

## 6.0 Other CEQA Considerations



### 6.0 OTHER CEQA CONSIDERATIONS

# 6.1 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

Pursuant to Section 15126.2 of the CEQA Guidelines, following is a discussion of short-term uses of the environment and the maintenance and enhancement of long-term productivity. If the proposed project is approved and constructed, a variety of short- and long-term impacts would occur on a local level. During project grading and construction, portions of surrounding uses may be temporarily impacted by dust and noise. There may also be an increase in vehicle pollutant emissions caused by grading and construction activities. However, these disruptions would be temporary and may be avoided or lessened to a large degree through mitigation cited in this EIR and through compliance with the *Town of Mammoth Lakes Municipal Code* (Municipal Code); refer to Section 5.0, Environmental Analysis, and Section 8.0, Effects Found Not To Be Significant.

The proposed project would create long-term environmental consequences associated with a transition in land use from a passive park use to an active recreational use (i.e., the ice rink/RecZone, and flexible community facilities). Development of the proposed project and the subsequent long-term effects may impact the physical, aesthetic, and human environments. Long-term physical consequences of development include increased traffic volumes, increased noise from project-related mobile (traffic) and stationary (mechanical, sporting events, public announcement system, landscaping, etc.) sources, hydrology and water quality impacts, and increased energy and natural resource consumption. Incremental degradation of local and regional air quality would also occur as a result of mobile source emissions generated from project-related traffic, and stationary source emissions generated from the consumption of propane and electricity. However, as analyzed in Section 5.0, Environmental Analysis, and Section 8.0, Effects Found Not To Be Significant, impacts associated with the proposed project would be less than significant. Therefore, the proposed project would not have significant long-term implications in this regard.

# 6.2 IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

According to Sections 15126(c) and 15126.2(c) of the CEQA Guidelines, an EIR is required to address any significant irreversible environmental changes that would occur should the proposed project be implemented. As stated in CEQA Guidelines Section 15126.2(c):

"[uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter likely, Primary impacts and, particularly, secondary impacts [such as highway improvement which provides access to a previously inaccessible area] generally commit future generations to similar uses. Also, irreversible damage can result



from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

The project would consume limited, slowly renewable and non-renewable resources. This consumption would occur during the construction phase of the project and would continue throughout its operational lifetime. Project development would require a commitment of resources that would include: (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the project site. Project construction would require the consumption of resources that are not replenishable or which may renew so slowly as to be considered non-renewable. These resources would include the following construction supplies: lumber and other forest products; aggregate materials used in concrete and asphalt; metals; and water. Fossil fuels such as gasoline and oil would also be consumed in the use of construction vehicles and equipment.

The resources that would be committed during project operation would be similar to those currently consumed within the Town of Mammoth Lakes. These would include energy resources such as electricity and propane, petroleum-based fuels required for vehicle-trips, fossil fuels, and water. Fossil fuels would represent the primary energy source associated with both construction and ongoing operation of the project, and the existing, finite supplies of these natural resources would be incrementally reduced. Project operation would occur in accordance with Title 24, Part 6 of the California Code of Regulations, which sets forth conservation practices that would limit the amount of energy consumed by the project. However, the energy requirements associated with the project would, nonetheless, represent a long-term commitment of essentially non-renewable resources.

Limited use of potentially hazardous materials typical of recreational uses, including minor amounts of cleaning products along with the occasional use of pesticides and herbicides for landscape maintenance are the extent of materials anticipated to be utilized on-site. The use of these materials would be in small quantities and used, handled, stored, and disposed of in accordance with the manufacturer's instructions and applicable government regulations and standards. Compliance with these regulations and standards would serve to protect against significant and irreversible environmental change resulting from the accidental release of hazardous materials. Compliance with such regulations would serve to protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

In summary, project construction and operation would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these particular resource quantities for future generations or for other uses during the life of the project. However, continued use of such resources would be on a relatively small scale and consistent with regional and local growth forecasts in the area. As such, although irreversible environmental changes would result from the project, such changes would not be considered significant.

#### 6.3 GROWTH-INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires that an EIR analyze growth-inducing impacts of a project. Section 15126.2(d) requires that an EIR:



"Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth [a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas], Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

#### POPULATION, HOUSING, AND EMPLOYMENT

#### **Population**

Mono County. The County encompasses approximately 3,030 square miles.<sup>1</sup> It is bordered by the State of Nevada to the northeast, Inyo County to the south, and the Counties of Fresno, Madera, Mariposa, Tuolumne, and Alpine to the west. As of May 2016, Mono County had a population of 13,721 people.<sup>2</sup> This represents an increase of approximately 7.4 percent over the County's January 2000 population of 12,770<sup>3</sup>; refer to <u>Table 6-1</u>, <u>Population Estimates</u>.

Table 6-1 Population Estimates

Year	Mono County	Town of Mammoth Lakes
Population		
2000¹	12,770	7,035
2016 <sup>2</sup>	13,721	8,024
Change	7.4%	14.0%

#### Sources

Town of Mammoth Lakes. The Town of Mammoth Lakes (Town) was incorporated in 1984 and remains the only incorporated jurisdiction within Mono County. The Town's Municipal Boundaries include approximately 25 square miles of land. Approximately 4.5 square miles are within the Urban

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State of California, Department of Finance, E-8 Historical Population and Housing Estimates for Cities, Counties, and the State, 1990-2000, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-8/, accessed September 2, 2016.

State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark, http://www.dof.ca.gov/Forecasting/Demographics/ Estimates/E-5/, accessed September 2, 2016.

Mono County's official website, http://www.monocounty.ca.gov/information.html, accessed September 2, 2016.

<sup>&</sup>lt;sup>2</sup> State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/, accessed September 2, 2016.

<sup>&</sup>lt;sup>3</sup> State of California, Department of Finance, E-8 Historical Population and Housing Estimates for Cities, Counties, and the State, 1990-2000, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-8/, accessed September 2, 2016.



Growth Boundary (UGB). The Towns' population differs from other cities in that the majority of the Town's population consists of seasonal residents or visitors. The Final Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update (General Plan PEIR), dated May 2007, considers the persons at one time (PAOT) to account for seasonal residents, second homes, and visitors along with the permanent residents. Due to the resort nature of the Town, the actual population of the Town is always greater than the permanent population, particularly during peak season (winter).

The Town's January 2016 population was 8,024.<sup>4</sup> This represents an increase of approximately 14.0 percent over the Town's January 2000 population of 7,035.<sup>5</sup> <u>Table 6-1</u> provides a summary of both 2000 and 2016 population estimates for Mono County and the Town of Mammoth Lakes.

#### Housing

Mono County. The County's housing stock was estimated to be 14,000 units in January 2016. This represents an increase of approximately 19.5 percent over the estimated 11,720 housing units reported in January 2000. The vacancy rate in January 2016 was estimated to be approximately 58.0 percent, and the persons per household estimate for occupied units was approximately 2.28.<sup>6</sup> The high vacancy rate is reflective of the resort nature of the area and seasonal residents. Table 6-2, Housing Estimates, provides a summary of both 2000 and 2016 housing estimates for Mono County and the Town of Mammoth Lakes.

Table 6-2 Housing Estimates

Year	Mono County	Town of Mammoth Lakes
Housing		
2000¹	11,720	7,935
2016 <sup>2</sup>	14,000	9,672
Change	19.5%	21.9%

#### Sources

 State of California, Department of Finance, E-8 Historical Population and Housing Estimates for Cities, Counties, and the State, 1990-2000, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-8/, accessed September 2, 2016.

State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark, http://www.dof.ca.gov/Forecasting/Demographics/ Estimates/E-5/, accessed September 2, 2016.

<sup>&</sup>lt;sup>4</sup> State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/, accessed September 2, 2016.

<sup>&</sup>lt;sup>5</sup> State of California, Department of Finance, E-8 Historical Population and Housing Estimates for Cities, Counties and the State, 1990-2000, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-8/, accessed September 2, 2016.

<sup>&</sup>lt;sup>6</sup> State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/, accessed September 2, 2016.



Town of Mammoth Lakes. The Town's housing stock was estimated to be 9,672 units in January 2016. This represents an increase of approximately 21.9 percent over the estimated 7,935 housing units reported in January 2000. The vacancy rate in January 2016 was estimated to be approximately 65.4 percent, with the persons per household estimate for occupied units being 2.35.7 Although it appears an excess supply of housing units exist in the Town, in actuality, a majority of the housing units are short-term seasonal units. Additionally, overcrowding conditions occur as a result of high rents and limited housing opportunities for permanent residents and the seasonal workforce. This is a reflection of the resort nature of the Town, and the fact that seasonal, recreational, and occasional use units account for a majority of the total housing units.

#### **Employment**

Mono County. According to the California Employment Development Department, the annual average civilian labor force within Mono County totals approximately 8,540 as of July 2016. An estimated 5.7 percent of the County's workforce (480 persons) was unemployed.<sup>8</sup>

<u>Town of Mammoth Lakes</u>. According to the California Employment Development Department, the annual average civilian labor force within the Town of Mammoth Lakes totals approximately 5,330 persons as of July 2016. An estimated 5.0 percent of the Town's workforce (270 persons) was unemployed.<sup>9</sup>

#### **IMPACT ANALYSIS**

A project could induce population growth in an area either directly or indirectly. More specifically, the development of new residences or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. The project site is located in a developing area within the Town. Project implementation would result in the development of new community multi-use facilities; refer to Section 3.0, Project Description. Based on the factors discussed below, project implementation would not result in significant growth-inducing impacts.

Removal of an Impediment to Growth. The project site currently consists of a passive recreational park use, and is located within a developing area within the Town. Transportation and infrastructure exist to serve the range of recreational, commercial, and residential uses in the project vicinity. Given the developed nature of the project area and developed infrastructure, the proposed project would not establish an essential public service or provide new access to an area. Therefore, the proposed project would not be considered growth inducing with respect to removing an impediment to growth.

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<sup>&</sup>lt;sup>7</sup> State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark, http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/, accessed September 2, 2016.

<sup>&</sup>lt;sup>8</sup> California Employment Development Department, Labor Force and Unemployment Rate for Cities and Designated Places, with March 2015 Benchmark, http://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html, accessed September 2, 2016.

<sup>&</sup>lt;sup>9</sup> Ibid.



Economic Growth. As stated above, the project involves the development of new community multi-use facilities. During project construction, construction-related jobs would be created. However, these jobs would be temporary and would not be growth-inducing. During project operation, economic growth associated with the community multi-use facilities would be consistent with the General Plan with respect to the planned land use for the project site. The proposed community multi-use facilities would serve the existing Town residents and would not result in significant jobs or economic growth in the Town.

<u>Population Growth</u>. A project could induce population growth in an area either directly or indirectly. The development of new residences or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. As concluded above, transportation and infrastructure exist to serve the range of recreational, commercial, and residential uses in the project vicinity. The project does not involve the extension of roads or other infrastructure into undeveloped areas. Therefore, the project would not foster population growth through the extension of roads or other infrastructure. The population growth associated with the proposed project is considered a less than significant impact.

<u>Precedent-Setting Action</u>. As demonstrated in <u>Section 5.1</u>, <u>Land Use and Relevant Planning</u>, the proposed project does not require any General Plan or Municipal Code amendments. The project components include a Major Design Review, among others. As such, the proposed project would not be considered growth inducing with respect to a precedent-setting action.

<u>Development or Encroachment of Open Space</u>. The project is considered an infill development, because the site is surrounded by existing residential uses to the south and west. Therefore, the project would not be growth-inducing with respect to development or encroachment into an isolated or adjacent area of open space.

Overall, project implementation would not be considered growth inducing, inasmuch as it would not foster significant unanticipated economic expansion and growth opportunities. The project would not remove an existing impediment to growth and would not develop or encroach into an isolated or adjacent area of open space. The proposed project would not foster significant unanticipated population growth in the project area, as described above.

In addition to inducing growth, a project may create a significant environmental impact if it would displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere and/or displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. The project would serve the existing community and would not displace any existing housing.

#### **6.4 ENERGY CONSERVATION**

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the California State Legislature adopted Assembly Bill 1575 (AB 1575), which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of



50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct state responses to energy emergencies, and—perhaps most importantly—promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of caused by a project. Thereafter, the State Resources Agency Created Appendix F of the State CEQA Guidelines.

State CEQA Guidelines Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The discussion below, analyzes the proposed project's effect on energy consumption impacts on energy resources.

#### **6.4.1 ENVIRONMENTAL SETTING**

Energy consumption is analyzed in this EIR due to the potential direct and indirect environmental impacts associated with the project. Such impacts include the depletion of nonrenewable resources and emissions of pollutants during both the construction and long-term operational phases.

#### **ELECTRICITY/PROPANE SERVICES**

Southern California Edison (SCE) provides electrical services in Mammoth Lakes and Mono County through State-regulated public utility contracts. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources, including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, generation of electricity is usually not tied to the location of the fuel source and can be delivered great distances via the electrical grid. The generating capacity of a unit of electricity is expressed in megawatts (MW). One MW provides enough energy to power 1,000 average California homes per day. Net generation refers to the gross amount of energy produced by a unit, minus the amount of energy the unit consumes. Generation is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh).

Although the natural gas is widely used throughout the State, Mammoth Lakes uses propane to fuel furnaces, water heaters, and stoves. Turner Gas Company (TGC) currently provides the Town with propane supplies. Electricity and propane service is available to locations where land uses could be developed. As part of the development of the proposed project, the Town of Mammoth Lakes' has conducted a consultation process with utility companies, including SCE and TGC, to allow informed input. The input that is provided facilitates a detailed review of the project by service purveyors to assess the potential demands. Utility companies are bound by contract to update energy systems to meet any additional demand.



#### **Energy Usage**

Energy usage is typically quantified using the British Thermal Unit (Btu). Total energy usage in California was 7,684 trillion Btu's in 2013 (the most recent year for which this specific data is available), which equates to an average of 201 million BTUs per capita. Of California's total energy usage, the breakdown by sector is 38 percent transportation, 24 percent industrial, 19 percent commercial, and 19 percent residential. Electricity and propane in California are generally consumed by stationary users such as residences and commercial and industrial facilities, whereas petroleum consumption is generally accounted for by transportation-related energy use. It should be noted that the Town of Mammoth Lakes uses propane instead of natural gas for furnaces, water heaters, and stoves. In 2014, taxable gasoline sales (including aviation gasoline) in California accounted for 14,921,441,859 gallons of gasoline.

The electricity consumption attributable to Mono County from 2007 to 2014 is shown in <u>Table 6-3</u>, <u>Electricity Consumption in Mono County 2007-2014</u>. As indicated, the demand has remained relatively constant, with no substantial increase.

Table 6-3
Electricity Consumption in Mono County 2007-2014

	Year	Electricity Consumption (in millions of kilowatt hours)	
	2007	185.58	
	2008	199.71	
	2009	199.69	
	2010	201.17	
	2011	204.65	
	2012	196.84	
	2013	204.30	
	2014	191.45	
Source:	Source: California Energy Commission, <i>Electricity Consumption by County</i> , http://ecdms.energy.ca.gov/elecbycounty.aspx, accessed September 5, 2016.		

Automotive fuel consumption in Mono County from 2007 to 2016 is shown in <u>Table 6-4</u>, <u>Automotive</u> <u>Fuel Consumption in Mono County 2007-2016</u>. As shown, automotive fuel consumption has declined in Mono County since 2007.

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California State Profile and Energy Estimates, EIA (US Energy Information Administration), updated April 16, 2015, http://www.eia.gov/state/data.cfm?sid=CA#ConsumptionExpenditures, accessed September 5, 2016.

<sup>&</sup>lt;sup>11</sup> California Board of Equalization, *Net Taxable Gasoline Sales*, 2016, https://www.boe.ca.gov/sptaxprog/reports/mvf\_10\_year\_report.pdf, accessed September 5, 2016.



Table 6-4
Automotive Fuel Consumption in Mono County 2007-2016

Year	On-Road Automotive Fuel Consumption (Gallons)	Off-Road Automotive Fuel Consumption (Construction Equipment) (Gallons)
2007	18,700,000	3,874,000
2008	17,926,000	3,444,000
2009	17,712,000	3,189,000
2010	17,675,000	3,259,000
2011	17,161,000	3,241,000
2012	16,609,000	3,193,000
2013	16,506,000	3,231,000
2014	16,480,000	3,295,000
2015	16,375,000	3,426,000
2016	16,264,000	3,533,000
Source: California Air	Resources Board, EMFAC2014.	

#### 6.4.2 REGULATORY SETTING

The following is a description of State and local environmental laws and policies that are relevant to the CEQA review process.

#### STATE OF CALIFORNIA

#### California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24)

Title 24, California's energy efficiency standards for residential and non-residential buildings, was established by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. In 2013, the CEC updated Title 24 standards with more stringent requirements. The 2013 standards are expected to substantially reduce the growth in electricity and natural gas/propane use. Additional savings result from the application of the standards on building alterations. For example, requirements for cool roofs, lighting, and air distribution ducts are expected to save additional electricity. These savings are cumulative, doubling as years go by. The 2016 standards have been approved and will go into effect on January 1, 2017. California's energy efficiency standards are updated on an approximate three year cycle.

#### CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen standards require new



residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2013 and went into effect July 1, 2014.

#### RECENT CEQA LITIGATION

In California, Clean Energy Committee v. City of Woodland (2014) 225 Cal.App.4<sup>th</sup> 173 ("CCEC"), the Court observed that CEQA Guidelines Appendix F lists environmental impacts and mitigation measures that an EIR may include. Potential impacts requiring EIR discussion include:

- 1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- 2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- 3. The effects of the project on peak and base period demands for electricity and other forms of energy.
- 4. The degree to which the project complies with existing energy standards.
- 5. The effects of the project on energy resources.
- 6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

#### **6.4.3 STANDARDS OF SIGNIFICANCE**

#### SIGNIFICANCE CRITERIA

In accordance with State CEQA Guidelines, the effects of a project are evaluated to determine whether they would result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria used to determine the significance of impacts may vary depending on the nature of the project. According to Appendix F of the State CEQA Guidelines, the proposed project would have a significant impact related to energy, if it would:

 Develop land uses and patterns that cause wasteful, inefficient, and unnecessary consumption of energy or construct new or retrofitted buildings that would have excessive energy requirements for daily operation.



The impact analysis focuses on the three sources of energy that are relevant to the proposed project: electricity and transportation fuel for vehicle trips associated with new development as well as the fuel necessary for project construction.

#### **6.4.4 ENERGY CONSUMPTION**

Energy consumption associated with the proposed project is summarized in <u>Table 6-5</u>, <u>Energy Consumption</u>. As shown in <u>Table 6-5</u>, the increase in electricity usage as a result of the project would constitute an approximate 0.004 percent increase in the typical annual electricity consumption in Mono County. The project would not consume natural gas as all of the Town of Mammoth Lakes uses propane to fuel furnaces, water heaters, and stoves, etc. The increase in off-road automotive fuel consumption in Mono County would be nominal, while the on-road automotive fuel consumption from the project would be 0.003 percent.

Table 6-5 Energy Consumption

Energy Type	Project Annual Energy Consumption	Mono County Annual Energy Consumption	Percentage Increase Countywide <sup>6</sup>
Electricity Consumption	396.82 MWh	103,840 MWh	0.004%
Automotive Fuel Consumption <sup>3, 4</sup>			
Project Construction	2,217 gallons	3,295,000 gallons <sup>5</sup>	0.00%
Project Operations	47,987 gallons	16,480,000 gallons <sup>5</sup>	0.003%

#### Notes:

- 1. Based on total electricity consumption (does not represent the net emissions over import energy).
- The project would not consume natural gas as the Town of Mammoth Lakes uses propane Lakes to fuel furnaces, water heaters, and stoves.
- 3. Construction and operational fuel consumption is based on the EPA's Greenhouse Gas Emissions Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator, accessed September 8, 2016.
- 4. Project operations would require nominal vehicle trips.
- 5. Countywide fuel consumption is from the California Air Resources Board EMFAC2014 model.
- 6. The project increases in electricity consumption are compared with the total consumption in Mono County in 2014. The project increases in automotive fuel consumption are compared with the countywide fuel consumption in 2016.

#### CONSTRUCTION-RELATED ENERGY CONSTRUCTION

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, and construction. Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. Some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and CARB engine



emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. The incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest in minimizing the cost of doing business.

As indicated in <u>Table 6-5</u>, the overall fuel consumption would be 2,217 gallons for the proposed project, which would result in a nominal increase (0.00 percent) in fuel use in Mono County. As such, project construction would have a minimal effect on the local and regional energy supplies. It is noted that construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. A less than significant impact would occur in this regard.

#### **OPERATIONAL ENERGY CONSTRUCTION**

#### **Energy Demand**

#### TRANSPORTATION ENERGY DEMAND

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration (NTSA) is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. Table 6-5 provides an estimate of the daily fuel consumed by vehicles traveling to and from the project site. As indicated in Table 6-5, project operations are estimated to consume approximately 47,987 gallons of fuel per year, which would increase Countywide automotive fuel consumption by 0.003 percent. The project would not result in any unusual characteristics that would result in excessive long-term operational fuel consumption. Fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.



#### **BUILDING ENERGY DEMAND**

The proposed project would be required to comply with Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage. Furthermore, the electricity provider, SCE, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 50 percent of total procurement by 2030. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures projects will not result in the waste of the finite energy resources.

As mentioned above, SCE currently provides electrical services within the Town of Mammoth Lakes, while propane gas services are provided by TGS. SCE has indicated that adequate capacity exists within the area to serve to proposed project. These utility companies would continue to provide these services and are required by the California Public Utilities Commission to update existing systems to meet any additional demand.

As depicted in <u>Table 6-5</u>, the project-related building energy would represent a 0.004 percent increase in electricity consumption and a nominal increase in propane consumption over the current Countywide usage.<sup>12</sup> The project would adhere to all Federal, State, and local requirements for energy efficiency, including the Title 24 standards, as well as the project's design features. The proposed project would not result in the inefficient, wasteful, or unnecessary consumption of building energy. Additionally, the proposed project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

#### **ENERGY EFFICIENCY MEASURES**

Title 24, California's Energy Efficiency Standards for Residential and Non-residential Buildings, was established by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. In 2013, the CEC updated Title 24 standards with more stringent requirements. The 2013 Standards are incorporated within the California Building Code and are expected to substantially reduce the growth in electricity and natural gas/propane use. Additional savings result from the application of the Standards on building alterations. For example, requirements for cool roofs, lighting, and air distribution ducts are expected to save about additional of electricity. These savings are cumulative, doubling as years go by. Additionally, the project may include the installation of solar panels on-site. The use of solar panels would reduce building energy demand during operations.

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<sup>&</sup>lt;sup>12</sup> The project would not consume natural gas as the Town of Mammoth Lakes uses propane Lakes to fuel furnaces, water heaters, and stoves.



#### **CONCLUSION**

As shown in <u>Table 6-5</u>, the increase in electricity and automotive fuel consumption over existing conditions is minimal (less than one percent). For the reasons described above, the proposed project would not place a substantial demand on regional energy supply or require significant additional capacity, or significantly increase peak and base period electricity demand, or cause wasteful, inefficient, and unnecessary consumption of energy during project construction, operation, and/or maintenance, or preempt future energy development or future energy conservation.