

3.1.9 Utilities and Service Systems

This section discusses potential impacts to utilities and service systems, including water, wastewater, stormwater, and solid waste hauling and disposal, resulting from implementation of the Campo Wind Project with Boulder Brush Facilities (Project). This analysis is based on review of existing resources; technical data; applicable laws, regulations, and guidelines; and the following technical reports prepared for the Project:

- Groundwater Resources Evaluation for the Campo Wind Project with Boulder Brush Facilities, prepared by Dudek (Appendix J-1)
- Water Supply Assessment for the Campo Wind Project with Boulder Brush Facilities, prepared by Dudek (Appendix N)

Baseline utilities information was obtained through a review of technical documents prepared for the Project, which are attached as appendices to this Environmental Impact Report (EIR), and the websites and documents cited throughout this section. For a detailed discussion regarding energy utilities, refer to Section 3.1.2, Energy, of this EIR.

Comments received in response to the Notice of Preparation included concerns regarding groundwater resources, adequate water supply, and water dedicated for fire protection. These concerns are addressed in this section. A copy of the Notice of Preparation and comment letters received in response to it are included in Appendix A of this EIR.

3.1.9.1 Existing Conditions

Surface Water Resources

The Project Area is located within the boundaries of two Regional Water Quality Control Boards (RWQCBs). The Boulder Brush Facilities and the portion of the Campo Wind Facilities located in the northeastern corner of the Campo Band of Diegueño Mission Indians Reservation (Reservation) fall within the boundary of Colorado River RWQCB (Region 7). The remaining southern portion of the Campo Wind Facilities is located within the boundary of the San Diego RWQCB (Region 9). The division between the Colorado River RWQCB and the San Diego RWQCB is marked by the Tecate Divide. The Project Area is located west of the Tecate Divide, which is a series of ridgelines separating drainages that discharge to the Salton Sea from drainages that discharge into the Pacific Ocean. The majority of the Reservation lies to the west of this divide; however, the Boulder Brush Boundary and the northeastern portion of the Reservation lie to the east of the divide. Portions of the Project that lie to the west of the Tecate Divide are located within the Clover Flat, Hill, and Hipass Hydrologic Subareas, which are contained within the Cameron and Campo Hydrologic Areas, all within the Tijuana Hydrologic Unit that drains toward the Pacific Ocean. The portions of the Project that lie to the east of the Tecate Divide are located within the

McCain Hydrologic Subarea, which is contained within the Jacumba Hydrologic Areas, all within the Anza Borrego Hydrologic Unit that drains toward the Salton Sea.

Baseline hydrologic and existing water resources conditions are further addressed in the Groundwater Resources Evaluation for the Project, included as Appendix J-1 to this EIR. The U.S. Geological Survey Watershed Boundary Dataset indicates that the Project Area lies within the Tecate Creek, Upper Cottonwood Creek, and Arroyo Seco watersheds of the Cottonwood-Tijuana sub-basin in Laguna-San Diego Coastal basin and in the Upper Carrizo Creek watershed of the Carrizo Creek sub-basin within the Salton Sea basin (see Figure 3.1.5-2, Watersheds, of Section 3.1.5, Hydrology and Water Quality, of this EIR) (USGS 2016). Surface waters from the Project Area ultimately flow to the Pacific Ocean, with the exception of waters from the northeastern portion of the Reservation and the Boulder Brush Boundary, which flow to the Salton Sea. Baseline hydrologic and existing water resources conditions in the Project Area are further addressed in Appendices J-1 through J-3.

A number of gullies, swales, and dry washes transect the Project Area. During heavy rain events, runoff starts as sheet flow and concentrates in several paths as it flows into area streams. The Reservation Boundary includes U.S. Geological Survey blue-line drainages, including Campo Creek, Miller Creek, Diabold Creek, and unnamed dry drainages (USGS 2019). An emergent wetland area is located within the central-western portion of the Reservation, along Diabold Creek, a tributary of Campo Creek just west of Church Road. This is a constructed wetland created by the Campo Band of Diegueño Mission Indians (Tribe) with a permit from the U.S. Army Corps of Engineers. U.S. Geological Survey blue-line drainages that cross the Boulder Brush Facilities consist of Tule Creek and unnamed tributaries to Tule Creek (USGS 2019).

Groundwater Resources

Due to the intermittent flow of surface water on the Reservation during most of the year and the lack of infrastructure to deliver imported water, groundwater wells constitute the sole source of domestic water supply to the Project Area and Project Vicinity. Consequently, preservation of groundwater levels and quality is vital when evaluating proposed land uses within the Reservation (by the Tribe and Bureau of Indian Affairs) and within the Boulder Brush Boundary under the jurisdiction of the County of San Diego (County). Water sources during construction would include On- and Off-Reservation facilities such as groundwater production wells on the southern end of the Reservation and commercially obtained non-potable water from permitted Off-Reservation purveyors such as the Jacumba Community Services District (JCSD) and Padre Dam Municipal Water District (PDMWD). Since water from the PDMWD is not sourced from groundwater, the study area for groundwater resources includes both the On-Reservation wellfield and the aquifers that supply JCSD's wells.

A portion of the Reservation is located within the Tijuana Hydrologic Unit, a triangular-shaped area drained by Cottonwood Pine Valley and Campo Creeks, which are tributaries to the Tijuana River. Hydrographs for on-site and off-site wells, presented as appendices to the Groundwater Resources Evaluation (Appendix J-1), show relatively stable to slightly declining groundwater levels. Groundwater use during construction of the San Diego Gas & Electric Company (SDG&E) East County Substation Project was 36.4 acre-feet (AF) over 4 months, compared to 61 AF expected to be extracted for the Project over 14 months. Transducer measurements noted a decline in water levels of up to 110 feet when pumps were running, and 30 to 50 feet when pumps were shut off. By the end of the 5-year post-construction period, however, groundwater had recovered to near pre-construction levels.

Pursuant to Section 1424(e) of the federal Safe Drinking Water Act, the Regional Administrator of the U.S. Environmental Protection Agency (Region 9) determined on May 28, 1993, that the Campo/Cottonwood Creek aquifer is a sole or principal source of drinking water (i.e., Sole Source Aquifer) for the population in the vicinity of the communities of Boulevard, Campo, and Pine Valley, located in eastern San Diego County. The majority of the Reservation lies within the designated boundaries of the aquifer, but the Project lies outside the area designated by the Environmental Protection Agency as a sole source aquifer. Existing conditions of groundwater resources in the Project Vicinity is outlined in detail in Section 3.1.5, Hydrology and Water Quality, of this EIR.

Water Quality and Supply

Water On-Reservation is provided by individual on-site wells and community wells through three Public Water Systems¹ regulated by the Tribe, with oversight by the Campo Environmental Protection Agency. The Tribe recognizes the need to plan for future water services and to conserve available water. There are currently no land uses that consume water within the Boulder Brush Boundary, and the Boulder Brush Boundary is not connected to a public water system or located within the service area of a retail water supplier.

Limited information exists pertaining to groundwater quality within the Project Area. As part of a landfill project that was proposed but never constructed on the southeastern corner of the Reservation Boundary, groundwater quality sampling occurred between 1994 and 2004. Constituents measured in water quality samples included chloride, fluoride, pH, sulfate, total dissolved solids (TDS), title 22 metals, and volatile organic compounds. Groundwater on the site was primarily sodium-bicarbonate type water, with water quality ranging from good to relatively poor. Poor groundwater quality encountered in some wells was the result of elevated concentrations of naturally occurring metals, primarily arsenic, manganese, iron, and TDS. The study found that TDS concentrations were

¹ Section 10912 of the California Water Code defines a “public water system” as a system that has 3,000 or more service connections and provides piped water to the public for human consumption.

generally elevated in the shallower parts of the groundwater flow system, with deeper parts generally having lower TDS concentrations and therefore generally better groundwater quality. Water quality samples collected On-Reservation in 2004 generally met drinking water maximum contaminant levels for constituents sampled. Exceedances of primary maximum contaminant levels for arsenic occurred in three (of 34) monitoring wells sampled in 2004. Exceedances of secondary maximum contaminant levels for TDS occurred in four wells sampled, and exceedances of secondary maximum contaminant levels for manganese occurred in one well sampled. No volatile organic compounds were detected in any of the wells sampled (Appendix J-1).

Because of the arid and ephemeral nature of surface watercourses in the Project Area, there is no systematic monitoring of surface water quality within the U.S. Geologic Survey blue-line streams. However, water quality sampling in 2007 and 2008 lead to Campo Creek being listed as impaired for indicator bacteria on the most recently approved Clean Water Act Section 303(d) List of Water Quality Limited Segments (SWRCB 2016). This impairment listing is relevant to the majority of the Reservation Boundary west of the Tecate Divide because stormwater runoff from the area eventually drains to Campo Creek. Clean Water Act Section 303(d) also lists Cottonwood Creek, Morena Reservoir, and Barrett Lake as impaired water bodies for a variety of pollutants/stressors (see Table 3.1.5-2, Clean Water Act Section 303(d) Impairments, in Section 3.1.5, Hydrology and Water Quality). These waterbodies are all located downstream of the northwestern corner of the Reservation Boundary west of the Tecate Divide, although the Project surface area that contributes runoff to these impaired water bodies is rather limited. There are no Clean Water Act Section 303(d) impaired water bodies for the creeks intersected by the Boulder Brush Boundary or the portion of the Reservation Boundary located east of the Tecate Divide.

Imported Water

Regionally, imported water comes from the San Diego County Water Authority, which derives its water from a diverse network of sources, including the Colorado River, the Metropolitan Water District (State Water Project supplied by reservoirs in Northern California and the Sacramento–San Joaquin River Delta), water transfers, local groundwater and surface water sources, recycled water, seawater desalination, water conservation, and potable reuse (SDCWA 2018). The Project Site is located east of the San Diego County Water Authority service area and has no direct connection to imported water.

Wastewater

Under existing conditions, there are no current land uses that use wastewater services within the Boulder Brush Boundary, and the Boulder Brush Boundary is not connected to a public wastewater system. The Reservation does not support a wastewater district for septic or wastewater treatment. The vast majority of the community relies on individual septic tanks that are the responsibility of home owners.

Stormwater

The Project Area contains many ridges that generally run north to south and slope from the east and west, and site ridges drain to the southeast. The Project Area is east of the Salton Sea Divide, which means the Project Area ultimately drains to the Salton Sea. Development that lies east of this divide is not eligible for consideration as a priority development project, as specified in the County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance. The latest Federal Emergency Management Agency flood maps indicate that there are no flood hazards on the site (FEMA Panel 06073C2075F).

Solid Waste

Solid waste disposal in unincorporated San Diego County was facilitated historically through the use of rural bin sites. These rural bin sites functioned as transfer stations where residents disposed of residential waste and licensed waste haulers transported the waste to an area landfill. Presently, the closest County-designated transfer stations to the Project Site are the WM Refuse and Recycling Center in El Cajon (County of San Diego 2017). There are four permitted active landfills located within San Diego County with remaining capacity. The two nearest landfills to the Project Site are the Sycamore Landfill in Santee and the Otay Landfill in Chula Vista. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Sycamore Canyon landfill has a permitted disposal rate or throughput of 5,000 tons per day, and a remaining capacity of 113,972,637 cubic yards as of December 2016 (CalRecycle 2018a). The Otay Landfill has a permitted disposal rate or throughput of 6,700 tons per day and remaining capacity of 21,194,008 cubic yards as of May 2016 (CalRecycle 2018b).

Under existing conditions, there are no current land uses that generate solid waste within the Boulder Brush Boundary, and the Boulder Brush Boundary is not serviced by a solid waste disposal provider.

3.1.9.2 Regulatory Setting

Federal Regulations

National Pollution Discharge Elimination System Permits

In California, the State Water Resources Control Board (SWRCB) and its RWQCBs administer the National Pollution Discharge Elimination System (NPDES) permit program. The NPDES permit system was established in the Clean Water Act to regulate point-source discharges and nonpoint-source discharges to surface waters of the United States. The NPDES program characterizes receiving water quality, identifies harmful constituents, targets potential sources of pollutants, and implements a comprehensive stormwater management program. Construction and

industrial activities are typically regulated under statewide general permits that are issued by the SWRCB. The RWQCB also issues Waste Discharge Requirements that serve as NPDES permits under the authority delegated to the RWQCBs under the Clean Water Act. In November 1990, under Phase I of the urban runoff management strategy, the Environmental Protection Agency published NPDES permit application requirements for municipal, industrial, and construction stormwater discharges. With regard to municipalities, the permit application requirements were directed at jurisdictions owning or operating municipal separate storm sewer systems (MS4s) serving populations of 100,000 or more, or contributing significant pollutants to waters of the United States.

State Regulations

State regulations are applicable to the Boulder Brush Boundary, which is under the jurisdiction of the County. State regulations are not applicable to the Campo Wind Facilities or the Reservation.

California Integrated Waste Management Board Solid Waste Policies

Assembly Bill 939, the Integrated Waste Management Act, established an integrated waste management hierarchy to guide the California Integrated Waste Management Board (now CalRecycle) and local agencies in the implementation of programs geared at source reduction, recycling and composting, and environmentally safe transformation and land disposal. Assembly Bill 939 also included waste diversion mandates that require all cities and counties to divert 50% of all solid waste through source reduction, recycling, and composting activities. The Integrated Waste Management Act also requires each county to provide capacity for solid waste generated within its jurisdiction that cannot be reduced or recycled for a 15-year period (CalRecycle 2018c).

Regional Water Quality Control Board

The statutes that govern the activities under the Project that may affect water quality are the federal Clean Water Act (33 USC 1251 et seq.) and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (California Water Code, Section 13000 et seq.). These acts provide the basis for water quality regulation in the Project Area.

The California Legislature has assigned the primary responsibility to administer and enforce statutes for the protection and enhancement of water quality to the SWRCB and its nine RWQCBs. The SWRCB provides state-level coordination of water quality control by establishing statewide policies and plans for implementation of state and federal regulations. The nine RWQCBs throughout California adopt and implement water quality control plans that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems. The RWQCB adopts and implements a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve

those objectives for all waters addressed through the Basin Plan (California Water Code Sections 13240–13247). The Project Area straddles two RWQCB jurisdictions, Region 7 and Region 9. The Boulder Brush Facilities, and the northeastern corner of the Reservation are located within Region 7 under the jurisdiction of the Colorado River RWQCB. The Campo Wind Facilities are located within Region 9 under the jurisdiction of the San Diego RWQCB.

Construction General Permit (SWRCB Order 2009-0009-DWQ, as amended by Order 2010-0014-DWQ)

Under the NPDES program, stormwater discharges associated with construction activities are regulated under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (i.e., the Construction General Permit [CGP]) to avoid and minimize water quality impacts attributable to such activities.² The CGP applies to all projects where construction activity disturbs 1 or more acres of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling and excavation. The CGP requires development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would include and specify best management practices (BMPs) designed to prevent pollutants from contacting stormwater and to keep all products of erosion going into receiving waters. Routine inspection of all BMPs is required under the provisions of the CGP. In addition, the SWPPP must contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a water body listed on the Section 303(d) list for sediment (which the Project Site does not).

As stated above, the Colorado River RWQCB geography extends over the Boulder Brush Facilities and the northeastern corner of the Reservation, and the San Diego RWQCB over the majority of the Campo Wind Facilities. Because the SWRCB, Colorado River RWQCB, or San Diego RWQCB have not adopted a municipal permit for the Project Site, the Boulder Brush Facilities would be subject to the Post-Construction Standards in the CGP and the County of San Diego's Jurisdictional Runoff Management Plan.

Dischargers are required to submit a Notice of Intent to obtain coverage under the CGP at the discretion of the SWRCB and the applicable RWQCB. Dischargers are responsible for notifying the relevant RWQCB of violations or incidents of non-compliance, as well as for submitting annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected.

The CGP requires a risk-based permitting approach, dependent upon the likely level of risk imparted by a project. To ensure compliance and protection of water quality, the permit

² SWRCB Order 2009-0009-DWQ (as amended by SWRCB Order 2010-0014-DWQ), NPDES Permit No. CAS000002, NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.

implements monitoring, reporting, and training requirements for management of potential stormwater pollutants. The permit contains the following compliance items: (1) mandatory BMPs to reduce erosion and sedimentation, which may include incorporation of vegetated swales, setbacks and buffers, rooftop and impervious surface disconnection, bioretention cells, rain gardens, rain cisterns, implementation of pollution/sediment/spill control plans, training, and other structural and nonstructural actions; (2) sampling and monitoring for non-visible pollutants; (3) effluent monitoring and annual compliance reports; (4) development and adherence to a Rain Event Action Plan; (5) requirements for the post-construction period; (6) numeric action levels and effluent limits for pH and turbidity; (7) monitoring of soil characteristics on site; and (8) mandatory training under a specific curriculum.

The Project would disturb more than 1 acre of soil and would thus be subject to the provisions and requirements of the CGP. The Boulder Brush Developer would submit a Notice of Intent to the SWRCB and obtain coverage under, and comply with, the CGP. Preparation of separate SWPPPs for the Campo Wind Facilities and the Boulder Brush Facilities would be required in accordance with the CGP. The SWPPPs would include relevant measures, conditions, and obligations that would reduce or eliminate the impacts of construction activities on stormwater and receiving water quality and quantity. The CGP also contains requirements for the post-construction period. The Boulder Brush Facilities are subject to the California Environmental Quality Act (CEQA) and considered a project requiring preparation of a water supply assessment because it would occupy more than 40 acres of land. A water supply assessment has been prepared for the Project, and is included as Appendix N to this EIR.

Local Regulations

Local regulations are applicable to the Boulder Brush Boundary, which is under the jurisdiction of the County. Local regulations are not applicable to the Campo Wind Facilities or the Reservation.

County of San Diego On-Site Wastewater System Groundwater Policy

On-site wastewater treatment systems discharge pollutants to groundwater, and therefore are regulated by the State Water Code. State Water Code Section 13282 allows RWQCBs to authorize a local public agency to issue permits for and to regulate on-site wastewater treatment systems “to ensure that systems are adequately designed, located, sized, spaced, constructed and maintained.” The RWQCB with jurisdiction over San Diego County authorizes the County Department of Environmental Health to issue certain on-site wastewater treatment system permits that ensure compliance with the County of San Diego Onsite Wastewater Treatment Groundwater Policy throughout the County, including within incorporated cities. No city within San Diego County is authorized to issue these permits.

County of San Diego Construction and Demolition Materials Ordinance

The County of San Diego Construction and Demolition Materials Ordinance (Sections 68.508 through 68.518 of the County Code of Regulatory Ordinances) is intended to increase diversion of construction and demolition materials from landfills to conserve landfill capacity and extend the useful life of local landfills. The ordinance requires that projects totaling more than 40,000 square feet of construction prepare a debris management plan that specifies the type of project, total square footage of construction, and (among other items) the estimated volume and weight of construction and demolition debris that would be disposed of at a landfill. Applicants are required to submit a performance guarantee (payment) to the County to ensure that the project complies with the diversion standards (i.e., projects must recycle 90% inert construction and demolition debris and 70% of all other construction and demolition debris) of the Construction and Demolition Materials Ordinance. Since the Boulder Brush Facilities would involve more than 40,000 square feet of construction, it is considered an applicable project under the Construction and Demolition Materials Ordinance.

County of San Diego Best Management Practice Design Manual

The 2019 County of San Diego BMP Design Manual provides guidance for land development and public improvement projects to comply with the 2013 MS4 Permit (Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100). The BMP Design Manual has been updated and replaces the February 2016 version. It is focused on project design requirements and related post-construction requirements, not on the construction process itself (County of San Diego 2019).

County of San Diego Grading Ordinance

The County Code Title 8, Division 7, Excavation and Grading, Clearing and Watercourses (Grading Ordinance),³ echoes protections at the federal level by prohibiting any actions or development that would impede water flows, and addresses grading and clearing near watercourses. The Grading Ordinance requires that projects involving more than 200 cubic yards of grading, clearing, and/or removal of natural vegetation obtain a grading permit. Grading permits are discretionary and require compliance with CEQA. Additional information specific to grading permit requirements is discussed in Section 3.1.3, Geology, Soils, and Seismicity, of this EIR.

Chapter 6 of the Grading Ordinance exists to protect people and property against flood hazards by prohibiting the alteration of the surface of land to reduce the capacity of a watercourse, and prohibit any action that impairs, impedes, or accelerates the flow of water in a watercourse in such a manner

³ The Grading Ordinance defines a watercourse as any surface water body (including any arroyo, canal, channel, conduit, creek, culvert, ditch, drain, gully, ravine, reservoir, river, stream, wash, waterway, or wetland) in which waters from a tributary drainage area of 100 acres or larger flow in a definite direction or course, either continuously or intermittently, and any area adjacent thereto that is subject to inundation from a 100-year flood.

that adversely affects adjoining properties. The Grading Ordinance prohibits any land alteration or construction of structures in, upon, or across a watercourse without first obtaining a permit. Enforcement occurs at the time that grading plans or improvement plans are reviewed during the grading permit process. The County official will not approve grading plans or improvement plans unless the official determines that the proposed grading does not create an unreasonable hazard of flood or inundation to people or property. The Project Area is identified by the Federal Emergency Management Agency as being within Zone D (Appendix K), which indicates that flood risk is undetermined because the agency has not conducted a flood hazard analysis. The Project Area is not downstream of a dam and thus would not be subject to inundation in the event of a dam failure; nor is the Project Area subject to seiche or tsunami (due to the great distance to the ocean or large body of water). In addition, the Project Site is not within any County-identified flood hazard areas (e.g., alluvial fan flooding area) (County of San Diego 2007). Even though the Project Site is not within an identified flood hazard area as defined by either the Federal Emergency Management Agency or the County, the provisions of the Grading Ordinance apply to the Boulder Brush Facilities because the Project would result in land alteration and construction of structures within a watercourse, as defined by the ordinance.

County of San Diego Groundwater Ordinance

The County adopted the San Diego County Groundwater Ordinance in 1991; it was last amended in 2013. The Groundwater Ordinance establishes regulations for the protection, preservation, and maintenance of groundwater resources. The purpose of the ordinance is to ensure that development does not occur in groundwater-dependent areas of the County unless adequate supplies are available to serve both existing and proposed uses (County of San Diego 2013). Section 67.722, All Other Projects, of the Groundwater Ordinance regulates all areas within the County outside Borrego Valley and any future groundwater-impacted basins. For discretionary permit applications, the following findings must be made: For projects using greater than 20 AF per year or 20,000 gallons per day, groundwater resources must be adequate to meet the groundwater demands both of the project and the groundwater basin if the basin were developed to the maximum density and intensity permitted by the General Plan, and for all other projects, that groundwater resources must be adequate to meet the groundwater demands of the project.

County of San Diego Watershed Protection Ordinance

On May 8, 2013, the San Diego RWQCB adopted a new Municipal Stormwater Permit (NPDES Permit No. R9-2013-0001) that covered the San Diego County Copermittees. The Municipal Stormwater Permit mandates that the County develop new and updated Runoff Management Plans and Programs, including Water Quality Improvement Plans and a Jurisdictional Runoff Management Plan. These plans were submitted to the RWQCB on June 26, 2015. Permit requirements are generally implemented in the unincorporated County under authority of the Watershed Protection, Stormwater Management, and Discharge Control Ordinance.

The amended MS4 Permit, like all previous iterations, requires the County to establish and maintain adequate legal authority to implement all updated Regional MS4 Permit provisions. The Watershed Protection, Stormwater Management, and Discharge Control Ordinance has been amended to ensure that it is current with the minimum requirements of the recently amended Regional MS4 Permit. The amendments include updating terminology and definitions related to land development priority development projects, removal of outdated sections, minor updates to discharge prohibitions, and the incorporation of an optional program to allow development projects to satisfy some of its stormwater compliance obligations at off-site locations.

San Diego County General Plan

Updated (and adopted) in August 2011, the San Diego County General Plan guides future growth in the unincorporated areas of the County and considers projected growth anticipated to occur within various communities. The following policies are relevant to the Boulder Brush Facilities (County of San Diego 2011a):

Coordination among Facility Planning, Financing Programs, and Land Use Planning

- **Policy LU-12.3: Infrastructure and Services Compatibility.** Provide public facilities and services that are sensitive to the environment with characteristics of the unincorporated communities. Encourage the collocation of infrastructure facilities, where appropriate.

Water Supply

- **Policy LU-13.1: Adequacy of Water Supply.** Coordinate water infrastructure planning with land use planning to maintain an acceptable availability of a high quality sustainable water supply. Ensure that new development includes both indoor and outdoor water conservation measures to reduce demand.
- **Policy LU-13.2: Commitment of Water Supply.** Require new development to identify adequate water resources, in accordance with State law, to support the development prior to approval.

The following policies identified in the General Plan Conservation and Open Space Element would be applicable to the Boulder Brush Facilities (County of San Diego 2011b):

- **Policy COS-17.1: Reduction of Solid Waste Materials.** Reduce greenhouse gas emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated. Divert solid waste from landfills in compliance with State law.
- **Policy COS-17.2: Construction and Demolition Waste.** Require recycling, reduction and reuse of construction and demolition debris.

- **Policy COS-17.6: Recycling Containers.** Require that all new land development projects include space for recycling containers.
- **Policy COS-19.1: Sustainable Development Practices.** Require land development, building design, landscaping, and operational practices that minimize water consumption.
- **Policy COS-19.2: Recycled Water in New Development.** Require the use of recycled water in development wherever feasible. Restrict the use of recycled water when it increases salt loading in reservoirs.

Mountain Empire Subregional Plan

The County's Mountain Empire Subregional Plan establishes goals and policies to guide development within the areas of Tecate, Potrero, Boulevard, Campo/Lake Morena, Jacumba, and the Mountain Empire Balance, which together compose the Mountain Empire Subregion of southeastern San Diego County. The goals and policies of the Mountain Empire Subregional Plan are intended to be more specific than those of the County General Plan, since they consider the distinct history, character, and identity of Mountain Empire communities (County of San Diego 2016).

Policies in the Mountain Empire Subregional Plan that relate to the Project are listed below (County of San Diego 2016):

Public Facilities and Services

- Uses proposed for property adjacent to substations or transmission line right-of-ways should be reviewed for possible impacts to the power facilities and vice versa.

Campo Band of Mission Indians Land Use Code

The Campo Band of Mission Indians Land Use Code was adopted by the Tribe on June 15, 1992, and amended on June 1, 2011. The purpose of the Code is the promotion of the health, safety, and general welfare of the residents of the Reservation. The Tribe is guided by the goals set forth in its Land Use Plan with protecting the natural and physical resources on the Reservation. Under the Campo Lease, Tribal regulations and plans are not applicable to the Campo Wind Facilities, but are included for informational purposes.

Campo Band of Mission Indians Land Use Plan

The Campo Band of Mission Indians Land Use Plan was originally adopted by the Tribe in June 1978, and most recently revised and adopted in December 2010. The purpose of the Land Use Plan is to ensure that future development within the Reservation occurs in an environmentally and culturally sustainable manner. In addition, it is important to the Tribe to achieve economic growth,

job growth, and standard of living. The Land Use Plan is meant to help direct orderly and appropriate growth and change (Campo Band of Mission Indians 2010). The Land Use Plan is described in more detail in the Environmental Impact Statement (EIS) for the Project (BIA 2019), which is incorporated by reference herein. Under the Campo Lease, Tribal regulations and plans are not applicable to the Campo Wind Facilities, but are included here for informational purposes.

The Tribe has designated a Campo Renewable Energy Zone, within which renewable energy projects may be developed. This area may be used for commercial wind, solar, geothermal, hydrological and other types of renewable energy generation that use existing energy resources not created by combustion, chemical or radioactive sources, and that leverage market opportunities associated with the renewable energy sector for the benefit of the Tribe. The Campo Renewable Energy Zone may include, without limitation, overhead and underground electrical distribution, collection, transmission and communications lines; electric transformers; electric substations; energy storage facilities; telecommunications equipment; power generation facilities for the transmission of electrical energy, including, without limitation, the electrical energy generated by any wind turbines or solar panels; roads and crane pads; meteorological towers, wind and solar measurement equipment; control buildings, maintenance yards, and related facilities and equipment; and, any other undertakings or activities reasonably necessary, useful or appropriate to accomplish development of renewable energy resources and related renewable energy business enterprises.

3.1.9.3 Analysis of Project Effects and Determination as to Significance

Although the County as Lead Agency is analyzing the Project as a whole, the County's land use jurisdiction is limited to the Boulder Brush Facilities. The Bureau of Indian Affairs (BIA) has jurisdiction over the Campo Wind Facilities and has prepared an EIS to evaluate Project effects under the National Environmental Policy Act (NEPA) (BIA 2019). This analysis hereby adopts and incorporates by reference the EIS. In addition, this section provides an analysis of the Project impacts, both on the Reservation and on private lands, pursuant to the requirements of CEQA and consistent with the County's own guidelines.

Water

Guidelines for the Determination of Significance

The County's Guidelines for Determining Significance do not include significance thresholds or guidance for determining significance for impacts to utilities and service systems. Therefore, for the purpose of this EIR, Appendix G of the CEQA Guidelines applies to the

direct and indirect impact analysis, as well as the cumulative impact analysis. A significant impact would result if the project would:

- Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

The following analysis focuses on whether there are sufficient water resources to serve the Project. Stormwater, groundwater quality, and drainage facilities are more fully discussed in Section 3.1.5, Hydrology and Water Quality, of this EIR.

Analysis

Project

During construction, water would be used for road construction, concrete foundations, dust suppression, and fire protection. Daily water use would vary depending on the weather conditions and time of year, both of which affect the need for dust control. Hot, dry, windy conditions would necessitate greater amounts of water. Tanker trucks would apply water to construction areas where needed to aid in road compaction and reduce construction-generated dust. An estimated maximum water demand of approximately 173 AF of water would be required over the 14 months of construction (Appendix N, Water Supply Assessment). Approximately 250,000 gallons per day (gpd) would be required during peak construction demand, which would occur over the first 3 months of construction, when road construction overlaps with turbine foundation concrete mixing and associated dust suppression. For the remainder of Project construction, water demand would be reduced to approximately 120,000–150,000 gpd. This water would be used for concrete mixing, dust suppression, and other tasks. Nontoxic soil stabilizers may be used as an alternative dust-suppression method, which would considerably reduce construction water demand. These conservative water-demand estimates do not account for use of these stabilizers.

Water sources during construction would include On- and Off-Reservation facilities such as groundwater production wells on the southern end of the Reservation and commercially obtained non-potable water from permitted Off-Reservation purveyors such as JCSD and PDMWD. Because water from PDMWD is not sourced from groundwater, the study area for groundwater resources includes the On-Reservation wellfield and the aquifers that supply JCSD's wells. Although the exact amount of water to come from each source is not known, the Developer and Boulder Brush Developer would prioritize use of nearby sources. Therefore, and for the purposes of a conservative analysis, the entire water demand for construction of the Campo Wind Facilities and the Boulder Brush Facilities is assumed to consist of groundwater derived from the fractured rock aquifer underlying the Reservation wellfield and/or the aquifers accessed by JCSD.

JCSD's non-potable wells consist of Well 6, Highland Center Well, and Park Well, and are all located in an area immediately north of the international border, approximately 8 miles east of the Reservation's eastern boundary. The fractured rock aquifer underlying JCSD is similar to the aquifer underlying the southern portion of the Reservation, consisting of Cretaceous plutonic rocks known as the tonalite of La Posta (also referred to as the La Posta Quartz Diorite) (Appendix F-2). JCSD Well 6 accesses the fractured rock aquifer, and JCSD's Highland Center Well and Park Well access an alluvial aquifer. Groundwater resources investigations have been prepared to evaluate the cumulative impacts of supplying non-potable water to the Project and well as all other reasonably foreseeable future projects in the region. The analysis of potential off-site impacts from using water from JCSD's wells found that there would be no significant impact on groundwater in storage (Appendices J-2 and J-3) (refer to Section 3.1.5, Hydrology and Water Quality, of this EIR, as well as Appendices J-1, J-2, and J-3 for a detailed analysis on groundwater).

JCSD Well 6 can provide up to 100,000 gpd (112 acre-feet per year [AFY]) of untreated non-potable groundwater for construction use and the Highland Center Well can provide up to 174 gallons per minute (93.6 AFY when operating over an 8-hour workday) of untreated non-potable groundwater for construction use. Groundwater supplies in the Jacumba Valley Groundwater Basin are adequate to supply the Project over a 14-month construction period. The Jacumba Valley Groundwater Basin is not currently in overdraft and is listed by the California Department of Water Resources as a very-low-priority basin (DWR 2018). JCSD has historically supplied non-potable water for construction purposes to multiple energy generation and infrastructure projects, and has continually implemented a program to limit its pumping to a level that is protective of the groundwater resources. Appendices J-2 and J-3 evaluate the underlying fractured rock and alluvial aquifers, respectively, to ensure that JCSD's provision of non-potable water to multiple renewable energy projects, including the full water demand of the Project, would not adversely impact groundwater resources through well interference, depletion of groundwater in storage, and/or impacts to groundwater dependent ecosystems. The JCSD source of Project water is located approximately 11.5 miles east (one-way driving distance) of the Project Area, and the PDMWD source of Project water is located approximately 55 miles (one-way driving distance) west of the Project Area. PDMWD supplies imported water. To obtain water from JCSD or PDMWD, the Project contractor would be responsible for contracting water trucks following the appropriate permitting and coordination with the agencies. JCSD and PDMWD have each provided 399W will-serve letters indicating the availability of 173 AF of water for the construction phase of the Project (Appendix N).

Groundwater used for the construction of the Campo Wind Facilities would be sourced from On-Reservation wells. The Campo Environmental Protection Agency routinely monitors groundwater well levels on the Reservation and would continue to do so through the course of the Project. In addition, in the event that the Tribe decides to supply water to the Project, the Tribe would implement PDF-HY-1 (outlined in Section 3.1.5, Hydrology and Water Quality, of this EIR) that

would ensure that declines in groundwater levels in On-Reservation wells remain at less than 20 feet resultant from On-Reservation pumping for Project construction. PDF-HY-1 ensures that construction activities would not adversely affect groundwater supply on the Reservation. As the magnitude of groundwater level decline in the aquifer is proportional to the distance from On-Reservation production wells, monitoring groundwater levels at On-Reservation wells would reduce potential indirect impacts to Off-Reservation wells. If monitoring indicates that On-Reservation groundwater pumping threatens to drawdown groundwater levels in a manner that compromises On-Reservation groundwater wells, pumping would be halted until levels recover and/or water for construction would be sourced from JCSD and/or PDMWD.

Moreover, to further ensure water purchased from the JCSD does not result in impacts to the aquifers accessed by JCSD's non-potable water production wells (Well 6, Highland Center Well, and Park Well), the Developer will implement the Groundwater Mitigation Monitoring and Mitigation Plans (GMMPs) for the Flat Creek and Boundary Creek Watersheds. PDF-HY-2 (outlined in Section 3.1.5, Hydrology and Water Quality, of this EIR) continues the implementation of the JCSD's existing GMMPs, which consist of weekly and monthly recording of non-potable water pumping and groundwater levels within the pumping wells and within a groundwater monitoring network. PDF-HY-2 ensures that JCSD continues to conduct the GMMPs, continues reporting to the County of San Diego Planning and Development Services (PDS) annually, and ceases pumping from non-potable wells if applicable thresholds are exceeded. In this event, the GMMP requires pumping of the subject non-potable well to cease until the groundwater level at the well that experienced the threshold exceedance has increased above the threshold and remained there for at least 30 continuous days. PDF-HY-2 ensures that groundwater sustainability in JCSD's territory is maintained throughout its provision of non-potable water for the Project.

The Water Supply Assessment (Appendix N) has evaluated the available water supply under normal year, single-dry-year, and multiple-dry-year conditions over a 20-year projection, accounting for the projected water demand of the Project and the general projected demand for groundwater in the Basin. Based on the Water Supply Assessment evaluation, adequate water supplies for Project construction are available. An estimated maximum temporary water demand of approximately 173 AF during the Project construction period could sufficiently be supplied by one, or a combination of the identified water sources. Additionally, during construction of the Project, the Project would be equipped with three 10,000-gallon water tanks near the high-voltage substation dedicated for firefighting purposes, up to three water trucks, each with a 4,000-gallon capacity, and two 10,000-gallon water tanks to be installed at the Campo Wind Facilities collector substation. A minimal amount of water would be required for construction worker needs, including drinking water and for sanitation facilities. This water would be brought to the Project Site each day by the workers or purchased from a privately-owned bottled water distributor licensed by the California Department of Public Health, Food and Drug Branch.

During Project operations, the long-term annual groundwater demand is estimated to be 0.25 AFY (approximately 210 gallons per day) for the operations and maintenance (O&M) facility On-Reservation. The O&M facility is intended to staff approximately 10 to 12 full-time employees throughout the life of the Project. The O&M facility would require non-potable water service for wastewater use, and potable water services. It is anticipated that groundwater sourced from an existing, On-Reservation groundwater well would be used for Project operations; otherwise, water would be trucked in from JCSD or PDMWD. Of the 19 groundwater wells located On-Reservation, at least four supply wells have the potential to sufficiently serve as a source of groundwater for the Project's O&M demand of 0.25 AFY. The volume of water required for operation and maintenance of the Project would be minimal, and would not have a substantial impact on groundwater resources. A water balance analysis and a well interference analysis, documented in the Groundwater Resources Evaluation prepared for the Project (Appendix J-1), shows that use of 0.25 AFY of water for O&M would not exceed the County's significance thresholds for groundwater resources.

For the reasons stated above and provided in the Groundwater Resources Evaluation prepared for the Project (Appendix J-1) and the Water Supply Assessment prepared for the Project (Appendix N), adequate sources of water would supply the construction and operational needs of the Project, and impacts on water supplies and systems would be **less than significant**.

Boulder Brush Facilities

Boulder Brush Facilities construction activities would require an estimated maximum water demand of approximately 50 AF of water. This water would be used for concrete mixing, dust suppression, and other tasks. Nontoxic soil stabilizers may be used as an alternative dust-suppression method, which would considerably reduce construction water demand. Water sources during construction of the Boulder Brush Facilities would include commercially obtained non-potable water from permitted Off-Reservation purveyors such as JCSD and PDMWD. JCSD and PDMWD have each provided 399W will-serve letters indicating the availability of 173 AF of water for the construction phase of the Project (Appendix N). Operation of the Boulder Brush Facilities would not require water service. Since adequate sources of water would supply the construction needs of the Boulder Brush Facilities, impacts on water supplies and systems would be **less than significant**.

Campo Wind Facilities

Campo Wind Facilities construction activities would require an estimated maximum water demand of approximately 123 AF of water during construction. The BIA has prepared an EIS to evaluate Project effects under NEPA. For further analysis of water supplies available to serve the Campo Wind Facilities, please refer to the analysis contained in the EIS (BIA 2019). Generally, the EIS

analysis found that even at the greater water demands analyzed, long-term depletion of groundwater storage due to Campo Wind Facilities construction and O&M facility operation is not anticipated. The analysis and conclusions contained in the EIS are hereby incorporated by reference in this analysis.

It was determined that long-term O&M facility water demand could be met by existing On-Reservation groundwater wells (19 wells located in a 312-acre wellfield in the southern portion of the Reservation). All On-Reservation groundwater wells would produce water from the fractured bedrock aquifer underlying the Reservation. Of the 19 groundwater wells located On-Reservation, at least four supply wells have the potential to serve as a source of groundwater for the O&M demand of 0.25 AFY. While specific production rates of Reservation wells are considered confidential, historical pumping demonstrates that at least four wells located On-Reservation have sufficient capacity to supply the O&M facility during operation. Additionally, and as previously stated, JCSD and PDMWD have each provided 399W will-serve letters indicating the availability of 173 AF of water for the construction phase (Appendix N).

As described above, the Campo Environmental Protection Agency routinely monitors groundwater well levels on the Reservation and would continue to do so through the course of the Project. In addition, in the event that the Tribe decides to supply water to the Project, the Tribe would implement PDF-HY-1, outlined in Section 3.1.5 of this EIR, which would ensure that declines in groundwater levels in On-Reservation wells remain at less than 20 feet resultant from On-Reservation pumping for Project construction. PDF-HY-1 ensures that construction activities would not adversely affect groundwater supply on the Reservation. As the magnitude of groundwater level decline in the aquifer is proportional to the distance from On-Reservation production wells, monitoring groundwater levels at On-Reservation wells would reduce potential indirect impacts to Off-Reservation wells. If monitoring indicates that On-Reservation groundwater pumping for Project construction threatens to drawdown groundwater levels in a manner that compromises On-Reservation groundwater wells, pumping would be halted until levels recover, and/or water for construction would be sourced from JCSD and/or PDMWD.

As stated above, and based on the findings of the Water Supply Assessment prepared for the Project (Appendix N), adequate water supplies for Project construction and annual O&M demand are available. Since adequate sources of water would supply both the construction and operational needs of the Campo Wind Facilities, impacts on water supplies and systems would be **less than significant**.

Wastewater

Guidelines for the Determination of Significance

For the purpose of this document, Appendix G of the CEQA Guidelines applies to the direct and indirect impact analysis, as well as the cumulative impact analysis. A significant impact would result if the project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board
- 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.
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Analysis

Project

During Project construction, portable toilets would be provided for on-site waste handling, and waste would be pumped and cleaned regularly by the construction contractor and disposed of off-site in accordance with applicable regulatory requirements. No other wastewater would be generated during construction. During Project operations, the O&M facility on the Reservation would be served by an on-site septic system that would be self-contained, and use would be limited to the 10 to 12 permanent full-time employees who would use the facility during normal business hours. It is anticipated that the septic system would remain in place until all Project decommissioning activities are complete. The Project would not require connection to, or service by a wastewater treatment provider, and would not exceed wastewater treatment requirements of the Colorado River RWQCB or San Diego RWQCB. Since the Project would not connect to any existing wastewater facilities, require or result in the construction of new wastewater treatment facilities, or result in the expansion of existing facilities, impacts would be **less than significant**.

Boulder Brush Facilities

As stated above, during construction, portable toilets would be provided for on-site waste handling and waste would be pumped and cleaned regularly by the construction contractor and disposed of off-site in accordance with applicable regulatory requirements. During operation no wastewater would be generated as a result of the Boulder Brush Facilities. Since the Boulder Brush Facilities would not connect to any existing wastewater facilities, require or result in the

construction of new wastewater treatment facilities, or result in the expansion of existing facilities, impacts would be **less than significant**.

Campo Wind Facilities

As previously stated, during construction, portable toilets would be provided for on-site waste handling, and waste would be pumped and cleaned regularly by the construction contractor and disposed of off-site in accordance with applicable regulatory requirements. During operations, the O&M facility would be served by an on-site septic system that would be self-contained, and use would be limited to the 10 to 12 permanent full-time employees who would use the facility during normal business hours. The wastewater treatment system would comply with applicable Tribal regulations regarding septic tanks. The BIA has prepared an EIS to evaluate Project effects impacts under NEPA (BIA 2019). For further analysis of wastewater, please refer to the analysis contained in the EIS. Generally, the EIS analysis finds that septic tanks can handle projected sanitary wastes generation. The O&M facility sanitary system would collect wastewater from sanitary facilities such as sinks and toilets. This waste stream would be sent to an on-site sanitary waste underground septic system, which would not increase runoff. All wastewater discharged into the on-site septic system would be disposed of in accordance with all federal, state, regional, and local laws. The analysis and conclusions contained in the EIS are hereby incorporated by reference in this analysis.

Since the Campo Wind Facilities would not connect to any existing wastewater facilities, require or result in the construction of new wastewater treatment facilities, or result in the expansion of existing facilities, impacts would be **less than significant**.

Stormwater

Guidelines for the Determination of Significance

For the purpose of this document, Appendix G of the CEQA Guidelines applies to the direct and indirect impact analysis, as well as the cumulative impact analysis. A significant impact would result if the project would:

- 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.

Analysis

Project

Since the majority of the Project Area is undeveloped land, there are no existing stormwater drainage facilities that would serve the Project; as such, the Project would include development of a drainage system that would be designed to accommodate peak-flow and 100-year flood events,

and would do so in a manner that mimics natural drainage courses as closely as possible. Grading for the Project would avoid defined flow paths where possible, and proposed crossing structures, such as culverts and low water crossings, have been designed to pass stormwater flows in a similar manner to that of existing conditions. Compliance with the required SWPPPs for the Boulder Brush Facilities and the Campo Wind Facilities would ensure that no adverse impacts related to exceeding existing capacities of the stormwater drainage systems would occur.

Project features would be placed to avoid creeks, streams, tributaries, and jurisdictional waters to the extent feasible. Construction of new access roads across drainage features on the Reservation, however, would be unavoidable. During a 100-year flood event, the flood depths across the majority of the Project Site would be less than 0.5 feet, with velocities less than 1 foot per second, with the exception of the narrow channelized areas between local ridges, where flows near the Project Site can reach depths of up to 6 feet and velocities up to 7 feet per second (Appendix K). Design of the Project has avoided areas of high flood depths and velocities in channelized flow areas, and no turbines, gen-tie line support poles, or other structural components are proposed in areas where flood depths would be greater than 0.5 feet during a 100-year storm event.

Stormwater facilities would be designed to meet applicable requirements. The Project would include culverts and Arizona crossings, including low water crossings along the proposed access roads. Culverts and crossings were designed based on flow rates generated for a 10-year 24-hour storm return interval. Culverts are inlet controlled and sized to pass the 10-year design flow rate with no headwater above the pipe entrance. During Project operations, no grading, trenching, or excavation activities are expected. These additional drainage facilities have been included as part of the Project and have been analyzed throughout this CEQA document. Impacts associated with construction and operation of the Project, including the new stormwater facilities required to direct runoff, have been accounted for so that construction of new stormwater facilities would result in **less than significant impacts**.

Boulder Brush Facilities

As described above, stormwater facilities have been designed to meet applicable requirements including compliance with the County's BMP Design Manual, which provides guidance for complying with updated post-construction stormwater requirements, and provides updated procedures for planning, preliminary design, selection, and design of permanent stormwater BMPs based on performance standards presented in the MS4 Permit and the County Watershed Protection Ordinance.

The Boulder Brush Boundary is located in an area that lacks an existing engineered storm drain system. Stormwater drainage within the Boulder Brush Boundary currently occurs along natural watercourses, including Tule Creek. The Boulder Brush Facilities have been designed in a manner that would minimize impacts to existing natural drainage and flow paths. Proposed grading would

avoid defined flow paths where possible. When the avoidance of streamlines is not possible, crossing structures, such as culverts and low water crossings, have been designed for the 10-year 24-hour storm return interval in compliance with applicable regulations. There are 42 culverts, low water crossings and culvert/low water crossing combinations proposed for the Boulder Brush Facilities (Appendix K). The culverts were sized to pass the 10-year design flow rate with 1 foot of headwater above the pipe entrance. The minimum pipe diameter considered was 18 inches. The crossing structures have been designed to pass stormwater flows in a similar manner to that of existing conditions, and would not significantly alter the flow patterns or runoff quantity, or increase the erosive effects of the stormwater flow. Furthermore, through the implementation of a SWPPP during construction of the Boulder Brush Facilities, potential sources of polluted runoff would be reduced and prevented from substantially increasing stormwater runoff or degrading stormwater quality. There is one paved road crossing of Tule Wash that contains engineered components, but as indicated in Appendix K, this would not increase the volume or velocity of stormwater runoff, and thus would not affect the capacity of this existing crossing. Since on-site drainage has been designed to approximate pre-construction drainage patterns to the extent feasible, the potential increase in peak flows would be minor.

These drainage facilities have been included as part of the physical impacts associated with implementation of the Boulder Brush Facilities, and have been analyzed throughout this EIR. Impacts associated with construction and operation of the Boulder Brush Facilities, including the new stormwater facilities required to direct runoff, have been accounted for so that construction of new stormwater facilities would not result in significant environmental effects. Therefore, impacts on stormwater drainage as a result of the Boulder Brush Facilities would be **less than significant**.

Campo Wind Facilities

The BIA has jurisdiction over the Campo Wind Facilities and has prepared an EIS to evaluate Project effects under NEPA. For further analysis of stormwater, please refer to the analysis contained in the EIS (BIA 2019). Generally, the EIS analysis found that Project construction and decommissioning could result in on-site stormwater runoff, potentially altering existing drainage patterns if adequate measures are not implemented to channel and direct runoff. However, a SWPPP would be prepared and employed during construction of the Campo Wind Facilities, and site-specific design measures would be developed and submitted to the Campo Environmental Protection Agency and U.S. Environmental Protection Agency as part of the permitting process. Operation would be in compliance with the Clean Water Act, the NPDES Permit program, and the prepared SWPPP, as well as other applicable water quality and stormwater regulations. Compliance with applicable regulations would prevent polluted runoff and exceeding existing capacities of the stormwater drainage system. Compliance with applicable regulations would ensure that no adverse impacts related to exceeding existing capacities of the stormwater drainage

system and polluted stormwater would occur. The analysis and conclusions contained in the EIS are hereby incorporated by reference in this analysis. Impacts associated with construction and operation of the Campo Wind Facilities, including the new stormwater facilities required to direct runoff, have been accounted for so that construction of new stormwater facilities would not result in significant environmental effects. Therefore, impacts on stormwater drainage as a result of the Campo Wind Facilities would be **less than significant**.

Solid Waste

Guidelines for the Determination of Significance

For the purpose of this EIR, Appendix G of the CEQA Guidelines applies to the direct and indirect impact analysis, as well as the cumulative impact analysis. A significant impact would result if the project were to:

- 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.
- Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Analysis

Project

Waste generated by construction of the Project would consist mainly of concrete waste from turbine pad construction; wood waste from wooden forms used for concrete pads; scrap metal; wood; steel; and debris from turbine tower construction, O&M facility construction, and substation construction. Additional waste could include erosion-control materials, such as straw bales and silt fencing, and packaging materials for turbine parts and electrical infrastructure equipment. Waste would be minimized by estimating material needs in advance; implementing efficient construction practices; and, when feasible, recycling. Steel scrap and wood waste would be collected and transported to recycling facilities, and concrete waste would be used as on-site fill or fill for another site. When not feasible for recycling, construction waste would be transported to a landfill. The two closest landfills, Sycamore Canyon and Otay Landfill, both have respective remaining capacity of 113,972,637 and 21,194,008 cubic yards (CalRecycle 2018a, 2018b).

Construction of the Project would also be required to comply with applicable regulations regarding solid waste disposal, including the County's Construction and Demolition Materials Ordinance (Sections 68.508 through 68.518 of the County Code of Regulatory Ordinances). Construction of the Project would also be required to comply with applicable regulations regarding waste management. The Project's allowable contribution of construction-generated waste to the landfill is

only 10% of inert construction and demolition debris, and 30% of all other construction demolition debris. Based on the County's requirement to divert 90% of inert debris and 70% of other construction debris generated, the Project's contribution to the landfill would be relatively small.

Solid waste generated during operation of the Project would be limited to the O&M facility and the 10 to 12 permanent full-time employees. Solid waste generated by the O&M facility is expected to be minimal and would be properly disposed of through an agreement with a local waste management provider. In addition, operation of the Project would be required to comply with all applicable regulations regarding waste management.

When the Project is decommissioned, solid waste generated would be similar to waste generated during construction (concrete, wood, metal, electrical cables, and other inert debris). Prior to decommissioning of the Campo Wind Facilities, a decommissioning plan would be prepared consistent with the requirements of the Campo Lease. Prior to decommissioning of the Boulder Brush Facilities, a decommissioning plan would be prepared, and all decommissioning activities for the Boulder Brush Facilities would take place in accordance with all applicable laws, regulations, and terms of the Private Lease. When the turbines are decommissioned and the above-ground structures removed, the materials would be reused or sold for scrap, and concrete or any materials that cannot be reused would be recycled to the greatest extent possible.

It is unknown at this time how much capacity would be available at surrounding landfills at the time of Project decommissioning, or even what landfills will be open or closed. However, waste generated during decommissioning would be required to comply with all applicable laws and regulations, and decommissioning debris would be required to be properly disposed of at a facility with adequate capacity. Furthermore, it is unlikely that the entire Project and all associated structures would be decommissioned at the same time. It is more reasonable to assume that one or several turbines would be decommissioned at a time, and the associated structures/facilities would be demolished once all the turbines have been decommissioned. Turbines could be decommissioned either due to irreparable damage or the end of their life span. Therefore, not all of the debris generated from decommissioning of the entire Project Site would be sent to the landfill at the same time. It is anticipated that decommissioning would incrementally contribute to landfill capacity over the life of the Project. Incremental landfill contributions, in combination with compliance with applicable laws and regulations, would ensure the Project would not result in a substantial impacts to surrounding landfills. Therefore, because Project construction and operation would be served by a landfill with sufficient permitted capacity to accommodate solid waste disposal needs, and because Project construction, operation, and decommissioning would comply with state and local statutes and regulations related to solid waste, impacts are determined to be **less than significant**.

Boulder Brush Facilities

As stated above, construction would be required to comply with applicable regulations regarding solid waste disposal, including the County's Construction and Demolition Materials Ordinance (Sections 68.508 through 68.518 of the County Code of Regulatory Ordinances). The two closest landfills, Sycamore Canyon and Otay Landfill both have sufficient capacity to service construction of the Boulder Brush Facilities. During operation, solid waste generation at the Boulder Brush Facilities are expected to be minimal, and the majority of ongoing operation during the life of the Project would occur On-Reservation. As previously stated, it is unknown at this time how much capacity would be available at surrounding landfills at the time of decommissioning, or what landfills would be open or closed. However, waste generated during decommissioning of the Boulder Brush Facilities would be required to comply with applicable laws and regulations, and decommissioning debris would be required to be properly disposed of at a facility with adequate capacity. Because the Boulder Brush Facilities would be served by a landfill with sufficient permitted capacity to accommodate solid waste disposal needs, and because construction of the Boulder Brush Facilities would be in compliance with state and local statutes and regulations related to solid waste, impacts would be **less than significant**.

Campo Wind Facilities

As stated above, waste generated by construction would consist mainly of concrete waste from turbine pad construction; wood waste from wooden forms used for concrete pads; scrap metal; wood; steel; and debris from turbine tower construction, O&M facility construction, and substation construction. Construction of the Campo Wind Facilities would be required to comply with applicable regulations regarding solid waste disposal, including the County's Construction and Demolition Materials Ordinance. Solid waste generated during operation of the Campo Wind Facilities would be limited to the O&M facility and the 10 to 12 permanent full-time employees. Solid waste generated by the O&M facility is expected to be minimal and would be properly disposed of through an agreement with a local waste management provider, and in compliance with applicable regulations regarding waste management. Decommissioning of the Campo Wind Facilities would incrementally contribute to landfill capacity. Incremental landfill contributions, in combination with compliance with applicable laws and regulations, would ensure the Project would not result in a substantial impacts to surrounding landfills.

The BIA has jurisdiction over the Campo Wind Facilities and has prepared an EIS to evaluate Project effects under NEPA. For further analysis of solid waste, please refer to the analysis contained in the EIS. Generally, the EIS analysis finds that construction wastes could be deposited at the three landfills nearest to the Reservation: the Sycamore Landfill, Otay Landfill, and Miramar Landfill, all three of which have sufficient capacity. All construction waste disposal would be disposed of Off-Reservation and would be compliant with the County Construction and

Demolition Materials Ordinance, which would ensure that construction waste is diverted away from landfill disposal to a recycling facility. The amount of waste produced by the construction and operation of the Campo Wind Facilities is not expected to adversely impact local landfills by overwhelming their ability to serve existing local demands; therefore, the Campo Wind Facilities would have no adverse effect.

Because the Campo Wind Facilities would be served by a landfill with sufficient permitted capacity to accommodate solid waste disposal needs, and because construction of the Campo Wind Facilities would be in compliance with applicable regulations related to solid waste, impacts would be **less than significant**.

3.1.9.4 Cumulative Impact Analysis

The Project would not result in an increase of population in the area. Therefore, the Project would not cause demand for an increase in infrastructure capacity. The O&M facility would be staffed by 10 to 12 permanent full-time employees during normal business hours. The use of water and generation of solid waste and wastewater would be minimal, since reduction and recycling would minimize solid waste, and any long-term wastewater would be served by the On-Reservation septic system constructed for the Project adjacent to the O&M facility. Cumulative impacts to utilities and service systems as a result of the Project are outlined below.

Water

The geographic extent of the cumulative study area for water supply would encompass the Jacumba Valley Groundwater Basin area, as well as, the areas serviced by JCSD and/or PDMWD, and would include any projects that are, or would be, serviced by those water suppliers. As indicated in Table 1-4, Cumulative – Reasonably Foreseeable, Approved, and Pending Projects, in Chapter 1 of this EIR, several utility-scale renewable energy projects are proposed for southeast San Diego County, including wind projects and supporting infrastructure such as transmission lines and electrical substations, and other public facilities projects. With many of these projects expected to undergo construction in the next few years, the southeast County region will place increasing demand on groundwater resources within the Jacumba Valley Groundwater Basin during the construction phase of these projects could occur. In addition, concurrent construction of the Project and all reasonably foreseeable cumulative projects could temporarily stress the ability of local water purveyors/sources to deliver water supplies in accordance with existing entitlements; however, not all of the reasonably foreseeable cumulative projects would be constructed at the same time and water needs for construction purposes would be temporary.

Certain residential, commercial, and institutional projects seeking permits and approvals in the area could also contribute to long-term demands on groundwater resources. Because this area of the County is entirely groundwater dependent, water systems are limited to private wells for

domestic and agricultural purposes, and small community water systems that serve a limited number of customers. Other cumulative projects would be required to prepare a Water Supply Assessment or receive notification from a water purveyor that sufficient supplies exist to serve a project. Based on the production of JCSD Well 6 which can provide up to 100,000 gpd (112 AFY, equivalent to 11.6% of the production capacity) of untreated non-potable groundwater for construction use, and the Highland Center Well which can provide up to 174 gallons per minute (93.6 AFY when operating over an 8-hour workday) of untreated non-potable groundwater for construction use, JCSD can provide for a total of 205.6 AFY (Dudek 2015). The potential for concurrent construction water demand from the Project, Torrey Wind and JVR Energy Park is possible. Based on recent well testing performed by Dudek, the existing groundwater wells on the JVR project site have production capacity to supply all project water for the JVR project. If construction schedules of the Project, Torrey Wind and JVR project overlap and the JVR project incurs a water demand on JCSD, the two available construction water sources (Well 6 and the Highland Center Well) have combined capacity to supply water demand from all three competing projects. Therefore, the Project **would not result in a cumulatively considerable impact**.

Wastewater

The on-site septic system that would serve the O&M facility would be self-contained and would have no connection or impact on other projects in the area. Similar to the Project, the installation and operation of septic tanks at reasonably foreseeable cumulative project sites would be subject to applicable laws and regulations related to septic tank installation and operation. For example, for those reasonably foreseeable cumulative projects located on lands under the jurisdiction of the County of San Diego proposing septic tanks, a permit from the County is required and hydrologic and geotechnical studies are required by the County Department of Environmental Health prior to installation of the septic system to verify that the area can adequately support the proposed system. Therefore, since the Project would not generate wastewater which would be treated by a wastewater treatment provider and because the installation and operation of septic systems would be subject to laws and regulations, the Project **would not result in a cumulatively considerable impact** on wastewater treatment.

Stormwater

The Project would include development of stormwater drainage facilities, which are detailed in the Project's Minor Stormwater Management Plan and SWPPPs. The stormwater drainage facilities would be adequate to serve the Project's increase in peak runoff and 100-year peak-flow events. Adjacent cumulative projects would address stormwater flows on a site-by-site basis. The Project, along with other projects occurring in the area, would be required to comply with applicable federal, state, and local water quality and stormwater drainage regulations. The Project would not require or result in the construction of new or additional stormwater drainage facilities

beyond what is included as part of development of the Project. As such, the Project **would not result in a cumulatively considerable impact** to stormwater drainage facilities.

Solid Waste

The cumulative study area for solid waste would encompass both the incorporated and unincorporated areas of the County. Construction of the Project would generate construction waste that would be recycled to the extent possible. The waste generated by construction that would be sent to local landfills is not anticipated to overwhelm the remaining capacity of local landfill facilities such that these facilities would not be able to serve existing demand. Area landfills have sufficient capacity to accommodate the minor volume of waste expected to be generated during operation of the Project. Although exact volumes are unknown, construction of reasonably foreseeable projects in the area would generate waste that would be transported to a landfill for disposal. Each cumulative project would comply with all applicable regulations. The same landfills used during construction and operation of the Project would likely be used by waste haulers to dispose of waste generated in the Project Area by reasonably foreseeable cumulative projects. However, due to the temporary nature of construction and due to the remaining capacities of area landfills as discussed above, and because construction of all reasonably foreseeable cumulative projects would not necessarily occur concurrently with construction of the Project, local and regional landfills and waste haulers are anticipated to have sufficient remaining capacity to serve all reasonably foreseeable cumulative projects. Therefore, the Project **would not result in a cumulatively considerable impact** to solid waste collection, transfer, or disposal capacity.

3.1.9.5 Significance of Impacts Prior to Mitigation

Project

Based on the analysis above, Project impacts to utilities and service systems would be **less than significant**.

Boulder Brush Facilities

Based on the analysis above, impacts to utilities and service systems as a result of implementation of the Boulder Brush Facilities would be **less than significant**.

Campo Wind Facilities

Based on the analysis above, impacts to utilities and service systems as a result of implementation of the Campo Wind Facilities would be **less than significant**.

3.1.9.6 Mitigation Measures

Project

The Project would not result in significant impacts to utilities and service systems; therefore, no mitigation measures would be required.

Boulder Brush Facilities

The Boulder Brush Facilities would not result in significant impacts to utilities and service systems; therefore, no mitigation measures would be required.

Campo Wind Facilities

The Campo Wind Facilities would not result in significant impacts to utilities and service systems; therefore, no mitigation measures would be required.

3.1.9.7 Conclusion

Project

The Project would result in **less-than-significant impacts** to utilities and service systems, including water, wastewater, stormwater, and solid waste.

Boulder Brush Facilities

Implementation of the Boulder Brush Facilities would result in **less-than-significant impacts** to utilities and service systems, including water, wastewater, stormwater, and solid waste.

Campo Wind Facilities

Implementation of the Campo Wind Facilities would result in **less-than-significant impacts** to utilities and service systems, including water, wastewater, stormwater, and solid waste.

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