4.8 UTILITIES

This section describes existing public utilities in the project area and their potential to be affected by the action alternatives. Public utilities addressed in this section include water supply, solid waste, and energy demand. Section 4.17, "Hydrology and Water Quality," includes the evaluation of stormwater management. The provision of stormwater drainage is not discussed further in this section.

4.8.1 Affected Environment

4.8.1.1 ENVIRONMENTAL SETTING

Water Providers

The Squaw Valley Ski Area (Squaw Valley) is located on the western end of the Olympic Valley. There are two municipal and commercial water suppliers within the Olympic Valley: Squaw Valley Public Service District (SVPSD) and Squaw Valley Mutual Water Company (SVMWC). There are also several private parties that use groundwater to serve nonpotable needs, including golf course irrigation and snowmaking at the Resort at Squaw Creek and snowmaking at the Squaw Valley (Farr West Engineering et al. 2015).

SVPSD is a special district organized under California Water Code (CWC) Division 12 and incorporated in the State of California in 1964. It serves approximately 1,600 residential connections and roughly 40 commercial entities (SVPSD 2017) from four active wells in the Olympic Valley Groundwater Basin, two horizontal bedrock wells, and a distribution network that runs through most of Olympic Valley. The SVPSD water service area (excluding the SVMWC area) encompasses about 5,350 acres. SVPSD is the largest water purveyor in the Squaw Valley community.

SVMWC provides water to approximately 265 residential connections within a 115-acre service area that lies entirely within the overall boundaries of the SVPSD service area.

Two parties in Olympic Valley use unmetered groundwater from private wells: the PlumpJack Squaw Valley Inn (PlumpJack) and Gladys K. Poulsen. No recorded information regarding the volume or timing of the water use or demand is available for these private parties. However, the volumes extracted by these two pumpers are considered to be limited in comparison to the SVPSD and SVMWC deliveries. PlumpJack is a hotel that receives potable water from SVPSD, and the private well on the property is used only for limited landscape irrigation. The volume of water demand associated with this small area is not substantial in comparison to other pumping in the western portion of the Olympic Valley Groundwater Basin (Farr West Engineering et al. 2015).

Management of the Olympic Valley Groundwater Basin includes various methods of water conservation (Element 7 of the *Olympic Valley Groundwater Management Plan* [Management Plan]). State and local laws requiring indoor and outdoor conservation are implemented by SVPSD. SVPSD also has an Irrigation Conservation Ordinance with measures to promote voluntary conservation, including metered use and tiered rates, incentives, and informational programs. Stage 2 Water Conservation Restrictions and Emergency Irrigation Regulations were implemented for the first time in May 2015 in response to California Department of Water Resource (DWR) statewide water conservation requirements. There are no provisions through which groundwater pumping by SVMWC or private parties is controlled (Farr West Engineering et al. 2015).

Domestic and emergency water service for the Alpine Meadows Ski Area (Alpine Meadows) and community is provided by Alpine Springs County Water District. Alpine Meadows is served by four horizontal wells and two vertical wells. The horizontal wells are in remote areas on the south side of Alpine Meadows, whereas the Alpine Meadows Estates Well (a vertical well) is located in the central portion of the Alpine Meadows valley, and the R-1 well (a vertical well) is located near the Alpine Springs County Water District office (Alpine Springs County Water District 2015).

Water Sources

Almost all domestic, municipal, and nonpotable water used in the Olympic Valley is derived from local groundwater sources, primarily from the alluvial valley fill, along with a minor amount from fractured bedrock (Farr West Engineering et al. 2015). The alluvial groundwater system is generally unconfined but has some areas with vertical pressure gradients. These data are consistent with the geologic patterns of mixed glacial, lake, and stream deposits and suggest that some portions of the aquifer are covered by low-permeability clay and silt. Additional information describing the geologic and hydrologic characteristics of the Olympic Valley Groundwater Basin is provided in Section 4.17, "Hydrology and Water Quality."

The geologic materials in the western portion of the Olympic Valley Groundwater Basin have a larger capacity for water supply production than those in the east, and all the existing municipal water supply wells are located in the western area. Groundwater also is present in fractured bedrock sources in the mountains above the valley floor. Studies by the Lawrence Livermore National Laboratory have shown that there is not a strong connection between the basin on the valley floor and the fractured bedrock groundwater system above (Farr West Engineering et al. 2015), meaning that the bedrock groundwater system does not contribute to recharge of the basin. In addition, these studies found that on an annual basis, groundwater flow into Squaw Creek is more significant than stream flows percolating into the groundwater basin.

The active vertical wells tapping the alluvial aquifer are four SVPSD wells and one SVMWC well in the east parking lot area of Squaw Valley and one SVMWC well near the Olympic Channel, four Squaw Valley wells along the toe of the ski runs at the southwestern end of the valley, and three Resort at Squaw Creek wells southeast of Squaw Creek in the mid-meadow. The active horizontal wells extending to the bedrock source are two SVMWC wells on the north side slope above the valley floor and two SVPSD wells on the south side slope above the meadow east of Squaw Valley. Horizontal wells are not equipped with pumps; water that enters the well is drained out of the opening by gravity.

Domestic and emergency water supplies for Alpine Meadows are derived from the four groundwater wells described above and four springs. Emergency water supply is also available from multiple ponds along Bear Creek and the Truckee River (Geoarch Sciences, Inc. and C. G. Celio & Sons Co. 2005).

Energy

The California Pacific Electric Company (CalPeco), an element of Liberty Utilities, provides electrical service to Squaw Valley and Alpine Meadows. The project vicinity is served by the North Lake Tahoe Transmission System, one element of CalPeco's total electric utility holdings. CalPeco procures its electricity for the North Lake Tahoe Transmission System from NV Energy (CalPeco 2018).

Electrical service to Squaw Valley and Alpine Meadows is provided via the Squaw Valley Substation, located near the northwestern corner of Squaw Valley Road and State Route 89. The Squaw Valley Substation is a 50-megavolt amperes substation (a megavolt ampere is a unit of energy similar to a megawatt) fed by both a 60-kilovolt (kV) power line and a 120-kV power line from substations in Truckee and by a 120-kV line currently operating at 60 kV from Tahoe City in the south. Four main circuits extend from the Squaw Valley Substation: One serves the Squaw Valley Basin, one serves Alpine Meadows, and two serve Squaw Valley resort. Lines parallel State Route 89, providing connections at Squaw Valley Road and Alpine Meadows Road.

Propane is provided to the project vicinity by AmeriGas. AmeriGas is a national propane supplier, operating in all 50 states and with a customer base of over 2 million (AmeriGas 2016). According to the U.S. Department of Energy, propane is a clean-burning, high-energy alternative fuel. It is produced from liquid components recovered during natural gas processing and is a produced domestically. The expansion in natural gas production has led to an expanded availability of propane gas, and the United States is a net exporter of propane (U.S. Department of Energy 2015). The primary use of the propane within Squaw Valley is to feed the boilers that supply space and water heating to the residential and commercial areas of the village. Cooking, fire pits, and fire places account for the remaining propane use. The primary use of the propane in Alpine Meadows is to feed the boilers that supply space and water heating to the residential customers and the lodge and Alpine Meadows Ski Resort.

Solid Waste

Tahoe Truckee Sierra Disposal is responsible for waste and recycling services in the project area. Materials are transported to the Placer County Eastern Regional Material Recovery Facility (MRF) in Truckee, where they are sorted in an effort to meet California's mandatory solid waste diversion requirements. Waste materials are then transported to the Lockwood Regional Landfill, a 1,535-acre municipal solid waste facility located in Storey County, Nevada. The Eastern Regional MRF is permitted to receive 800 tons of material per day and 832 vehicles per day and is operated subject to a Solid Waste Facility Permit under the jurisdiction of the California Department of Resources Recycling and Recovery (CalRecycle) (Placer County Environmental Utilities 2018). The Lockwood Regional Landfill has a total capacity of 302.5 million cubic yards. As of 2010 the landfill had a remaining capacity of 264.68 million cubic yards (NDEP 2017).

4.8.1.2 REGULATORY SETTING

Federal

Truckee River Operating Agreement

The Truckee River Operating Agreement, which was approved on September 6, 2008, was developed to formalize, regulate, and monitor water rights and water use within the Tahoe Region, the Truckee River watershed, and the final outflow areas of Pyramid Lake and the Carson River. This agreement was designed to improve the operational flexibility of Truckee River reservoirs and was made by and among the United States of America, State of California, State of Nevada, Truckee Meadows Water Authority, Pyramid Lake Paiute Tribe of Indians, Washoe County Water Conservation District, City of Reno, City of Sparks, City of Fernley, Washoe County, Sierra Valley Water Company, Truckee Donner Public Utility District, North Tahoe Public Utility District, Carson-Truckee Water Conservancy District, and Placer County Water Agency. Under the agreement, Tahoe Region water rights for surface water and groundwater are capped at 34,000 acre-feet annually, split by 11,000 acre-feet per year (afy) designated for use in Nevada and 23,000 afy for use in California (U.S. Bureau of Reclamation et al. 2008).

Code of Federal Regulations

Volume 40, Part 258 of the CFR contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the locations, operation, design, groundwater monitoring, and closure of landfills.

State

California Water Code, Water Supply Wells and Groundwater Management

The CWC is enforced by DWR. DWR's mission is "[t]o manage the water resources of California in cooperation with other agencies, to benefit the State's people and to protect, restore and enhance the natural and human environments" (DWR 2018). DWR is responsible for promoting California's general welfare by ensuring beneficial water use and development statewide. Groundwater management is outlined in the CWC, Division 6, Part 2.75, Chapters 1–5, Sections 10750–10755.4. The Groundwater Management Act was first introduced in 1992 as Assembly Bill (AB) 3030 and has since been modified by Senate Bill (SB) 1938 in 2002, AB 359 in 2011, and AB 1739 in 2014. The intent of the Groundwater Management Act is to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions and to provide a methodology for developing a groundwater management plan.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 (SGMA) became law on January 1, 2015, and applies to all groundwater basins in the state (CWC Section 10720.3). (The SGMA comprises three separate bills: SB 1168, SB 1319, and AB 1739. All three were signed into law by the governor on September 16, 2014.) By enacting the SGMA, the legislature intended to provide local agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater within their jurisdiction (CWC Section 10720.1).

Under the SGMA, any local agency that has water supply, water management, or land use responsibilities within a groundwater basin may elect to be a "groundwater sustainability agency" for that basin (CWC Section 10723). It is possible that SVPSD or Placer County (County) may elect to become the groundwater sustainability agency for the Olympic Valley Groundwater Basin or that both agencies may elect to form a joint groundwater sustainability agency. The Alpine Meadows area is not designated as a groundwater basin subject to SGMA.

Any groundwater sustainability agency established for the Olympic Valley Groundwater Basin would have additional powers under the SGMA to manage groundwater within the basin, including, for example, the power to conduct investigations of the basin, require registration of groundwater extraction facilities and metering of groundwater extractions, regulate groundwater extractions from individual groundwater wells or wells generally, and assess fees on groundwater extractions (see, generally, CWC Section 10725 et seq.).

The SGMA also requires DWR to categorize each groundwater basin in the state as high, medium, low, or very low priority (CWC Sections 10720.7, 10722.4). On December 15, 2014, DWR announced its official "initial prioritization" of the state's groundwater basins for purposes of complying with the SGMA, and this priority list became effective on January 1, 2015 (DWR 2014). DWR has ranked the Olympic Valley Groundwater Basin as "low priority." Groundwater sustainability plans are not required for low- and very low–priority basins. Although the County and/or SVPSD will still need to take steps to designate and form a groundwater sustainability agency for the Olympic Valley Groundwater Basin, these administrative obligations will not affect the availability of water to serve the project. There is no designated groundwater basin for the Alpine Meadows area.

California Environmental Quality Act

Appendix F of the State CEQA Guidelines sets forth goals for energy conservation, including decreasing per capita energy consumption and reliance on fossil fuels and increasing reliance on renewable energy sources. CEQA requires EIRs to describe potential energy impacts of projects, with an emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (Public Resources Code Public Resources Code Section 21100[b][3]).

The California Energy Commission prepares an integrated policy report every 2 years that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (CEC 2017a). Energy efficiency is one of the key components of the state's strategy to reduce greenhouse gas (GHG) emissions and achieve reduction targets set forth by AB 32, SB 32, Governor Brown's Executive Order B-30-15, and SB 32 and AB 197 of 2016. Efficiency achieved through building codes, appliance standards, and ratepayer-funded programs has had a positive impact on GHG emissions in recent years (CEC 2017a:10). The policy report discusses efforts to decarbonize California's energy system and recognizes that transitioning to zero- and near-zero emission vehicles will be a fundamental part of meeting the state's climate goals.

The California Public Utilities Commission's *California Long Term Energy Efficiency Strategic Plan* established goals of having all new residential construction in California be zero net energy by 2020 and all new commercial construction zero net energy by 2030 (CPUC 2011).

Clean Energy and Pollution Reduction Act

On October 7, 2015, the Clean Energy and Pollution Reduction Act (SB 350) was signed into law, establishing new clean energy, clean air, and GHG reduction goals for 2030 and beyond. SB 350 codifies Governor Brown's clean energy goals to increase California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030, and it is part of California's overall strategy to address climate change (CEC 2017b). SB 350 enhances the state's ability to meet its long-term climate goal of reducing GHG emissions to 40 percent of 1990 levels by 2030 and 80 percent below 1990 levels by 2050 (CEC 2017b).

California Code of Regulations, Energy Efficiency Standards

Energy consumption of new buildings and structures in California is regulated by State Building Energy Efficiency Standards contained in the CCR, Title 24, Part 2, Chapter 13. Title 24 applies to all new construction and regulates energy consumed for heating, cooling, ventilation, water heating, and lighting. The 2016 Building Energy Efficiency Standards have improved efficiency requirements from previous codes, and the updated standards are expected to result in a statewide energy consumption reduction.

Effective January 1, 2011, the CALGreen Code became California's first green building standards code. It is formally known as the California Green Building Standards Code, Title 24, Part 11, of the CCR. The CALGreen Code establishes mandatory minimum green building standards and includes more stringent optional provisions known as Tier 1 and Tier 2. Cities and counties, at their discretion, may adopt Tier 1 or Tier 2 as mandatory or adopt and enforce other standards that are more stringent than the CALGreen Code. Placer County has adopted several modifications to both the residential and nonresidential CALGreen mandatory sections.

California Integrated Waste Management Act (1989)

AB 939 contains regulations affecting solid waste disposal in California. AB 939 requires that counties prepare integrated waste management plans to implement landfill diversion goals and prepare and adopt source reduction and recycling elements (SRREs). Each SRRE must establish a program for managing and reducing waste generated in that county.

Solid Waste Reuse and Recycling Access Act (1991)

AB 1327 requires jurisdictions to adopt ordinances requiring development projects to provide adequate storage area for the collection and removal of recyclable materials. Placer County adopted such an ordinance (Municipal Code Section 8.16.080).

California Building Standards Code (Title 24)

Where a local jurisdiction has not adopted a more stringent construction and demolition (C&D) ordinance, construction activities are required to implement Section 5.408 of the California Green Building Standards Code (CALGreen Code). Under Section 5.408, and in accordance with amendments to SB 1374 (2002), effective January 1, 2017, a minimum of 65 percent of nonhazardous C&D waste must be recycled and/or salvaged for reuse. Applicable projects are required to prepare and implement a construction waste management plan, which is submitted to the local jurisdiction before building permits are issued. Applicable projects include all newly constructed residential buildings or structures, existing residential buildings or structures with additions/alterations, all newly constructed nonresidential buildings or structures, existing nonresidential buildings with additions of 1,000 or more square feet, and existing nonresidential alterations when permit valuation or estimated construction cost of alteration is $200,000 or more. The Eastern Regional MRF accepts mixed and separated construction debris for recycling. Contractors may also separate and self-haul debris to a recycler of their choice. Tahoe Truckee Sierra Disposal, under contract with the County, provides debris box collection service to aid in the separation of recyclable debris.

Solid Waste Disposal Measurement Act (2007)

SB 1016 amended portions of the California Integrated Waste Management Act to allow CalRecycle to use per capita disposal as an indicator in evaluating compliance with the requirements of AB 939. Jurisdictions track and report their per capita disposal rates to CalRecycle. Solid waste facilities are required to obtain a Solid Waste Facility Permit from the Placer County Local Enforcement Agency and obtain Waste Discharge Requirements from the California Regional Water Quality Control Board.

Mandatory Commercial Recycling Measure (2011)

AB 341 established a statewide recycling goal of 75 percent by 2020; the 50-percent disposal reduction mandate established under AB 939 (1989) still applies for cities and counties. This law also requires certain businesses to recycle. To comply with this requirement, businesses may separate their recyclables and self-haul them to a recycling facility, recycle on-site, or subscribe to a mixed waste process service that diverts recyclables. The Eastern Regional MRF receives and sorts commercial waste to recover recyclable materials

and accepts source-separated recyclables. Tahoe Truckee Sierra Disposal, under contract with the County, also provides commercial recycling collection for some material types.

Mandatory Commercial Organics Recycling (2014)

AB 1826 requires certain businesses, beginning in 2016, to recycle their organic waste. The law also requires jurisdictions to develop and implement an organics recycling program. To comply with this requirement, businesses may separate their organic waste and self-haul it to an organics recycling facility, recycle on-site, or subscribe to a service that recycles organic waste. The Eastern Regional MRF receives and sorts commercial waste to recover organic materials, such as green waste and wood waste, and accepts separated green waste and wood waste. Tahoe Truckee Sierra Disposal, under contract with the County, offers food waste recycling collection.

Short-Lived Climate Pollutants: Organic Waste Methane Emissions Reductions (2016)

SB 1383 builds on California's commitment to reduce GHG emissions and air pollution statewide and, as it pertains to CalRecycle, establishes targets to achieve a 50-percent statewide reduction (from the 2014 level) by 2020 in the amount of organic waste disposed of and a 75-percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of the edible food currently disposed of will be recovered for human consumption by 2025.

Local

Placer County General Plan

The *Placer County General Plan* (Placer County 2013) contains a Public Facilities and Services Element that addresses water supply, solid waste services, and a Housing Element that addresses energy efficiency. The following policies are applicable to the action alternatives:

Public Facilities and Services Element

- **Policy 4.B.1.** The County shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

- **Policy 4.B.2.** The County shall require that new development pay the cost of upgrading existing public facilities or construction of new facilities that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

- **Policy 4.C.1.** The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.

- **Policy 4 G.2.** The County shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.

- **Policy 4.G.7.** The County shall require that all new development complies with applicable provisions of the Placer County Integrated Waste Management Plan.

Housing Element

- **Policy G-2**. The County shall promote land use patterns that encourage energy efficiency, to the extent feasible, and encourage efficient energy use in new development, including but not limited to access to non-auto transit, use of traffic demand management, and water-efficient landscaping.

Squaw Valley General Plan and Land Use Ordinance

The following policies provided in the *Squaw Valley General Plan and Land Use Ordinance* (Placer County 2006) are applicable to the alternatives:

- **Policy 145.10.** All developments must be served with adequate water in accordance with requirements of the Placer County Health Department. Fire flow requirements as determined by the Squaw Valley Fire Department and the Uniform Fire Code must be provided without reducing the level of service to existing development.

Olympic Valley Groundwater Management Plan

SVPSD led the development of the Management Plan in accordance with AB 3030 and SB 1938 under the CWC (HydroMetrics 2007). SVPSD is the only entity in the Olympic Valley that qualifies as a local agency as defined in CWC Section 10752 for the purpose of preparing a groundwater management plan. The Management Plan was developed in cooperation with a stakeholder group representing local groundwater users, environmental organizations, regulatory agencies, and the public. In addition to information about the existing groundwater conditions, the Management Plan includes specific basin management goals and objectives; identifies projects, programs, and policies to guide management of the basin resources; and outlines expected agency coordination under implementation. The Management Plan does not allow or impose restrictions or limitations on or by any one user. The management goals, objectives, and activities are to be accomplished through cooperative management by all the basin users.

The Management Plan provides a framework under which all the groundwater users in Olympic Valley move toward a commonly held set of goals and specific basin management objectives.

As discussed above, the Olympic Valley Groundwater Basin has been identified as a "low-priority" basin under the SGMA, and as a result, preparation of a groundwater sustainability plan is not required for this basin. Therefore, it is assumed that for the foreseeable future, the Management Plan will continue to be the guiding document for the Olympic Valley Groundwater Basin. As stated above, no groundwater basin has been identified for the Alpine Meadows area and no similar Management Plan has been prepared for this area.

Alpine Meadows General Plan

The *Alpine Meadows General Plan* (Placer County 1968) does not contain any goals or policies related to water supply or energy efficiency.

4.8.2 Analysis Methods

4.8.2.1 METHODS AND ASSUMPTIONS

Project impacts on water supply, energy demand, and generation of solid waste were identified by considering if and how existing levels of service would be changed by project implementation. Evaluation of potential impacts on water supply and energy demand was based on a review of documents pertaining to the project site and surrounding area. The impacts on solid waste was based on review of available landfill capacity. It is assumed that the action alternatives would be implemented in compliance with all applicable state and local laws.

As described in Section 2.2.6, "Resource Protection Measures," the project incorporates a number of Resource Protection Measures (RPMs) designed to avoid and minimize environmental effects. These RPMs are considered part of the project by the Forest Service and will be conditions of approval of the Placer County Conditional Use Permit. The text of all RPMs is provided in Appendix B. The potential effects of

implementing the action alternatives are analyzed as follows: The effect of the action alternatives was determined, relevant RPMs were applied, and the effectiveness of reducing adverse effects was determined. If additional measures were needed to further reduce effects, they were identified.

As it relates to CEQA, the significance of impacts is determined before RPMs are implemented. The analysis then determines whether the RPMs would reduce significant impacts to a less-than-significant level. If significant impacts would remain, mitigation measures are added, as feasible, to further reduce the significant impact. All RPMs, as well as additional mitigation measures, would be included in the Placer County mitigation monitoring and reporting program (MMRP), and their implementation would be ensured by the Conditional Use Permit's conditions of approval. All RPMs are considered roughly proportional and have an essential nexus to the impacts they reduce.

4.8.2.2 EFFECTS ANALYSIS AND SIGNIFICANCE CRITERIA

NEPA Indicators

An environmental document prepared to comply with NEPA must consider the context and intensity of the environmental effects that would be caused by or result from the action alternatives. Under NEPA, impacts should be addressed in proportion to their significance (40 CFR 1502.2[b]), meaning that severe impacts should be described in more detail than less consequential impacts. This is intended to help decision makers and the public focus on the project's key effects. The evaluation of effects considers the magnitude, duration, and significance of the changes. Changes that would improve the existing condition if they occur are noted and considered beneficial, and detrimental impacts are characterized as adverse. Where there would be no change, a "no effect" conclusion is used. The Forest Service has determined that the action alternatives could affect the provision of public utilities on the project site. The following analytical indicators are used to inform the Forest Service's determination of impacts:

- Discussion of supply and demand for water supply, sewer/wastewater services, and electricity/gas/energy services under existing and proposed conditions **(Impacts 4.8-1 and 4.8-2 and Section 4.8.2.3, "Issues Not Discussed Further").**
- Qualitative discussion of energy use associated with the proposed project **(Impact 4.8-2).**

CEQA Criteria

Based on the Placer County CEQA checklist, Appendix G of the State CEQA Guidelines, and utilities policies and standards in the *Placer County General Plan*, implementing any of the alternatives would result in a significant impact related to utilities if it would:

- exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board **(Section 4.8.2.3, "Issues Not Discussed Further")**;
- 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 **(Section 4.8.2.3, "Issues Not Discussed Further")**;
- require or result in the construction of new on-site sewage systems **(Section 4.8.2.3, "Issues Not Discussed Further");**
- require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects **(Section 4.8.2.3, "Issues Not Discussed Further," and Impact 4.17-5 in Section 4.17, "Hydrology and Water Quality")**;
- have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed **(Impact 4.8-1)**;

- result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's project demand, in addition to the provider's existing commitments **(Section 4.8.2.3, "Issues Not Discussed Further")**;
- require sewer service that may not be available by the area's waste water treatment provider **(Section 4.8.2.3, "Issues Not Discussed Further")**;
- be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs **(Impact 4.8-3)**;
- comply with federal, state, and local statutes and regulations related to solid waste **(Impact 4.8-3)**; or
- result in inefficient and wasteful consumption of energy during construction or operations or require new or expanded energy facilities that could cause significant environmental effects **(Impact 4.8-2).**

4.8.2.3 ISSUES NOT DISCUSSED FURTHER

As discussed in the initial study prepared for the project (Appendix A), no septic systems or restrooms exist on the project site, and none would be constructed for the gondola project.

Additional wastewater generation may be attributed to the project because of increased visitation (approximately 36,856 visitor-days per year) during winter months when the project is operational, but, as discussed below, the project would not alter the wastewater capacity of Squaw Valley or Alpine Meadows. The Tahoe-Truckee Sanitation Agency wastewater treatment facility serves both Squaw Valley and Alpine Meadows, so total visitation (including visitation to both resorts) was used to estimate wastewater generation for the project. To determine peak wastewater generation, the annual visitor-days were divided by the 5-month winter season, which resulted in approximately 7,371 additional visitor-days per month, or approximately 246 visitors per day for both resorts combined. Because visitation peaks during weekends and holidays, the daily visitation rate (i.e., 246 visitors per day) was tripled to get a conservative estimate of increased visitation on peak days that would not underestimate possible visitation. Therefore, to calculate the peak-day wastewater generation, a maximum of 738 visitors per day were assumed. Note that an estimate of daily increases in visitation is also provided in Section 4.7, "Transportation and Circulation." A more detailed methodology is used in Section 4.7 geared toward identifying visitation during specific peak days where traffic modelling is conducted. Although a much simpler methodology is used here for the estimate of wastewater capacity, the estimate of a maximum of 738 visitors per day identified here is conservative, and exceeds the daily weekend visitation estimated for the traffic analysis (see Table 4.7-8).

To continue the conservative approach to the analysis, it was assumed that all water used by visitors would become wastewater. Therefore, peak wastewater generation would be equal to peak water demand. Assuming a maximum of 5 gallons of water per day per visitor, the peak wastewater generation would be 3,690 gallons per day (0.003690 million gallons per day). Based on the EIR prepared for the *Village at Squaw Valley Specific Plan*, the remaining wastewater treatment capacity at the Tahoe-Truckee Sanitation Agency wastewater treatment facility, which serves both Squaw Valley and Alpine Meadows, is 1.07 million gallons per day (Placer County 2015). Therefore, adequate capacity exists to serve the project. The project would not exceed wastewater treatment requirements or require new sewer service. These issues are not discussed further in this Final EIS/EIR.

The adequacy of the storm drainage system relative to capacity and protection of water quality is evaluated in Section 4.17, "Hydrology and Water Quality." The physical environmental effects of installing the storm drainage system are evaluated as appropriate throughout this Final EIS/EIR. Storm drainage is not discussed further in this section.

4.8.3 Direct and Indirect Environmental Consequences

4.8.3.1 ALTERNATIVE 1 – NO ACTION ALTERNATIVE

Impact 4.8-1 (Alt. 1): Water Supply Impacts

Alternative 1 - No Action Alternative would result in a continuation of existing conditions. There would be no construction or operation of the proposed gondola and no increases in visitation attributable to the action alternatives would occur. Under this alternative, there would be no direct or indirect effects on water supply in the project vicinity. There would be **no effect** under both NEPA and CEQA.

Under Alternative 1 - No Action Alternative, the Tahoe National Forest (TNF) and Placer County would not provide necessary authorizations to allow construction of a gondola. The outcome would be a continuation of existing conditions, with no new construction and no installation and operation of new facilities. No increases in visitation related to the action alternatives would occur. Therefore, there would be no changes to existing water supplies and no direct or indirect effects on demand for water supply.

NEPA Effects Conclusion
With no direct or indirect effects on water supply, there would be **no effect** related to this issue.

CEQA Determination of Effects
With no direct or indirect effects on water supply, there would be **no effect** related to this issue.

Mitigation Measures

No mitigation measures are required.

Impact 4.8-2 (Alt. 1): Inefficient, Wasteful, and Unnecessary Consumption of Energy Resources

Alternative 1- No Action Alternative would result in a continuation of existing conditions. There would be no construction or operation of the proposed gondola and no increases in visitation attributable to the action alternatives. Under this alternative, there would be no direct or indirect increase in energy consumption, and continuation of existing energy usage would not be considered inefficient, wasteful, or unnecessary. There would be **no effect** under both NEPA and CEQA.

Under Alternative 1 - No Action Alternative, TNF and Placer County would not provide necessary authorizations to allow construction of a gondola. The outcome would be a continuation of existing conditions, and there would be no energy consumed for construction of the action alternatives and no energy consumed by operation of the gondola. In addition, there would be no indirect increases in energy usage related to increases in visitation related to the action alternatives. Therefore, there would be no changes to existing energy usage that would be considered inefficient, wasteful, or unnecessary.

NEPA Effects Conclusion
With no direct or indirect effects on energy usage, there would be **no effect** related to this issue.

CEQA Determination of Effects
With no direct or indirect effects on energy usage, there would be **no effect** related to this issue.

Mitigation Measures

No mitigation measures are required.

Impact 4.8-3 (Alt. 1): Increased Generation of Solid Waste

Alternative 1 - No Action Alternative would result in a continuation of existing conditions. There would be no construction or operation of the proposed gondola and no increases in visitation attributable to the action alternatives. Under this alternative, there would be no direct or indirect increase in the generation of solid waste. Using the CEQA criteria, there would be **no effect**. This impact analysis is specific to a CEQA criterion and is not responsive to a NEPA analytical indicator. No NEPA determination of effect is provided.

Under the No Action Alternative, TNF and Placer County would not provide necessary authorizations to allow construction of a gondola. The outcome would be a continuation of existing conditions, and there would be no solid waste generated during construction of the action alternatives and no solid waste generated by an increase in visitors. In addition, there would be no indirect increases in solid waste generation related to increases in visitation related to the action alternatives. Therefore, there would be no changes to existing solid waste generation that would exceed the capacity of any landfills.

NEPA Effects Conclusion
This impact analysis is specific to a CEQA criterion and is not responsive to a NEPA analytical indicator. No NEPA determination of effect is provided.

CEQA Determination of Effects
With no direct or indirect effects on solid waste generation, there would be **no effect** related to this issue.

Mitigation Measures

No mitigation measures are required.

4.8.3.2 ALTERNATIVE 2

Impact 4.8-1 (Alt. 2): Water Supply Impacts

Although Alternative 2 is not expected to directly increase water demand, construction of this alternative could result in increased resort visitation during winter months. The indirect water demand related to increases in visitation is expected to be approximately 184,280 gallons per year (0.57 afy), which could be adequately met by existing water supplies at Squaw Valley and Alpine Meadows. Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, there would be **no effect** related to water supply because there would be sufficient water supply to support projected demand. There are no applicable RPMs that would mitigate this effect. Under CEQA, and using the CEQA criteria, the effect on water supply would be **less than significant** because there would be sufficient water supplies available to serve the project from existing entitlements and resources. There are no applicable RPMs that would reduce this impact.

Alternative 2 would not directly increase water demand; however, construction of the gondola could result in an increase in visitation to Squaw Valley and Alpine Meadows. It is anticipated that the alternative could result in an increase of up to approximately 36,856 visitor-days per year. This increase in visitor-days would occur during the approximately 5-month winter season when the gondola would be operating and would result in both daytime and overnight visits. As described above, water for Squaw Valley is supplied by groundwater, and water for Alpine Meadows is supplied by a combination of groundwater and springs. Therefore, because water supply sources are different for Squaw Valley and Alpine Meadows, the increased water demand resulting from increased visitation generated under Alternative 2 would be divided between Squaw Valley and Alpine Meadows. However, to provide a highly conservative estimate of water demand effects, this analysis evaluates a condition in which all the increased water demand is attributed to each ski area (i.e., 246 visitors at Squaw Valley and 246 visitors at Alpine Meadows). To provide a conservative estimate of indirect increases in water demand, it is assumed that 100 percent of the additional visitors would be day skiers because water demand for this portion of visitors was not previously addressed by the *Village at Squaw Valley Specific Plan*. Overnight visitors would use existing lodging or lodging proposed as

part of the Village at Squaw Valley. No new lodging is proposed under Alternative 2. Therefore, if new visitors were assumed to be overnight guests, water demand for those visitors would be included in the water supply assessment previously prepared for the *Village at Squaw Valley Specific Plan* (Farr West Engineering et al. 2014, 2015). It is assumed that daytime visitors would use a maximum of 5 gallons of water per day per visitor. Thus, indirect water demand for Alternative 2 is expected to be approximately 184,280 gallons per year (0.57 afy).

Projected water supply capacity modeled for Squaw Valley ranges from 950 afy in 2020 to 1,205 afy in 2040 (Farr West Engineering et al. 2014). If it was conservatively assumed that all 0.57 afy of increased demand were applied to Squaw Valley, sufficient water supplies would be available to serve Alternative 2 because it would result in a very minor increase (0.06 percent) in water demand compared to the 950-afy water supply capacity. Therefore, an increase in demand of 0.57 afy would not result in a substantial increase in water demand for Squaw Valley. Projected water supply for Alpine Meadows is approximately 915 afy. Sufficient water supplies would be available to serve Alternative 2 because it would result in a very minor increase (0.06 percent) in water demand compared to the available water supply. An increase in demand of 0.57 afy would not result in a substantial increase in water demand for Alpine Meadows.

Therefore, there would be sufficient water supply to provide for increases in water demand that may occur as a result of Alternative 2.

NEPA Effects Conclusion

Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, there would be **no effect** related to water supply resulting from Alternative 2 because there would be sufficient water supply to support projected demand. There are no applicable RPMs that would mitigate this effect.

CEQA Determination of Effects

Alternative 2 would generate demand for water supply because proposed facilities could indirectly increase the number of visitors to the project site. However, water demand would not exceed available supplies. Under CEQA, and using the CEQA criteria, the effect on water supply would be **less than significant** because there would be sufficient water supplies available to serve the project from existing entitlements and resources. There are no applicable RPMs that would reduce this impact.

Mitigation Measures

No mitigation measures are required.

Impact 4.8-2 (Alt. 2): Inefficient, Wasteful, and Unnecessary Consumption of Energy Resources

Construction of Alternative 2 would consume energy in the form of fuel for construction vehicles, but this energy consumption would be temporary. Operation of the alternative would result in an increase in electricity usage for operation of the gondola and indirect increases in fuel for visitor vehicle trips. However, Alternative 2 would use a gondola motor properly sized to the project and electricity generated from the gondola at the mid-stations. Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, direct and indirect effects related to energy usage would be **minorly adverse** because although the alternative would not result in the inefficient or wasteful use of energy, it would increase energy usage. Implementation of RPMs AQ-9 and AQ-18 would mitigate this effect. Under CEQA, and using the CEQA criteria, impacts related to energy usage would be **less than significant**. In addition, RPMs AQ-9 and AQ-18 would reduce fuel usage during construction. With implementation of these RPMs, this impact would be reduced, although these RPMs are not necessary to reduce a significant impact to a less-than-significant level.

Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project, and CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). However, neither the law nor the State CEQA Guidelines establish thresholds that define *wasteful*, *inefficient*, or *unnecessary* use. Compliance with California's Title 24 Energy Efficiency Standards would generally promote energy efficiency

of structures during operation. However, compliance with building codes does not adequately address all potential energy impacts during project construction and operation. For example, energy would be required to transport people to and from the project site.

Increases in energy consumption have the potential to occur during construction and operation of Alternative 2. Construction of the alternative would require use of energy, particularly to fuel vehicles and construction equipment. However, energy usage associated with construction would be temporary, and vehicle trips would be a maximum of 70 worker trips per day (35 workers x 2) and several deliveries per day for materials. Therefore, the energy expenditure associated with construction of Alternative 2 is expected to be minor and temporary, and it would be the minimum necessary to successfully implement this alternative. In addition, implementation of two RPMs intended to protect air quality would also benefit energy efficiency during construction. RPM AQ-8 would result in the use of construction equipment with more modern engines, which would be more fuel efficient than older engines. RPM AQ-18 directs the contractor to minimize idling time to a maximum of 5 minutes for all diesel-powered equipment, reducing fuel consumption.

As described in Chapter 2, "Description of Alternatives," both base terminals for the gondola would be powered by new connections to electrical service. The motors at the base terminals would be the minimum size necessary to safely and efficiently operate the gondola. Electricity to both mid-stations would be supplied via a "line generator" that uses the moving lift to generate the power needed at the stations. Electrical demand would increase primarily during winter months (November through March) when the gondola is operational; however, a limited amount of power would be needed to support intermittent maintenance and testing during summer. The electrical demand for operation of the gondola under Alternative 2 is estimated at 7,164 kWh per day during the operating season. The length of the operating season would vary from year to year based on snowfall. The gondola would also operate for approximately 100 hours for maintenance during the non-operating season. This would result in approximately 71,600 kWh for the entire non-operating season.

In January 2018, Squaw Valley Ski Holdings (SVSH) signed a memorandum of understanding (MOU) with Liberty Utilities, the local electrical utility that serves Squaw Valley and Alpine Meadows, to provide 100% of the electricity to Squaw Valley and Alpine Meadows from renewable sources. The intent of the MOU is to achieve this objective by December 1, 2018. However, authorizations from the California Public Utilities Commission (CPUC) and other regulatory and technical steps must be completed before the goal of 100% renewable electricity deliveries can be reached. Therefore, at the time of writing this Final EIS/EIR, the MOU's target date of December 1, 2018 had not been achieved. However, if the objective of the MOU is ultimately achieved, the gondola would be powered by electricity generated from 100% renewable sources.

In addition, indirect increases in energy consumption could result from increases in the number of daily vehicle trips and fuel usage associated with increases in visitation under Alternative 2. Although implementing the alternative could result in an estimated increase of approximately 36,700 visitor-days per year, it would provide direct access to existing ski terrain and resort amenities, providing an alternative to the use of the shuttle bus and other vehicles that use fuel to move people between ski areas. The existing shuttle bus system would not operate while the gondola is in operation, reducing fuel use by these vehicles.

According to Appendix F of the State CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. Alternative 2 would reduce fuel usage during construction, use gondola motors properly sized to the project, and generate electricity from the gondola at the mid-stations. Therefore, although Alternative 2 would increase energy demand as a result of project development, implementing the alternative would not result in the inefficient or wasteful use of energy.

NEPA Effects Conclusion

Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, direct and indirect effects related to energy usage resulting from Alternative 2 would be **minorly adverse** because although the alternative would not result in the inefficient or wasteful use of energy, it would increase energy usage. These effects would be mitigated through implementation of RPMs AQ-8 and AQ-18.

CEQA Determination of Effects

Alternative 2 would increase demand for energy usage. However, the increase in energy usage would not result in the inefficient or wasteful use of energy. Under CEQA, and using the CEQA criteria, this impact would be **less than significant**. RPMs AQ-8 and AQ-18 would reduce fuel usage during construction. With implementation of these RPMs, this impact would be reduced, although these RPMs are not necessary to reduce a significant impact to a less-than-significant level.

Mitigation Measures

All RPMs provided in Appendix B are adopted by Placer County as mitigation measures and are included in the MMRP for the project. The adoption of RPMs AQ-9 and AQ-18 as mitigation measures reduces fuel consumption during construction, but these RPMs are not necessary to reduce a significant effect.

Impact 4.8-3 (Alt. 2): Increased Generation of Solid Waste

Alternative 2 would result in an increase in solid waste generation during construction. Operation of the alternative would generate approximately 0.06 ton per day of solid waste related to increases in visitation. The solid waste generated by construction and operation would not exceed the permitted capacity of the Lockwood Regional Landfill or the maximum throughput for the Eastern Regional MRF, which would receive solid waste from the project site. Under CEQA, and using the CEQA criteria, this impact would be **less than significant**. There are no applicable RPMs that would reduce this impact. This impact analysis is specific to a CEQA criterion and is not responsive to a NEPA analytical indicator. No NEPA determination of effect is provided.

Solid waste service would continue with the existing provider, Tahoe Truckee Sierra Disposal. Project construction activities would temporarily generate solid waste, including excess construction materials and material removed during site clearing. Most of the material removed during construction would be vegetation and trees, which would not be transported to the landfill. The remaining material would be transported to the Placer County Eastern Regional MRF in Truckee, where it would be sorted in an effort to meet California's mandatory solid waste diversion requirements. Waste materials would then be transported to the Lockwood Regional Landfill. Eastern Regional MRF has a maximum permitted throughput of 800 tons of material per day (Placer County Environmental Utilities 2018). The Lockwood Regional Landfill has a total capacity of 302.5 million cubic yards. As of 2010, the landfill had a remaining capacity of 269.7 million cubic yards (NDEP 2017), or 89% of its total capacity. Approximately 24 million cubic yards of material were placed in the landfill between 1994 and 2010 (NDEP 2017).

Solid waste related to operation of the project would primarily be from increases in visitation. CalRecycle does not have published waste generation rates for ski resorts; however, waste generation for similar recreation uses is 0.5 pound per visitor per day (CalRecycle 2016). Using this solid waste generation rate, the estimated increase of 36,856 visitor-days per year would generate 18,428 pounds of solid waste each year (9.21 tons per year), or 122.8 pounds of solid waste per day (0.06 ton per day). The 0.06 ton of solid waste per day would be very small compared to the permitted throughput of the Eastern Regional MRF (800 tons per day). In addition, assuming approximately 1.3 tons per cubic yard, the project would result in approximately 7.08 cubic yards of solid waste per year, which would not be a substantial contribution to the remaining capacity (269.7 million cubic yards) of the Lockwood Regional Landfill.

Solid waste generated by project construction would be temporary, and solid waste generated by operation of the project would not cause the landfill to exceed its permitted capacity. The project would also comply with all federal, state, and local statutes and regulations related to solid waste reduction and recycling.

NEPA Effects Conclusion

This impact analysis is specific to a CEQA criterion and is not responsive to a NEPA analytical indicator. No NEPA effects conclusion is provided.

CEQA Determination of Effects
Alternative 2 would increase the generation of solid waste during construction. However, it would not result in any landfills exceeding their capacity. Under CEQA, and using the CEQA criteria, this impact would be **less than significant**. There are no applicable RPMs that would reduce this impact.

Mitigation Measures

No mitigation measures are required.

4.8.3.3 ALTERNATIVE 3

Impact 4.8-1 (Alt. 3): Water Supply Impacts

Although Alternative 3 is not expected to directly increase water demand, operation of the alternative could result in increased resort visitation during winter months. The indirect water demand related to increases in visitation is expected to be approximately 184,280 gallons per year (0.57 afy), which could be adequately met by existing water supplies at Squaw Valley and Alpine Meadows. Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, there would be **no effect** related to water supply because there would be sufficient water supply to support projected demand. Under CEQA, and using the CEQA criteria, the effect on water supply would be **less than significant** because there would be sufficient water supplies available to serve the project from existing entitlements and resources. There are no applicable RPMs that would reduce this impact.

This impact would be the same as described for Alternative 2 because the projected increase in indirect water demand is the same. There would be sufficient water supply to provide for increases in water demand that may occur as a result of Alternative 3.

NEPA Effects Conclusion
Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, there would be **no effect** related to water supply resulting from Alternative 3 because there is sufficient water supply to support projected demand. There are no applicable RPMs that would mitigate this effect.

CEQA Determination of Effects
Although Alternative 3 would potentially increase water demand, this increase could be adequately met with existing water supplies at Squaw Valley and Alpine Meadows. Under CEQA, and using the CEQA criteria, the effect on water supply would be **less than significant** because there would be sufficient water supplies available to serve the project from existing entitlements and resources. This impact would not differ materially from that under Alternative 2 because both alternatives would generate the same, or very similar, increases in demand for water supply. There are no applicable RPMs that would reduce this impact.

Mitigation Measures

No mitigation measures are required.

Impact 4.8-2 (Alt. 3): Inefficient, Wasteful, and Unnecessary Consumption of Energy Resources

Construction of Alternative 3 would consume energy in the form of fuel for construction vehicles, but this energy consumption would be temporary. Operation of the alternative would result in an increase in electricity usage for operation of the gondola and indirect increases in fuel for visitor vehicle trips. However, Alternative 3 would use a gondola motor properly sized to the project and electricity generated from the gondola at one of the mid-stations. Under NEPA, and considering the NEPA indicators, absent of RPMs and/or mitigation, direct and indirect effects related to energy usage would be **minorly adverse** because although the alternative would not result in the inefficient or wasteful use of energy, it would increase energy usage. Implementation of RPMs AQ-9 and AQ-18 would mitigate this effect. Under CEQA, using the CEQA criteria, the impact related to energy usage would be **less than significant**. In addition, RPMs AQ-9 and AQ-18 would reduce fuel usage during construction. With implementation of these RPMs, this impact would be reduced, although these RPMs are not necessary to reduce a significant impact to a less-than-significant level.

This impact would be similar to the impact described for Alternative 2 because both alternatives would result in similar increases in energy usage. For Alternative 3, the Squaw Valley mid-station would use a line generator similar to that planned for the mid-stations under Alternative 2; however, the Alpine Meadows mid-station would receive power from electrical infrastructure that serves the Caldwell property. Peak electrical demand for operation of Alternative 3 is estimated at 7,164 kWh per day, which is the same electrical demand estimated for Alternative 2. All other energy usage for Alternative 3 is expected to be similar to that under Alternative 2.

The same RPMs identified above for Alternative 2 would apply to Alternative 3. RPMs AQ-8 and AQ-18 would be equally effective at improving energy efficiency during construction.

NEPA Effects Conclusion

Under NEPA, and considering the NEPA indicators, absent of RPMs and/or mitigation, direct and indirect effects related to energy usage resulting from Alternative 3 would be **minorly adverse** because although Alternative 3 would not result in the inefficient or wasteful use of energy, it would increase energy usage. These effects would be mitigated through implementation of RPMs AQ-8 and AQ-18. This impact under Alternative 3 would be the same as under Alternative 2.

CEQA Determination of Effects

Alternative 3 would increase energy usage; however, it would not result in inefficient or wasteful use of energy. Under CEQA, and using the CEQA criteria, this impact would be **less than significant**. RPMs AQ-8 and AQ-18 would reduce fuel usage during construction. With implementation of these RPMs, this impact would be reduced, although these RPMs are not necessary to reduce a significant impact to a less-than-significant level.

Mitigation Measures

All RPMs provided in Appendix B are adopted by Placer County as mitigation measures and are included in the MMRP for the project. The adoption of RPMs AQ-8 and AQ-18 as mitigation measures reduces fuel consumption during construction, but these RPMs are not necessary to reduce a significant effect.

Impact 4.8-3 (Alt. 3): Increased Generation of Solid Waste

Alternative 3 would result in an increase in solid waste generation during construction. Operation of the alternative would generate approximately 0.06 ton per day of solid waste related to increases in visitation. The solid waste generated by construction and operation would not exceed the permitted capacity of the Lockwood Regional Landfill or the maximum throughput for the Eastern Regional MRF, which would receive solid waste from the project site. Under CEQA, and using the CEQA criteria, this impact would be **less than significant**. There are no applicable RPMs that would reduce this impact. This impact analysis is specific to a CEQA criterion and is not responsive to a NEPA analytical indicator. No NEPA determination of effect is provided.

This impact would be the same as described for Alternative 2 because both alternatives would generate the same amount of solid waste during construction and would not increase solid waste during operation.

NEPA Effects Conclusion
This impact analysis is specific to a CEQA criterion and is not responsive to a NEPA analytical indicator. No NEPA effects conclusion is provided.

CEQA Determination of Effects
Alternative 3 would increase solid waste generation during construction; however, it would not result in any landfills exceeding their capacity. Under CEQA, and using the CEQA criteria, this impact would be **less than significant**. There are no applicable RPMs that would reduce this impact. This impact would be the same as under Alternative 2 because neither alternative would result in any landfills exceeding their capacity.

Mitigation Measures

No mitigation measures are required.

4.8.3.4 ALTERNATIVE 4

Impact 4.8-1 (Alt. 4): Water Supply Impacts

Although Alternative 4 is not expected to directly increase water demand, operation of the alternative could result in increased resort visitation during winter months. The indirect water demand related to increases in visitation is expected to be approximately 184,820 gallons (0.57 afy), which could be adequately met by existing water supplies at Squaw Valley and Alpine Meadows. Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, there would be **no effect** related to water supply because there would be sufficient water supply to support projected demand. Under CEQA, and using the CEQA criteria, the effect on water supply would be **less than significant** because there would be sufficient water supplies available to serve the project from existing entitlements and resources. There are no applicable RPMs that would reduce this impact.

This impact would be the same as described for Alternative 2 because the projected increase in indirect water demand is the same. There would be sufficient water supply to provide for increases in water demand that may occur as a result of Alternative 4.

NEPA Effects Conclusion
Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, there would be **no effect** related to water supply resulting from Alternative 4 because there would be sufficient water supply to support projected demand. There are no applicable RPMs that would mitigate this effect.

CEQA Determination of Effects
Although Alternative 4 would potentially increase water demand, this increase could be adequately met with existing water supplies at Squaw Valley and Alpine Meadows. Under CEQA, and using the CEQA criteria, the effect on water supply would be **less than significant** because there would be sufficient water supplies available to serve the project from existing entitlements and resources. This impact would not differ materially from that under Alternative 2 because both alternatives would generate the same, or very similar, increases in demand for water supply. There are no applicable RPMs that would reduce this impact.

Mitigation Measures

No mitigation measures are required.

Impact 4.8-2 (Alt. 4): Inefficient, Wasteful, and Unnecessary Consumption of Energy Resources

Construction of Alternative 4 would consume energy in the form of fuel for construction vehicles, but this energy consumption would be temporary. Operation of the alternative would result in an increase in electricity usage for operation of the gondola and indirect increases in fuel for visitor vehicle trips. However, Alternative 4 would use a gondola motor properly sized to the project. Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, direct and indirect effects related to energy usage would be **minorly adverse** because although the alternative would not result in the inefficient or wasteful use of energy, it would increase energy usage. Implementation of RPMs AQ-8 and AQ-18 would mitigate this effect. Under CEQA, using the CEQA criteria, impacts related to energy usage would be **less than significant**. In addition, RPMs AQ-8 and AQ-18 would reduce fuel usage during construction. With implementation of these RPMs, this impact would be reduced, although these RPMs are not necessary to reduce a significant impact to a less-than-significant level.

This impact would be similar to the impact described for Alternative 2 because both alternatives would result in similar increases in energy usage. However, although both alternatives would require power to both base terminals and mid-stations, Alternative 4, unlike Alternative 2, would not use line generators for the mid-stations. Peak electrical demand for operation of Alternative 4 is estimated at 7,164 kWh per day, which is the same electrical demand estimated for Alternative 2. All other energy usage for Alternative 4 is expected to be similar to that under Alternative 2.

The same RPMs identified above for Alternative 2 would apply to Alternative 4. RPMs AQ-8 and AQ-18 would be equally effective at improving energy efficiency during construction.

NEPA Effects Conclusion

Under NEPA, and considering the NEPA indicators, absent RPMs and/or mitigation, direct and indirect effects related to energy usage resulting from Alternative 4 would be **minorly adverse** because although Alternative 4 would not result in the inefficient or wasteful use of energy, it would increase energy usage. These effects would be mitigated through implementation of RPMs AQ-8 and AQ-18. This effect under Alternative 4 would be the same as under Alternative 2.

CEQA Determination of Effects

Alternative 4 would increase energy usage; however, it would not result in inefficient or wasteful use of energy. Under CEQA, and using the CEQA criteria, this impact would be **less than significant**. RPMs AQ-8 and AQ-18 would reduce fuel usage during construction. With implementation of these RPMs, this impact would be reduced, although these RPMs are not necessary to reduce a significant impact to a less-than-significant level.

Mitigation Measures

All RPMs provided in Appendix B are adopted by Placer County as mitigation measures and are included in the MMRP for the project. The adoption of RPMs AQ-8 and AQ-18 as mitigation measures reduces fuel consumption during construction, but these RPMs are not necessary to reduce a significant effect.

Impact 4.8-3 (Alt. 4): Increased Generation of Solid Waste

Alternative 4 would result in an increase in solid waste generation during construction. Operation of the alternative would generate approximately 0.06 ton per day of solid waste related to increases in visitation. The solid waste generated by construction and operation would not exceed the permitted capacity of the Lockwood Regional Landfill or the maximum throughput for the Eastern Regional MRF, which would receive solid waste from the project site. Under CEQA, and using the CEQA criteria, this impact would be **less than significant**. There are no applicable RPMs that would reduce this impact. This impact analysis is specific to a CEQA criterion and is not responsive to a NEPA analytical indicator. No NEPA determination of effect is provided.

This impact would be the same as described for Alternative 2 because both alternatives would generate the same amount of solid waste during construction and would not increase solid waste during operation.

NEPA Effects Conclusion
This impact analysis is specific to a CEQA criterion and is not responsive to a NEPA analytical indicator. No NEPA effects conclusion is provided.

CEQA Determination of Effects
Alternative 4 would increase solid waste generation during construction; however, it would not result in any landfills exceeding their capacity. Under CEQA, and using the CEQA criteria, this impact would be **less than significant**. There are no applicable RPMs that would reduce this impact. This impact would be the same as under Alternative 2 because neither alternative would result in any landfills exceeding their capacity.

Mitigation Measures

No mitigation measures are required.

4.8.3.5 SUMMARY OF DIRECT AND INDIRECT EFFECTS

Table 4.8-1 provides a summary of the effects determinations for the direct and indirect effects evaluated above for each alternative.

For the No Action Alternative, there would be no effect for all NEPA indicators and CEQA criteria evaluated.

Addressing the action alternatives, for Impact 4.8-1, there would be no effects related to water supply for all NEPA indicators, and effects would be less than significant for CEQA criteria for all three action alternatives. For this impact, water demand would be the same across all the action alternatives, and there would be no meaningful difference in effects across the three action alternatives.

For Impact 4.8-2, effects related to energy efficiency would be minorly adverse for all NEPA indicators, and effects would be less than significant for all CEQA criteria for all three action alternatives. There would be no difference in effects across the action alternatives because energy demand among the action alternatives would be similar.

For Impact 4.8-3, effects related to generation of solid waste would be less than significant under CEQA for all three action alternatives. There would be no difference in effects across the action alternatives because solid waste generation among the action alternatives would be similar. The analysis provided for Impact 4.8-3 is specific to a CEQA criterion and is not responsive to a NEPA analytical indicator. No NEPA determination of effect is provided.

Table 4.8-1 Summary of Direct and Indirect Effects

Impact	Applicable Analytical Indicators and Significance Criteria	Alt. 1	Alt. 2	Alt. 3	Alt. 4
4.8-1: Water Supply Impacts	Discussion of supply and demand for water supply, sewer/wastewater services, and electricity/gas/energy services under existing and proposed conditions	No effect	No effect under NEPA; less than significant under CEQA	No effect under NEPA; less than significant under CEQA Same as for Alternative 2	No effect under NEPA; less than significant under CEQA Same as for Alternatives 2 and 3
	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed	No effect	No effect under NEPA; less than significant under CEQA	No effect under NEPA; less than significant under CEQA Same as for Alternative 2	No effect under NEPA; less than significant under CEQA Same as for Alternatives 2 and 3

Table 4.8-1 Summary of Direct and Indirect Effects

Impact	Applicable Analytical Indicators and Significance Criteria	Alt. 1	Alt. 2	Alt. 3	Alt. 4
4.8-2: Inefficient, Wasteful, and Unnecessary Consumption of Energy Resources	Discussion of supply and demand for water supply, sewer/wastewater services, and electricity/gas/energy services under existing and proposed conditions	No effect	Minorly adverse under NEPA; less than significant under CEQA	Minorly adverse under NEPA; less than significant under CEQA Similar to Alternative 2	Minorly adverse under NEPA; less than significant under CEQA Similar to Alternatives 2 and 3
	Qualitative discussion of energy use associated with the proposed project	No effect	Minorly adverse under NEPA; less than significant under CEQA	Minorly adverse under NEPA; less than significant under CEQA Similar to Alternative 2	Minorly adverse under NEPA; less than significant under CEQA Similar to Alternatives 2 and 3
	Result in inefficient and wasteful consumption of energy during construction or operations or require new or expanded energy facilities that could cause significant environmental effects	No effect	Minorly adverse under NEPA; less than significant under CEQA	Minorly adverse under NEPA; less than significant under CEQA Similar to Alternative 2	Minorly adverse under NEPA; less than significant under CEQA Similar to Alternatives 2 and 3
4.8-3: Increased Generation of Solid Waste	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs	No effect	Less than significant under CEQA	Less than significant under CEQA Same as for Alternative 2	Less than significant under CEQA Same as for Alternatives 2 and 3
	Comply with federal, state, and local statutes and regulations related to solid waste	No effect	Less than significant under CEQA	Less than significant under CEQA Same as for Alternative 2	Less than significant under CEQA Same as for Alternatives 2 and 3

4.8.4 Cumulative Effects

4.8.4.1 METHODS AND APPROACH

The list of past, present, and reasonably foreseeable future projects considered in this cumulative analysis is provided in Chapter 3 of this Final EIS/EIR. The spatial scope for the cumulative effects analysis of water supply includes the groundwater aquifer of Squaw Valley and Alpine Meadows and the local utility service areas for energy usage and solid waste generation. The temporal scope includes the construction period (6–8 months) as well as the operational period of the gondola. For this analysis, the temporal cumulative effects timeframe for present and future actions is 20-years. This is generally consistent with the longest implementation times for "Cumulative Effects Projects" listed in Table 3-3 and applicable to the spatial scope of this analysis; a 20-year estimated buildout period for the Village at Squaw Valley Specific Plan (Item #2 in Table 3-3) and a projection to 2039 for General Development in Olympic Valley (Item #10 in Table 3-3). This timeframe is also consistent with the timeframe considered for the water supply assessment previously prepared for the Village at Squaw Valley Specific Plan (Farr West Engineering et al. 2014, 2015).

Any present or reasonably foreseeable future projects in the project vicinity that have the potential to create impacts on utilities are listed below. Potential impacts associated with these projects include increases in water demand, energy usage, or solid waste generation caused by construction or operation.

The following present and reasonably foreseeable future projects could potentially affect one or more utilities in a cumulative manner with the proposed gondola.

Project	Potential Impacts
Alpine Meadows Hot Wheels Lift Replacement	Solid waste generation
Timberline Twister	Increased utility use and solid waste generation
Squaw Valley Red Dog Lift Replacement	Solid waste generation
Alpine Meadows Master Development Plan	Increased utility use and solid waste generation
Alpine Sierra subdivision	Increased utility use and solid waste generation
White Wolf project	Increased utility use and solid waste generation
General development in Olympic Valley	Increased utility use and solid waste generation
General development in Alpine Meadows	Increased utility use and solid waste generation
State Route 89/Fanny Bridge Improvement Project	Solid waste generation

4.8.4.2 CUMULATIVE IMPACTS

Alternative 1 – No Action Alternative

Alternative 1 – No Action Alternative would result in a continuation of existing conditions. There would be no direct or indirect impacts and thus by definition no contribution to cumulative impacts related to utilities.

Alternative 2

Various future projects that propose new residential and commercial development would increase demand for water supply and energy and generate solid waste, including those projects listed above. Each new project would be reviewed by decision makers to ensure that adequate water supply and utility capacity are available to serve the project before it is approved and that energy usage is minimized. Utility providers would continue to employ programs and mechanisms to support provision of these services to new development. Infrastructure upgrades necessary to supply water and electricity to existing and future users are planned by the County and utility providers, and new projects would be required to reduce energy usage to the extent possible. Local jurisdictions are also required to reduce solid waste to meet California's mandatory solid waste diversion requirements. Overall, the cumulative condition for water supply, utilities, and solid waste impacts would not be adverse. As described in the discussions of Impacts 4.8-1, 4.8-2, and 4.8-3, above, Alternative 2 would not result in significant impacts related to water supply; inefficient, wasteful, and unnecessary consumption of energy resources; or increased generation of solid waste, because the demands of the project would be small in comparison to available capacity, and the project would not result in inefficient, wasteful, and unnecessary consumption of energy resources. In addition, as stated in the discussion of Impact 4.8-3 (Alt. 2), as of 2010 the Lockwood Regional Landfill had a remaining capacity of 269.7 million cubic yards (NDEP 2017). Approximately 24 million cubic yards of material were placed in the landfill between 1994 and 2010 (NDEP 2017), resulting in an average annual input of 1.5 million cubic yards per a year. Even if this rate of material entering the landfill were doubled, the landfill would have over 75-years of capacity remaining to accommodate any future cumulative increase in demand. For water supply, the water supply assessment previously prepared for the Village at Squaw Valley Specific Plan (Farr West Engineering et al. 2014, 2015) found sufficient groundwater available to support 20-years of anticipated cumulative development in Olympic Valley. Given these conditions, Alternative 2 **would not make a considerable contribution** to a significant cumulative impact on water supply, utilities, or solid waste.

Alternatives 3 and 4

Alternatives 3 and 4 would have the same cumulative effects related to water supply, utilities, and solid waste as Alternative 2 because each would involve the same projected increase in water demand, similar increases in energy usage, and similar amounts of solid waste generation during construction. There is no meaningful difference in effects across the three action alternatives.