be obtained from on-site wells. Such effluent would not contain any toxicants or cleaning agents.

Wastewater disposal for the proposed operations and maintenance (O&M) building would be provided via an on-site septic system. No connection to public wastewater treatment service systems would occur.

Therefore, due to the nature of anticipated construction and operational activities, the project is not anticipated to exceed wastewater treatment requirements of the Lahontan Region RWQCB. Impacts would be less than significant.

Mitigation Measures: None required.

Level of Significance: Less than significant impact.

REQUIRE NEW OR EXPANDED WATER OR WASTEWATER TREATMENT FACILITIES

Impact 3.13-2 **The project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Impacts would be less than significant.**

Refer to Impact 3.13-1, above, and Impact 3.13-4, below. The site is currently not served by public water or wastewater treatment service facilities.

The project would require the use of limited quantities of water during the construction phase for purposes of dust control and earthwork; operation of the proposed solar and energy storage project would also require use of water for maintenance purposes (e.g., panel washing) and in support of daily activities at the proposed on-site O&M facility. Bottled water would be brought to the site to provide drinking water for employees. Water for project construction and operation would be supplied from existing on-site groundwater wells; connection to a public water service system would not occur. Groundwater would not require treatment prior to use.

With project implementation, existing local demands within the project boundaries are expected to be substantially reduced. Project demands during construction are estimated to average 450 AFY (approximately 3.5 years) and then reduce to 25 AFY during operations. Over a 20-year period, the existing local use, if continued in its present form, would have amounted to approximately 167,000 AF; the project would amount to 2,280 AF (Tetra Tech 2018a). Anticipated water use for the project would therefore amount to less than 1.5 percent of the current agricultural use and water demands would be substantially reduced (however, it is anticipated that such reductions may be offset locally by others off-site exercising their water rights). Refer also to Impact 3.13-4 regarding water supply availability.

Additionally, as the project would not create new water demands and would re-allocate water to the project from on-site agricultural use, the project would not affect calculated UWMP water

demands. As stated previously, the UWMP indicates that MWA has adequate water supplies to meet anticipated demands during average, single-dry and multiple-dry year scenarios over the next 25 years (Tetra Tech 2018a). Refer also to **Appendix I-3**.

Therefore, the project would not require or result in the construction of new water treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. Impacts in this regard would be less than significant.

Wastewater disposal needs would be provided on-site via portable toilet facilities during the construction phase. Disposal of such wastewater would occur at a permitted off-site facility. Wastewater disposal for the O&M building would be provided via an on-site septic system. Connection to a public wastewater treatment service system would not occur. Therefore, the project would not require or result in the construction of new wastewater treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. Impacts in this regard would be less than significant.

Mitigation Measures: None required.

Level of Significance: Less than significant impact.

REQUIRE NEW OR EXPANDED STORMWATER DRAINAGE FACILITIES

Impact 3.13-3 The project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Impacts would be less than significant.

Under current conditions, drainage on the project site is conveyed as natural overland flow along very gradual slopes and relatively unconcentrated, shallow channelization, with the exception of drainage improvements associated with the existing on-site railroad spur, Coolwater Generating Station, decommissioned/removed solar facilities and Barstow-Daggett Airport. Existing on-site paved and dirt roads do not support any associated storm drain facilities.

Refer to Section 3.9, Hydrology and Water Quality, for additional discussion of the proposed drainage improvements and potential project effects relative to stormwater quality. The proposed site drainage improvements have been designed to follow natural drainage patterns. None of the on-site facilities, including fences and panel posts, are expected to prevent or inhibit stormwater flows. The project would provide adequate retention facilities to mitigate the expected stormwater runoff volume increase caused by the project. Based on the negligible increase in flows expected from project implementation, along with the anticipated regrowth of

natural vegetative cover on-site, project design would reduce peak flows to near-existing conditions.

During project operations, the proposed solar and energy storage project would discharge uncontaminated water used in cleaning the solar PV panels. Such water would not contain any toxicants or cleaning agents. It is anticipated that the minimal amount of wastewater generated during panel cleaning activities would be absorbed through the ground surface and would not result in runoff from the project site.

Additionally, impervious surface would not be increased by the solar panels as they would be mounted above the ground surface and rainfall falling directly onto the panels would shed directly onto the ground below. The majority of the ground surface within the boundaries of the solar field would therefore remain pervious (e.g., not covered by impervious surfaces such as paved roadways or permanent structures). All proposed stormwater drainage improvements have been considered in the EIR analysis.

Therefore, the project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities that could cause significant environmental effects. Impacts would be less than significant.

Mitigation Measures: None required.

Level of Significance: Less than significant impact.

REQUIRE NEW OR EXPANDED WATER SUPPLIES

Impact 3.13-4 The project would have sufficient water supplies available to serve the project from existing entitlements and resources, and new or expanded entitlements are not needed. Impacts would be less than significant.

A Water Supply Assessment was prepared by Tetra Tech to evaluate anticipated water supply and demand for the project's construction and operational phases (Tetra Tech 2018a). Refer to **Appendix I-3** of this EIR. Refer also to Section 3.9, Hydrology and Water Quality, for additional discussion of potential project effects on groundwater supplies.

CONSTRUCTION

Water for construction would be used for purposes of dust control and earthwork. It is anticipated that water trucks would be filled on-site and used to spread water to mitigate potential visible fugitive dust from vehicular travel and wind erosion. Domestic water for use by employees would be provided from on-site wells (or temporarily by the construction contractor

through deliveries to the site). Domestic water for use by employees would be provided by the construction contractor through deliveries to the site or from on-site wells.

Seven landowners within the project area have a Free Production Allowance (FPA) of 7,682 AF for 2017-2018 (Tetra Tech 2018a). The project applicant has entered into agreements with these landowners to acquire the properties along with the acquisition of adequate water supply to meet construction (and operational) needs from the existing seven on-site wells. For the overall project (Phases 1 to 3), it is estimated that approximately 1,800 AF of water would be required for the purpose of dust suppression and earthwork during the approximately construction period.

The project would eliminate approximately 1,600 acres of agricultural use on the subject site which required water production of approximately 8,338 AF in 2017. The project would require approximately 450 AFY for an estimated 3.5 years for a total of 1,800 AF (during construction) and then reduce long-term water use to approximately 25 AFY (during project operation). As such, during construction, water production would be reduced by approximately 7,860 AF as compared to current agricultural production. However, the remaining rights to the production would still exist and, assuming those rights are exercised, there would be little or no net reduction in production. Therefore, the project would not increase, nor likely decrease, the amount of pumping (or extraction) from the subbasin and has contractual rights to use already allocated groundwater for which there are no other demands. (The demand for such water has already been allocated to the landowners whose land would be developed for the project.)

The maximum amount of pumping is thus capped and controlled under the Stipulated Judgment and the amount of water to be used by the Project is within the existing allocation and cannot by law exceed it without replacement. The WSA has demonstrated that the project would consume water that has already been allocated for consumption under Stipulated Judgment and there is sufficient water supply available for the Project during normal, single dry, and multiple dry water years during a 20-year projection. In addition to existing and planned future uses, including agricultural and manufacturing uses.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than Significant.

OPERATION

Periodic inspections and maintenance activities for the proposed solar PV facilities would occur. Use of nominal amounts of water may be necessary for maintenance in the event of repairs. Water would be sourced from groundwater wells on the proposed solar and energy storage project site.

Water would also be required for panel washing activities. The frequency of panel washing would be determined based on soiling of the solar PV panels and expected benefit from cleaning. Should cleaning be necessary, water would be sprayed on the solar PV panels to remove dust. An estimated 25 AF year of water would be necessary for project operation and maintenance purposes (for all phases of the project or full 650-megawatt buildout). This water would be obtained from on-site groundwater wells.

Project operations would be monitored via the proposed Supervisory Control and Data Acquisition (SCADA) system and the O&M building. The O&M building would be staffed with full- and part-time employees such as a plant manager, maintenance manager, solar technicians, and environmental specialists. All water for the O&M building would be provided via on-site groundwater wells.

The WSA prepared for the proposed project calculated the baseline groundwater budget for the Baja subarea groundwater basins in the absence of the proposed project and all other known cumulative projects not already in place for the normal (average), single-dry and multiple-dry year scenarios (Tetra Tech 2018a). With addition of the project, the WSA determined that an adequate water supply would be available to serve the site under the scenarios considered during a 20-year projection; refer to **Appendix I-3** for additional details. Therefore, there is sufficient water supply to meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses. As stated above, the project would replace a much more water-intensive land use with a less water-intensive land use. While the WSA assumes conservatively that the reduction in water usage at the project site due to the conversion of agricultural land uses to a solar PV facility may be transferred to other areas within the subarea, resulting in decreased local water usage, the project would require a minimal amount of water as compared to the size of the subbasin.

The project would require approximately 450 AFY for an estimated 3.5 years for a total of 1,800 AF (during construction) and then reduce long-term water use to approximately 25 AFY (during project operation). This would reduce production needs at the project site by more than 164,000 AF over 20 years, as compared to current conditions. However, as stated above, the remaining rights to the production would still exist and, assuming those rights are exercised, there would be little or no net reduction in production within the subbasin.

Further, the maximum amount of pumping is capped and controlled under the Stipulated Judgment. The amount of water to be used by the project is within the existing allocation and cannot by law exceed it without replacement. As imposed by the adjudication, consumptive use cannot be increased with a transfer or change in the purpose of the use (i.e. agricultural use to solar PV facility), and therefore, the project cannot consumptively use more water than under current conditions.

Although the subbasin is not yet considered to be balanced (water extracted out of the basin equal to water added to the basin), and the FPA is expected to decline in the future, there would be sufficient water available for the project because it would only use a fraction of the water it would make available due to the elimination of agricultural uses on-site. The large capacity of the subbasin as compared to the projected water budget deficit allows for the subbasin to provide sufficient water supply to the project, while the Watermaster would continue ongoing efforts to bring the basin into balance over the long-term (see also **Appendix I-3**).

An adequate water supply for project operations would be available through secured water rights acquired by the project applicant and/or through agreements with landowners who currently have on-site water allocations. No new or expanded entitlements are required. Impacts to water supplies in this regard would be less than significant.

As indicated above, a significant and unavoidable impact on groundwater levels east of the Calico-Newberry Fault may occur under certain future conditions, due to changing groundwater use within the affected subbasin. However, these changes would be location-based change and not a change in overall demand or water supplies in the Basin, which could stay the same. It is questionable whether such impacts can reasonably be considered to be foreseeable indirect impacts of the project. However, for the purposes of this EIR, these location-specific impacts on groundwater levels are assumed to be significant and unavoidable because the County could not compel action by the Watermaster to adjust FPA or take other action to achieve equilibrium in the Baja Subarea. Refer to Section 3.9, Hydrology and Water Quality, for an in-depth discussion.

Mitigation Measures: No mitigation measures required.

Level of Significance: Less than significant impact.

INADEQUATE WASTEWATER TREATMENT CAPACITY

Impact 3.13-5 **The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Impacts would be less than significant.**

Refer to Impacts 3.13-1 and 3.13-2. Wastewater disposal needs would be provided on-site via portable toilet facilities for use during the construction phase. Disposal of such wastewater would occur at a permitted off-site facility. Wastewater disposal for the O&M building would be provided via an on-site septic system. Public wastewater treatment services would not be required and no increase in demand for such services would occur with project implementation.

The project would not result in a determination by the wastewater treatment provider that serves the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Impacts would be less than significant.

Mitigation Measures: None required.

Level of Significance: Less than significant impact.

SUFFICIENT PERMITTED LANDFILL CAPACITY TO ACCOMMODATE SOLID WASTE DISPOSAL NEEDS

Impact 3.13-6 The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Impacts would be less than significant.

The County of San Bernardino implements its Countywide Integrated Waste Management Plan to ensure the proper management and disposal of waste materials. According to the County's General Plan Program EIR, the County's Solid Waste Management Division is responsible for the operation and management of the County's solid waste disposal system, which consists of six regional landfills, eight transfer stations, and five community collection centers (County 2007b).

Solid waste from the project site would be disposed of at the Barstow Landfill or the Victorville Landfill, or at the California Street Landfill (located in Redlands). According to the General Plan Program EIR, prior or planned expansions to these landfills provide the County with a minimum of 20 additional years of landfill capacity (County 2007b). The Barstow Landfill has a remaining capacity of 71,481,660 cubic yards (c.y.) with an anticipated closure date of 2071 (CalRecycle 2018a); the Victorville Landfill has a remaining capacity of 81,510,000 c.y. with an anticipated closure date of 2047 (CalRecycle 2018b); and the California Street Landfill has a remaining capacity of 6,800,000 million c.y. with an anticipated closure date of 2042 (CalRecycle 2018c).

Solid waste would largely be generated by short-term construction activities associated with the proposed project. Project construction would result in minor quantities of construction debris such as concrete, wiring, metal, packaging and other materials. Any solid waste generated by the project would be disposed of at a licensed off-site landfill or at a recycling facility, as appropriate.

Due to the nature of the proposed land use, project operation would generate minimal quantities of solid waste, generally from workers on-site performing routine maintenance. The project proposes construction of an O&M building that would serve to store spare parts and vehicles and to accommodate full- and part-time staff associated with the project. Therefore, minimal amounts of solid waste may be generated by staff occupying the site and/or from periodic maintenance activities. All solid waste would be collected by workers on a daily basis, or as otherwise needed, and transported to a licensed off-site landfill or recycling facility for disposal.

Additionally, the project components, including the solar panels and tracking systems, would be decommissioned in the future and disposed of. The solar panels would generally consist of silicon, glass and a metal frame. Tracking systems (not including the motors and control systems) typically consist of aluminum and concrete. These materials can be recycled. Additionally, concrete from deconstruction would be recycled. Several industrial recycling facilities are located within San Bernardino and Riverside counties within proximity to the project site that would be able to accommodate deconstructed, recyclable wastes from the decommissioning activities. Metal, scrap equipment and parts that do not have free-flowing oil would be sent for salvage. All decommissioning activities would comply with federal, state and local standards and all regulations that exist when the project is decommissioned, including the requirements of San Bernardino County Development Code Section 84.29.060.

Construction, operation and decommissioning activities for the project are not anticipated to result in impacts related to landfill capacity. With project conformance to applicable federal, state and local solid waste reduction and recycling measures, the project is not anticipated to result in a significant impact on solid waste disposal capacity. Impacts would be less than significant.

Mitigation Measures: None required.

Level of Significance: Less than significant impact.

COMPLY WITH FEDERAL, STATE AND LOCAL STATUTES AND REGULATIONS FOR SOLID WASTE

Impact 3.13-7 The project would comply with federal, state, and local statutes and regulations related to solid waste. Impacts would be less than significant.

Refer to Impact 3.13-5, above. The project would generate solid waste during construction and operation activities, thus requiring consideration of waste reduction and recycling measures. The 1989 California Integrated Waste Management Act (AB 939) requires that specific waste diversion goals be achieved for all California cities and counties, including an overall reduction in solid waste produced by 50 percent by the year 2000. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed design. Additionally, California Assembly Bill 341 (2011) established a state goal to reduce, recycle or compost no less than 75 percent of waste generated by the year 2020.

Generation of solid waste would generally be limited to the construction phase (e.g., minor quantities of construction debris). Solid waste produced during construction would be properly disposed of in accordance with applicable statutes and regulations. Similarly, any waste generated during future decommissioning of the solar and energy storage project components

would be required to be properly managed and disposed of in a licensed, off-site landfill or recycled.

Minimal amounts of solid waste may be generated by staff occupying the site and/or from periodic maintenance activities. All solid waste would be collected by workers on a daily basis, or as otherwise needed, and transported to a licensed off-site landfill or recycling facility for disposal.

Construction and operational activities for the proposed project would occur in compliance with applicable federal, state and local statutes and regulations related to solid waste. Impacts would be less than significant.

Mitigation Measures: None required.

Level of Significance: Less than significant impact.

CUMULATIVE IMPACTS

Impact 3.13-8 The project would not result in cumulative impacts related to utilities and service systems. Impacts would be less than significant.

Cumulative projects that would have the potential to be considered in a cumulative context with the projects' incremental contribution, and that are included in the analysis of cumulative impacts relative to utilities and services, are identified in **Table 3.0-1** in Section 3.0, Introduction to Environmental Analysis, of this EIR.

It is not anticipated that the cumulative projects identified in **Table 3.0-1** would result in impacts relative to utilities or service systems. All current, planned or future discretionary projects within the County's jurisdiction would be required to demonstrate the availability of adequate water, wastewater treatment and/or solid waste disposal services prior to the issuance of permits and/or commencement of construction activities, or to identify adequate mitigation measures to ensure that new development does not adversely affect the County's ability to provide such services.

In particular, as discussed under Impact 3.13-4, groundwater supplies would be adequate to serve construction and operational demands of the proposed project. According to the WSA, the project, when considered with current and anticipated future development within the subbasin, would not adversely affect groundwater availability in the immediate future or over the long-term, due to existing and anticipated groundwater supplies and ongoing regulation and management of the subbasin by the MWA (Tetra Tech, 2018a; see **Appendix I-3**).

Based on the findings of the WSA, there is sufficient groundwater supply available for the project during normal, single dry and multiple dry water years during a 20-year projection. A sufficient water supply would be available to meet the projected water demand associated with the proposed project, in addition to existing and planned future uses within the subbasin (Tetra Tech 2018a).

Additionally, the project would replace a more water-intensive land use with a less water-intensive land use. While the WSA assumed conservatively that the reduction in water usage at the project site due to the conversion of agricultural land uses may be transferred to other areas within the subarea, thereby decreasing local water usage, the proposed project would require only a limited amount of water as compared to the overall size of the subbasin, thereby having a minimal contribution to anticipated future increase on groundwater demands (Tetra Tech 2018a).

As with the proposed project, the cumulative projects considered would be required to conform with federal, state and local regulations pertaining to solid waste disposal and recycling. As indicated, area landfills (those serving the project site and others operated by the County within the region) have adequate capacity well into the future to accommodate area growth and solid waste disposal needs. As such, the project, in combination with other cumulative projects, would not contribute to a significant cumulative impact relative to solid waste disposal.

As discussed above, all utilities and services have been determined available and adequate to serve the proposed solar PV facility. As such, the project, considered in combination with other cumulative projects identified, would result in a less than significant cumulative impact on utilities and service systems.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than significant.

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