

## **4.0 MANDATED ENVIRONMENTAL ANALYSIS**

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This chapter includes environmental analysis mandated by CEQA, TRPA and NEPA. Sections include:

- significant and unavoidable adverse impacts;
- relationship between local short-term use of the environment and maintenance and enhancement of long-term productivity;
- irreversible and irretrievable commitment of resources;
- growth-inducing effects of the proposed action and alternatives; and
- CEQA environmentally superior alternative and NEPA/TRPA environmentally preferable alternative.

### **4.1 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS**

Section 2100(b)(2)(A) of CEQA, TRPA Code of Ordinances, Chapter 3, Subsection 3.7.2 (C), and NEPA Section 1502.16 requires that an EIR/EIS/EIS identify any significant environmental effects that cannot be avoided if the project were implemented. There are no significant environmental effects that cannot be avoided under any Alternative. The Proposed Action and Action Alternatives have been modified where necessary to comply with existing MPA 07 mitigation measures, design features and other standard regulatory requirements. Compliance with these MPA 07 mitigation measures and Chapter 2 design features would eliminate potentially significant environmental effects.

Prior to approving either the Proposed Action or one of the Action Alternatives studied in this EIR/EIS/EIS, the lead environmental agencies must make either of the following findings for each potentially significant adverse effect: (1) Changes or alterations have been required in or incorporated into such project which avoid or reduce the significant adverse environmental effects to a less than significant level; or (2) Specific considerations such as economic, social or technical, make infeasible the mitigation measure or project alternatives discussed in the environmental impact statement on the project.

### **4.2 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USE OF THE ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY**

TRPA Code of Ordinances, Chapter 3, Subsection 3.7.2 (F) and NEPA Section 1502.16 requires the inclusion of “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity” in the Draft EIS. This analysis often

entails a balancing of social, economic, and environmental impacts over time. In some cases, a relatively short-term benefit may have adverse long-term effects, with the possibility that future generations may be burdened with unwarranted social and environmental costs. It is also possible to have long-term benefits at the expense of short-term costs. Balancing of such impacts from this Project is the responsibility of the Heavenly Mountain Resort, TRPA, Forest Service, and other applicable regulatory agencies.

The short-term use being evaluated in this document is the modification and operation of Heavenly Mountain Resort as described in the proposed Heavenly Mountain Resort Epic Discovery Project. The Heavenly Mountain Resort Epic Discovery Project EIR/EIS/EIS discusses the effects of the Proposed Action and Action Alternatives on the environment and discloses programs for the maintenance and enhancement of the environment through implementation of the Proposed Action, implementation of MPA 07 mitigation measures (see Chapter 5) and design features (see Section 2.3.5), and compliance with local, TRPA, state, and federal regulations.

The existing conditions of the environment have been documented in Chapter 3. The discussion included in the “environmental setting” section of each environmental topic area also addresses past environmental effects that resulted from the construction and operation of the ski resort to present. These effects included degradation of soils and water quality, SEZs, scenic quality, old forest habitats, and biological resources, and the exceedance of traffic and noise standards as described and identified for the No Action Alternative (MP 96 and MPA 07 EIR/EIS/EIS documents). Should the No Action Alternative be selected, these existing impacts would continue to be reduced by implementation of the mitigation measures included in the MPA 07. No additional mitigation measures are proposed for the No Action Alternative because there is no additional action being taken.

Potential impacts from implementation of the Proposed Action and Alternatives 1 and 2 (Action Alternatives) are disclosed in this document. Mitigation measures that would reduce the identified effects are included as project modifications and as design features that shall be required for project implementation. As with the No Action Alternative, the required mitigation measures would also continue to reduce past effects to soils and water quality, SEZs, scenic quality, old forest habitats, biological resources, and traffic and noise.

The LTBMU Forest Plan (1988), as amended, identifies opportunities to expand skiing and recreational capacity at Heavenly and acknowledges that optimum use of the area for skiing and recreation will continue to require physical and operational improvements. The Forest Plan recognizes the potential for adverse effects to water and air quality, local transportation systems, and visual quality, but nevertheless provides the direction that ski area development may continue in order to expand and improve long-term recreational opportunities. The desired future condition, as described in the Forest Plan, is a quality ski resort with ski trails and other disturbed areas stabilized and revegetated to reduce the potential for soil erosion and to improve visual quality of the area.

In November 2011, Congress enacted the Ski Area Recreational Opportunity Enhancement Act (SAROE), which amended the National Forest Ski Area Permit Act of 1986 to clarify the authority of the Secretary of Agriculture regarding additional recreational uses of NFS land

subject to ski area permits, and for other purposes (16 USC 487b). The SAROE provides authority for the Forest Service to approve facilities to support summer and year-round natural resource-based recreation at ski areas.

The TRPA Plan Area Statement for Heavenly Valley California (PAS 087) states that the “area should continue to provide downhill skiing opportunities. Expansion or modification of Heavenly Ski Resort should be consistent with the adopted ski area master plan.” The Plan Area Statement for Heavenly Valley Nevada (PAS 086) states that “Significant modifications of existing ski facilities may be permitted based upon a master plan for the entire ski area.” As described in both PAS 086 and PAS 087, the purpose of the master plan process is to assist in designing the most efficient [long-term and sustainable] operation with the least environmental disturbance.

The Purpose and Need of the Epic Discovery Project demonstrate a need to expand and enhance natural-resource based year-round recreational opportunities on Forest Service Land and improve the year-round recreational value of the ski resort, provided that appropriate environmental protection measures are implemented. Heavenly’s ability to respond to regional demands for recreational facilities and to continue to attract visitors to the South Lake Tahoe area are key in maintaining the ability to fund the long-term environmental maintenance and enhancement of the lands within the special use permit area.

The Heavenly Mountain Resort is already committed to recreational use, a use that meets an existing and growing demand. Continuing to restore and enhance the environment and enhance the recreation facilities at Heavenly would ensure the long-term productivity of the land for the recreational purpose and would alleviate the need to convert other lands in order to meet the existing and future need.

### **4.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

TRPA Code of Ordinances, Chapter 3, Subsection 3.7.2 (G) and NEPA Section 1502.16 requires the inclusion of “the significant irreversible and irretrievable commitments of resources which would be involved in the proposed project should it be implemented” in the EIS. Section 21100(b)(2)(B) of CEQA requires that an EIR identify any significant irreversible changes that would result from project implementation. Section 15126.2(c) of CEQA provides guidance as to what sorts of changes might be considered irreversible. Such changes include use of nonrenewable resources, commitment of future generations to similar uses, and environmental accidents that could occur as a result of the Project.

Implementation of the No Action, Proposed Action or Alternatives 1 or 2 would result in the use of non-renewable resources during the construction and operation of individual projects. The use of building materials and energy resources during construction would largely be irreversible and irretrievable. Electricity, fossil fuels, and water would be consumed during operation of the Heavenly Mountain Resort under all Alternatives. The use of these nonrenewable resources is not expected to account for more than a small, incremental portion of the resources that are used in the Lake Tahoe Region and would not exceed capacities that would limit the availability of

these resources for other needs. Many of the proposed Epic Discovery Activities are gravity based and do not require use of electricity and other nonrenewable resources for operations.

All Alternatives would be expected to commit future generations to continued recreational use of the lands within the special use permit boundary. Continued implementation of the existing MPA 07 (No Action) or approval of the Epic Discovery Project (Proposed Action) or Alternatives 1 or 2 would commit new undisturbed lands to recreational uses. However, the development and operation of any Alternative would not preclude future use of the project area for other suitable activities, including future maintenance or enhancement of wildlife habitat and watershed protection. The project area is not particularly suitable for most other active uses, including urban development, timber production, or mineral extraction.

The potential for irreversible damage to the environment resulting from project-related activities is described in Section 4.14 of the 95 Draft EIR/EIS/EIS prepared for the MP 96. All of the Alternatives include activities that require the use, storage, and disposal of hazardous materials such as fuels, paints, solvents, and oils. In addition, each alternative would continue to facilitate human activity within the ski resort boundary, putting both the visitors and natural environment at risk to human-induced wildfire risks. Compliance with all applicable state, federal, and TRPA regulatory requirements concerning the use, storage, and disposal of hazardous materials would reduce but not eliminate (unforeseen natural disaster or accident) the potential for irreversible damage associated with these materials. Compliance with Forest Service standard regulations about open flame and bans on smoking would also reduce, but not eliminate the risk of wildfire from expanded summer use of the Heavenly permit area lands.

Section 4.14 of the 95 Draft EIR/EIS/EIS also describes the potential for improper disposal or accidental spill of hazardous materials within Heavenly's special use permit boundary. The Heavenly Hazardous Materials Business Plan establishes procedures for avoiding and minimizing the potential risk of improper disposal or accidental spill of hazardous materials. In addition, regular monitoring and inspection of hazardous materials use and storage areas is required. These measures, which are explained in detail in the Spill Prevention Plan (Section Six of the Heavenly Mountain Resort Hazardous Materials Business Plan which is available at Heavenly's executive offices or USFS offices), would reduce but do not eliminate (unforeseen natural disaster or accident) the potential for irreversible environmental damage from the use, storage, and disposal of hazardous materials.

#### **4.4 GROWTH-INDUCING EFFECTS OF THE PROPOSED ACTION AND ALTERNATIVES**

CEQA, the TRPA Code of Ordinances, Chapter 3, Subsection 3.7.2 (H), and NEPA Section 1508.8b (indirect effects) requires the inclusion of "the growth-inducing impact of the proposed project" in the Epic Discovery Project EIR/EIS/EIS. This section discusses the potential of the No Action Alternative, the Proposed Action and Alternatives 1 and 2 to foster economic or population growth, to prompt the construction of new housing in the surrounding environment, or to remove obstacles to population growth. Growth inducement may result from direct employment, population, or housing growth; secondary or indirect growth; or provision of new infrastructure which would remove obstacles to population growth. To examine growth inducement, the Project's effect has been evaluated on the following growth factors and their

relationship to the growth defined in the region's General Plans: population; employment; housing demand; and infrastructure.

The Action Alternatives would not result in any additional growth-inducing effects as compared to the No Action Alternative (MPA 07) based on no proposed increase or change in the approved maximum capacity of the resort. The MP 96 included a total of 16,125 Persons At One Time (PAOT) for both the In-Basin and Out-of-Basin areas of the Heavenly Mountain Resort. The Proposed Action and the Action Alternatives propose to maintain the maximum capacity of the Resort at or below 16,125 PAOT. Heavenly Mountain Resort currently has 320 allocated summer day use PAOTs. At the time of the publication of the TRPA Regional Plan Update Final EIS, 1,192 summer day use PAOTs were assigned and in use throughout the Lake Tahoe Basin and 5,569 summer day use PAOTs remained unallocated. The Proposed Action would require an allocation of 475 summer day use PAOTs. Alternative 1 would require 485 summer day-use PAOTs and Alternative 2 would require 455. The expansion of summer uses proposed in the Epic Discovery Project and Alternatives are consistent with summer day use PAOTs analyzed in the TRPA 2012 Regional Plan Update for use in the Lake Tahoe Basin and the 2011 Ski Area Recreational Opportunity Enhancement Act that authorizes the USFS to permit additional recreational uses on existing ski resorts.

The 95 Draft EIR/EIS/EIS identified that the MP 96 would result in increased employment in the South Lake Tahoe area of approximately 1,011 new employees through buildout (i.e., 2016). Based upon employment growth since MP 96 adoption, neither the No Action, Proposed Action, nor Action Alternatives analyzed in this Epic Discovery Project EIR/EIS/EIS would exceed these estimated levels of employment growth through buildout. Currently, Heavenly supports 125 year-round positions with approximately 250 full- and part-time employees for summer operations and approximately 1,750 full- and part-time employees for winter operations. Implementation of the Proposed Action would potentially increase Heavenly's summer employment by 75 FTEs (full-time equivalents) for year one and 250 FTEs at full implementation. For winter operations, Heavenly anticipates employment to increase by approximately 25 FTEs for year one activities and up to 50 FTEs at full implementation. New employment opportunities could be absorbed by the existing tourist-oriented labor force and would not be expected to cause a large influx of new residents. Due to the surplus of available beds at Heavenly employee complexes during the summer, housing for additional summer employees would not be an issue and would not affect the local rental market. Thus, growth-inducing effects related to serving a new labor force (i.e., demand for increased housing and expanded public services) would not occur.

Finally, the 95 Draft EIR/EIS/EIS concluded that some increased summer visitation in the project area would occur from MP 96 buildout. However, given the existing commercial services that are available in the vicinity (i.e., hotels, motels, retail stores, gas stations, etc.), the additional summer visitation generated by the Action Alternatives would be substantially less than existing winter visitation and would not create a substantial increase in the demand for goods and services. The increased summer visitation is also not expected to result in a demand for new commercial development.

## **4.5 CEQA ENVIRONMENTALLY SUPERIOR ALTERNATIVE AND NEPA/TRPA ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

### **CEQA Requirements**

CEQA requires the identification of an Environmentally Superior Alternative; that is, the Alternative which has no significant effect or has the least significant effect on the environment. For reference, significance under CEQA is determined based on substantial or potentially substantial adverse changes of any of the physical environmental conditions due to the Project. The degree of change is evaluated against existing environmental conditions. For the consideration of the Environmentally Superior Alternative, only those portions of the Proposed Action or Alternatives located within California are considered. The only difference between the Action Alternatives in California is the inclusion of the Sky Basin Coaster under Alternative 1 and the elimination of the Sky Basin Challenge Course under Alternative 2, which results in Alternative 1 having the largest impact area in California and Alternative 2 having the smallest impact area.

### **TRPA Requirements**

The Tahoe Regional Planning Compact, along with other state and federal environmental legislation, establishes TRPA's mission. As directed by the Compact, TRPA adopted environmental threshold carrying capacities in 1982 for the Lake Tahoe Region. The Compact defines an "environmental threshold carrying capacity" as "an environmental standard necessary to maintain a significant scenic, recreational, educational, scientific or natural value of the region or to maintain public health and safety within the region."

The threshold standards guide virtually all aspects of TRPA's planning and operating functions. The adopted thresholds address the following nine components of the environment of the Tahoe region: water quality, soil conservation, air quality, vegetation preservation, wildlife, fisheries, noise, recreation and scenic resources.

TRPA's Code of Ordinances require a finding for any action that the project will not cause the environmental threshold carrying capacities to be exceeded. When evaluating Alternatives, TRPA identifies the Alternative that will best maintain and/or achieve environmental thresholds. The Compact and the Code of Ordinances also allow for the consideration of social, technical or economic impacts when selecting an Alternative.

### **NEPA Requirements**

The National Environmental Policy Act requires the federal agencies to select a preferred Alternative. The Forest Service preferred Alternative is the one that the Forest Service believes will fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. The preferred Alternative does not have to be the environmentally superior Alternative, but must meet the Proposed Action's purpose and need (see Chapter 1, Section 1.3). The Forest Service must consider, in addition to physical changes

to the existing environment, the effects on socioeconomics and compliance with the adopted purpose and need.

### **Identification of the CEQA Environmentally Superior and NEPA Preferred Alternative**

Without consideration of the proposed modifications that have been added to the Proposed Action and Action Alternatives, the No Action Alternative would be environmentally superior under CEQA. Under the No Action Alternative, existing uses approved in the MPA 07 would continue to operate and future development would be limited to the remaining un-built projects included in the MPA 07. The No Action Alternative is considered environmentally superior based on the fact that impacts identified in the MPA 07 Final EIR/EIS/EIS would be avoided or mitigated, and the additional development (e.g., ziplines, sky cycle, trails, mountain bike park, alpine coaster, lookout tower, emergency snowcat evacuation route, and interpretive/infill activities) proposed under the Proposed Action and Action Alternatives would not be constructed.

Although the No Action Alternative is considered environmentally superior because it has the least amount of effects on the natural environment, it does not provide an opportunity to comply with the stated Purpose and Need as described in Section 1.3.

Effects that would have a greater magnitude under the Action Alternatives than under the No Action Alternative include:

- runoff and erosion;
- disturbance to SEZs and jurisdictional wetlands;
- permanent land coverage;
- loss or degradation of vegetation and wildlife habitat; and
- number of daily vehicle trips and associated air emissions.

The Action Alternatives would result in a greater number of potentially significant impacts as compared to the No Action Alternative. However, each of the identified impacts for the Action Alternatives would be reduced to a less than significant level based upon modifications to the Proposed Action (see Section 2.3.5), as summarized in Sections 2.6 and 2.7. Therefore, the environmentally preferable Alternative should be the Alternative that best achieves the stated Purpose and Need and has the least amount of potential effect on the environment.

The analysis in Chapter 2 Table 2-8 provides the impact differences between the Action Alternatives – the differences in key effects, including runoff and water quality degradation, land coverage, sensitive plant species disturbance, sensitive wildlife habitat disturbance, SEZ disturbance, component visibility, and additional daily vehicle trips and associated air emissions. A summary of the project components provided under each Action Alternative is provided in

Executive Summary Table Summary-1 and a summary of potential effects and mitigation measures/design features by impact is provided in Executive Summary Table Summary-2.

Since all of the Action Alternatives include mitigation measures and standard design features to reduce potentially significant effects, they better meet the Purpose and Need and project objectives than the No Action Alternative to varying degrees. All Action Alternatives meet the Purpose and Need components identified in Section 1.3 (Chapter 1) relatively equally, although Alternative 2 meets project objectives less effectively due to the exclusion of the Sky Meadows Challenge Course in order to reduce recreational use of Sky Meadows area and potential SEZ disturbance associated with increased use. The differences between the Action Alternatives in their ability to enhance the quality of the recreation experience lies in the location of the alpine coaster (Forest Flyer in Adventure Peak vs. Sky Basin Coaster in Sky Meadows Basin) and the exclusion of the Sky Meadows Challenge Course under Alternative 2. As discussed in Chapter 3.13 - Recreation, the elimination of the Sky Meadows Challenge Course under Alternative 2 results in fewer activities in the Sky Meadows Basin, which improves the variety of recreation opportunities to a lesser degree and may reduce the use of that area compared to the Proposed Action or Alternative 1. While Alternative 1 would provide an equal variety of recreation opportunities as the Proposed Action, the Sky Meadows Coaster would have greater impacts on winter recreation, specifically tree skiing above the Sky Meadows Basin because it crosses a ski trail on overhead bridges and the area surrounding the track would be fenced and closed to skiing for the safety of skiers, thereby reducing the overall tree-skiing area available near the coaster.

The analysis in Chapter 3.13 did not find the Sky Meadows Coaster would have an overall adverse effect on recreation. The alternative Sky Meadows Coaster location is proposed due to the proximity of the Forest Flyer Coaster to successful Pacific marten female reproductive habitat as discussed in Chapter 3.9 – Wildlife, but the overall impact to Pacific marten habitat is slightly greater under Alternative 1 (16.64 acres) as compared to the Proposed Action and Alternative 2 (14.84 acres) and the effects on habitat are not found to be significant or adverse due to existing requirements for preconstruction surveys. Aside from the differences related to the location of the coaster and exclusion of the Sky Meadows Challenge Course, all Action Alternatives better meet the Purpose and Need than the No Action (MPA 07) Alternative because they include new recreation opportunities identified by guests in visitor preference surveys.

Of the three Action Alternatives analyzed in this Epic Discovery Project EIR/EIS/EIS, Alternative 2 results in the least degree of new impact to biological and air resources, water quality, traffic, and land coverage due to the elimination of the Sky Meadows Challenge Course, as summarized in Table 2-8. The impact difference between Alternative 2 and the Proposed Action is slight. Alternative 1 results in the greatest amount of new impact due to the larger size of the Sky Meadows Coaster as compared to the Forest Flyer Coaster because it results in a slightly greater quantity of tree removal, land coverage, and habitat disturbance. The difference in overall quantity of effect between the three Action Alternatives is minor.

As demonstrated by Table 2-8, the Action Alternative that best balances the Purpose and Need of the proposed Epic Discovery Project with the potential effects to biological, water, and air resources, traffic, and land coverage is the Proposed Action. While Alternative 2 results in slightly less quantity of impact than the Proposed Action prior to implementation of mitigation and design features, the Proposed Action best meets the Purpose and Need and includes



mitigation measures and design features that address potential effects, ~~including the Sky Meadows Challenge Course SEZ impact (Mitigation Measure GEO 1: Relocate Sky Meadows Challenge Course Access Trails Outside of Mapped SEZ)~~. With implementation of mitigation measures and design features, the environmental effects of the Proposed Action and Alternative 2 are the same; however the Proposed Action more effectively meets the Purpose and Need of the Epic Discovery Project. Therefore, the Proposed Action is considered to be the NEPA Preferred and CEQA Environmentally Superior Alternative.