

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**MEETING OF JANUARY 14-15, 2015
SOUTH LAKE TAHOE, CA**

ITEM: 5

**SUBJECT: HEAVENLY MOUNTAIN RESORT EPIC DISCOVERY PROJECT,
EL DORADO COUNTY**

BACKGROUND: Heavenly Mountain Resort proposes to expand summer recreational activities within the limits of the developed ski area in response to the Ski Area Recreational Opportunity Enhancement Act (SAROE), which was enacted by Congress in November 2011. The Act amended the National Forest Ski Area Permit Act of 1986 to provide public policy direction to and authority for the Forest Service to approve facilities to support summer and year-round natural resource-based recreation at ski areas. The Act recognizes the public benefits to be gained from expanding public access to year-round recreation opportunities in developed ski areas, including additional employment and economic activity for communities with public land ski areas.

Increased summer use at ski areas in recent years has been driven by new technologies and the growing number of people seeking outdoor recreational activities in more managed settings. In response to the policy direction and to visitor preferences, Heavenly has implemented a number of outdoor environment-based recreation activities including ropes courses, zip lines, hiking trails and summer tubing. The proposed project would broaden the range of existing recreational opportunities and is responsive to visitor preferences for a more diverse range of activities. Heavenly intends to integrate the proposed summer activities into a comprehensive environmental education program to teach visitors about the unique Lake Tahoe environment and how they can help conservation efforts.

Construction activities for the project are planned to start in spring 2015. A draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was circulated for a 60-day public review period ending October 27, 2014. The EIR/EIS is a joint document intended to meet the California Environmental Quality Act (CEQA) requirements for an EIR for the Water Board, the Tahoe Regional Planning Compact requirements for an EIS for the TRPA, and the National Environmental Policy Act (NEPA) requirements for an EIS for the Forest Service. The consultant hired to assist the three lead agencies, Hauge Brueck Associates, is now compiling comments, developing responses, and preparing the final document. The draft EIR/EIS is available for review at the Water Board's Lake Tahoe Office, TRPA office, USFS office, and online at <http://www.trpa.org/document/projects-plans/>. The Executive Summary from the draft EIR/EIS is enclosed (Enclosure 1).

In May 2015, the Water Board will be asked to consider adopting the Final EIR/EIS and updated Waste Discharge Requirements (WDRs) to regulate storm water and other authorized non-storm water discharges at Heavenly Mountain Resort. The TRPA and USFS will also consider approving the Final EIR/EIS.

**PROJECT
DESCRIPTION:**

The proposed project is designed to expand and diversify year-round, non-skiing recreational opportunities at Heavenly, primarily for summer time users. The proposal would include use of existing infrastructure (e.g., ski lifts and guest service facilities) to provide a wide variety of summer activities for guests. All activities would be accessed using the existing Gondola from the base station at Heavenly Village. A set of figures that help describe the activities and the locations, including the proposed project and alternatives, is enclosed (Enclosure 2).

The proposed project includes the project activities listed below, grouped by general location.

Adventure Peak (Figure 2-2, entirely within the Lake Tahoe Basin)

- Mid-Station Zipline Canopy Tour
- Sky Cycle Canopy Tour
- Forest Flyer Alpine Coaster
- Smaller Infill Activities
- Interpretive Activities at Tamarack Lodge

East Peak Basin (Figure 2-3, almost entirely outside the Lake Tahoe Basin)

- Mountain Bike Park
- East Peak Zipline Canopy Tour
- East Peak Reservoir Water Activities
- Interpretive Activities at East Peak Lodge
- East Peak Lodge Hiking Trail

Sky Meadows Basin (Figure 2-4, entirely within the Lake Tahoe Basin – Heavenly Valley Creek Watershed)

- Sky Meadows Zipline Canopy Tour
- Sky Meadows Challenge Course
- Ridge Run Lookout Tower and Observation Deck
- Interpretive Activities at Sky Deck

Mountainwide

- Educational Opportunities and Interpretive Information
- Mountain Excursion Tour
- Connecting Trails (e.g., Panorama Trail to connect East Peak Lake area to Tahoe Rim Trail and Van Sickle Park)
- Emergency Gondola Snow Cat Evacuation Route (Winter Use Only)

Two project alternatives are also being considered. Alternative 1 includes each of the components of the proposed project except for the Forest Flyer Alpine Coaster in the Adventure Peak area. Although the Forest Flyer Alpine Coaster would be eliminated, Alternative 1 would include a similar feature (Sky Basin Coaster) in Sky Meadows Basin, which drains Heavenly Valley Creek. This alternative is being studied as an alternative due to the potential for sensitive species habitat in the Forest Flyer location in Adventure Peak. Alternative 2 is the proposed project without the Sky Basin Challenge (Ropes) Course. This alternative is being studied to reduce potential indirect impacts to the Sky Meadows SEZ area. This alternative would remove the Sky Meadows Challenge Course, but would retain the remaining Sky Basin components included under the proposed project (e.g., Sky Meadows Zipline Canopy Tour and Ridge Run Lookout Tower).

DISCUSSION:

Increased erosion and sedimentation from the proposed projects in the Sky Meadows Basin are the chief concern for water quality due to the location and proximity to Heavenly Valley Creek, a Clean Water Act section 303(d) listed water body determined to be impaired from sediment. Extensive monitoring data have been collected since 2003 when the WDRs and monitoring program were updated to implement the Heavenly Valley Creek TMDL. Although monitoring data indicate that physical and chemical conditions in the creek are generally good and stable, biological monitoring consistently shows poor conditions in the Sky Meadows reach.

As a result, projects proposed in the Sky Meadows Basin have been designed to avoid direct impacts to SEZs to the extent feasible. Impacts are limited to linear facilities that cross SEZs with a total of 168 square feet of SEZ disturbance planned. Banked SEZ credits will be used for mitigation and additional erosion control/stabilization work will be completed at 23 identified locations in the watershed to further reduce erosion and sedimentation to surface waters. The mitigation elements would be set as requirements in updated WDRs to ensure their completion, and further monitoring would be established to evaluate the effectiveness of Heavenly's erosion control practices. Mitigation work in the Sky Meadows Basin is expected to reduce sedimentation and improve biotic conditions, as well as reduce fine sediment loading to Lake Tahoe.

The bulk of the comments received on the draft EIR/EIS are supportive of the project; however, other comments voiced concerns regarding potential conflicts with downhill mountain biking on the Panorama Trail; parking and use impacts in the Van Sickle Bi-State Park; and bird, amphibian, and White Bark Pine impacts. In response, additional explanation is being provided to describe measures that will avoid and minimize potential impacts.

RECOMMENDATION: This presentation is an informational item prior to asking the Board to take any action. A Final EIR/EIS and updated WDRs will be brought for Water Board consideration in May 2015. No action is required at this time.

ENCLOSURES

ENCLOSURES	DESCRIPTION	BATES NUMBER
1	EIR Executive Summary	5-7
2	Figure 1 and EIR Figures 2-1 through 2-8	5-27
3	Epic Discovery Presentation – B. Amorfini	5-39
4	Epic Discovery Presentation – A. Strain	5-47

ENCLOSURE 1

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EXECUTIVE SUMMARY

PROJECT LOCATION

The Heavenly Mountain Resort (also referred to as Heavenly in this document) is a year-round resort located partially inside and partially outside of the Lake Tahoe Region on the south shore of Lake Tahoe. Heavenly is situated within El Dorado County, California and Douglas County, Nevada, primarily on United States Department of Agriculture Forest Service (Forest Service) lands. Access to the Heavenly Mountain Resort is by way of U.S. Highway 50 and State Highway 89 from California and U.S. Highway 50 and State Highway 207 from Nevada. The Lake Tahoe Airport is located approximately six miles from the California base area, and the Reno Cannon International Airport is approximately 55 miles to the northeast of the Nevada base areas.

PROCESS

Heavenly currently operates under a 40-year Ski Area Special Use Permit issued by the Forest Service on May 7, 2002. Heavenly's location in the Lake Tahoe Basin subjects its proposed resort improvements to extensive, multi-level review and approval by the Forest Service, the Tahoe Regional Planning Agency (TRPA), El Dorado County California, Alpine County California as well as required compliance and conformity with all other applicable local, state and federal laws, rules, regulations, plans and policies.

A 20-year Heavenly Master Plan was adopted by the Forest Service, TRPA and El Dorado County in 1996 for the improvement, expansion, and management of summer and winter uses at Heavenly (MP 96). Section 1.4 of the MP 96 EIR/EIS/EIS (95 Draft and 96 Final EIR/EIS/EIS) stated that "because of changing needs or conditions and monitoring, this Master Plan may be amended." Following a change of Heavenly's ownership in 2002, a comprehensive review of all aspects of resort management, operations and future planning was completed. That review and subsequent analysis thereof, combined with direction from the Forest Service, resulted in Heavenly's decision to propose an amendment to the MP 96 through the Heavenly Mountain Resort Master Plan Amendment 2007 (MPA 07).

In early 2005, preparation of environmental documentation was initiated to analyze the potential effects of amending the MP 96 both on a programmatic level and for specific projects that were proposed for immediate implementation (identified as Phase 1 projects). After an initial agency review of an Environmental Assessment/Negative Declaration, the lead agencies and Heavenly agreed to prepare an EIR/EIS/EIS for the proposed MPA 07 that would include additional Action Alternatives and more detailed analysis for several of the environmental issues (e.g., biological resources, water quality and visual resources). The EIR/EIS/EIS was certified in 2007 along with the adoption of the Master Plan Amendment.

This EIR/EIS/EIS will be utilized by a number of regulatory agencies in order to consider approval of the projects proposed in the Epic Discovery Project. This document is an Environmental Impact Statement (EIS) for TRPA and is the environmental document on which

the Governing Board will consider its approval of the Heavenly Mountain Resort Ski Area Master Plan Amendment to add the Epic Discovery Project. In addition, the Epic Discovery Project EIR/EIS/EIS will also function as the environmental analysis and documentation for subsequent TRPA consideration of permits for the specific Epic Discovery projects. This document is also an EIS in compliance with the National Environmental Policy Act, which the Forest Service will use to base its final decision in a forthcoming Record of Decision, and approve proposed projects. The EIR/EIS/EIS serves as the compliance document under the California Environmental Quality Act (CEQA). The California Regional Water Quality Control Board, Lahontan Region is the CEQA Lead Agency.

SUMMARY OF THE ALTERNATIVES TO BE CONSIDERED

The No Action/No Project, Proposed Action, and Alternatives 1 and 2 are summarized below. Detailed descriptions of the Alternatives are provided in Sections 2.2 through 2.4 of this Draft EIR/EIS/EIS. Table Summary-1 documents the differences between the Alternatives selected for detailed study. The Alternatives were constructed to address potential impacts identified for certain Epic Discovery activities during initial project scoping. Alternatives that were considered by the lead agencies but eliminated from detailed study are described in Section 2.5.

No Action/No Project

As required by NEPA, TRPA, and California Environmental Quality Act (CEQA), a No Action or No Project Alternative has been included in this analysis for review alongside the action alternatives. By definition, the No Action Alternative represents a continuation of existing management practices without changes, additions, or upgrades to existing conditions. The No Action Alternative (continued implementation of the 2007 Mater Plan Amendment) allows a comparison of the effects from continued implementation of the 2007 Ski Area Master Plan to the Action Alternatives. Existing summer uses would continue, including sightseeing via the Heavenly Gondola, hiking and mountain biking on existing roadways and pathways, and operation of activities such as the climbing wall, tubing hill, ziplines, and ropes courses.

Proposed Action

The Proposed Action is designed to expand and diversify year-round, non-skiing recreational opportunities at Heavenly, primarily for summer time users. Proposed projects would utilize existing infrastructure (e.g., ski lifts) and guest service facilities to provide a wide variety of summer activities for guests. All activities would be accessed using the existing Gondola from the base station at Heavenly Village. The Proposed Action includes the following project activities, grouped by general location:

- Adventure Peak (Entirely within the Lake Tahoe Basin)
 - Mid-Station Zipline Canopy Tour
 - Sky Cycle Canopy Tour
 - Forest Flyer Alpine Coaster
 - Smaller Infill Activities
 - Interpretive Activities at Tamarack Lodge
- East Peak Basin (Almost entirely outside the Lake Tahoe Basin)

- Mountain Bike Park
- East Peak Zipline Canopy Tour
- East Peak Reservoir Water Activities
- Interpretive Activities at East Peak Lodge
- East Peak Lodge Hiking Trail
- Sky Meadows Basin (Entirely within the Lake Tahoe Basin)
 - Sky Meadows Zipline Canopy Tour
 - Sky Meadows Challenge Course
 - Ridge Run Lookout Tower and Observation Deck
 - Interpretive Activities at Sky Deck
- Mountainwide
 - Educational Opportunities and Interpretive Information
 - Mountain Excursion Tour
 - Connecting Trails (e.g., Panorama Trail to connect East Peak Lake area to Tahoe Rim Trail and Van Sickle Park)
 - Emergency Gondola Snow Cat Evacuation Route (Winter Use Only)

Alternative 1

Alternative 1 includes each of the components of the Proposed Action except for the Forest Flyer Alpine Coaster. Although the Forest Flyer Alpine Coaster in Adventure Peak would be eliminated, Alternative 1 proposes the Sky Basin Coaster located in Sky Meadows Basin. This alternative is being studied as an alternative location due to the potential for sensitive species habitat in the Forest Flyer location in Adventure Peak. The Sky Basin Coaster would operate using a similar system and equipment as the Forest Flyer Alpine Coaster.

Alternative 2

Alternative 2 is the Proposed Action minus the Sky Basin Challenge (Ropes) Course. This alternative is being studied as a potential way to reduce physical impacts to the Sky Meadow SEZ area. This alternative would remove the Sky Meadows Challenge (Ropes) Course from the Proposed Action, but would retain the remaining Sky Basin components included under the Proposed Action (e.g., Sky Meadows Zipline Canopy Tour and Ridge Run Lookout Tower).

Table Summary-1

Differences Between Alternatives Selected for Detailed Study

Epic Discovery Component	No Action	Proposed Action	Alternative 1	Alternative 2
Forest Flyer Alpine Coaster		X		X
Sky Meadows Challenge (Ropes) Course		X	X	
Sky Basin Coaster			X	

SUMMARY OF POTENTIAL EFFECTS

Table Summary-2 summarizes the potential effects of the Proposed Action and Action Alternatives, and lists the mitigation measures and design features incorporated into the Proposed Action and Action Alternatives to eliminate or reduce the potential effects. Through inclusion of the mitigation measures and design features into the Proposed Action and Action Alternatives, no significant effects result from implementation of the proposed projects or alternatives. Effects and mitigation measures for the No Action Alternative (continued implementation of the Heavenly Master Plan) are addressed in the 96 Final EIR/EIS/EIS and 07 Final EIR/EIS/EIS prepared for the MP 96 and MPA 07, respectively. The detailed description of MPA 07 mitigation measures can be found in Chapter 5 and in Table 2-6: Measures/Design Features Added to the Proposed Action and Action Alternatives.

The following acronyms are used in Table Summary-2:

- S – Significant Impact
- PS – Potentially Significant Impact
- LS – Less than Significant Impact
- NI – No Impact
- AE – Adverse Effect
- PAE – Potential Adverse Effect
- NAE – No Adverse Effect

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
3.1 Water Resources: Hydrology, and Cumulative Watershed Effects			
WATER-1: Would the Project increase peak and total runoff such that downstream conveyance or storage facilities (creeks, reservoirs, pipes, basins, etc.) no longer have adequate capacity, create new sources of chronic erosion or be located in areas of known chronic soil erosion in the Heavenly Valley Creek watershed (CA-1)?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	Implement Chapter 2 Design Features and existing MPA 07 measures including: <i>Sky Meadows Zipline Canopy Tour Design Features:</i> -The platform locations are designed to be located outside of Heavenly Valley Creek headwaters SEZ areas -Over-the-snow tree removal and yarding where feasible based on implementation timing and snowpack, over a minimum 12 inches compacted snow. -Trees which are removed over the snow will be skidded over a minimum of 12 inches of compacted snow behind a snow cat to a staging area in order to prevent soil disturbance. Removed trees will be limbed and chipped at the staging area for use for erosion control and soil amendments. -7.4-14 - Reduce and Control Fugitive Dust -7.5-23 - Minimize Loss/Degradation of Sensitive Plant Species <i>Trail Construction Design Features:</i> -Site-specific layout of walking paths and hiking trails with Forest Service specialists -7.4.1 - REVISED Construction Erosion Reduction Program -7.4.2 – Construct Infiltration Facilities -7.4.3 – Control Runoff for Existing Facilities -7.4.4 – Meet Water Quality Standards -7.4.5 – Implement Adaptive Ski Run Prescriptions	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
		<p>-7.4-6 – Control Runoff due to Future Construction and Long-term Operation of Facilities -7.5-24 - Noxious Weed Management -7.5-2 - REVISED Collection/Monitoring Agreement–(Ongoing Environmental Monitoring Program) -Drainage Spacing and Trail Tread Armoring</p> <p><i>Sky Meadows Challenge Course Design Features:</i> -7.4-7 - Avoid Disturbance to SEZ or Restore/Create SEZ -7.4-9 - Restore Future Disturbed SEZ to Meet MP 96 Mitigation Measure 7.4-7 Requirements. -7.5-21 Protect Tahoe Draba Populations within Heavenly Mountain Resort. -Heavenly shall define the staging and training area for the Sky Meadows Challenge Course with fencing/barriers outside of the Sky Meadows SEZ, which would avoid permanent land coverage in SEZ/LCD 1b. -Heavenly shall define the parking area for the Mountain Excursion Tour vehicles with fencing/barriers and separate it from nearby SEZ. -Heavenly shall locate all temporary and permanent disturbance required for the construction and operation of the Sky Meadows Challenge Course outside of the mapped SEZ, which would avoid permanent land coverage in SEZ/LCD 1b. -Heavenly shall use fencing/barriers to exclude pedestrian access to the mapped SEZ located under the Sky Meadows Challenge Course (e.g., stairway access from the Sky Deck to the SEZ will be closed during summer use). -Heavenly shall use fencing/barriers as needed to direct</p>	

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
		summer visitors to the existing Sky Meadows bathrooms using the existing summer maintenance roadway. <i>Mountain Excursion Tour Design Features:</i> -Pullouts/visitor stops would be designed at low risk and hydrologically stable locations. -Site-specific maintenance/road improvement needs would be identified and completed prior to public operations at the beginning of each summer season. -Ongoing dust control would be provided by a water truck on a regular daily or as needed in order to minimize dust and maintain a high-quality experience for the visitors.	
WATER-2: Would the Project increase peak and total runoff such that downstream conveyance or storage facilities (creeks, reservoirs, pipes, basins, etc.) no longer have adequate capacity, create new sources of chronic erosion or be located in areas of known chronic soil erosion in the Gondola watershed (CA-7)?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
WATER-3: Would the Project increase peak and total runoff such that downstream conveyance or storage facilities (creeks, reservoirs, pipes, basins, etc.) no longer have adequate capacity, create new sources of chronic erosion or be located in areas of known chronic soil erosion in the Mott Canyon watershed (NV-1)?	Action – NAE Alt. 1 – NAE Alt. 2 – NAE	None	Action – NAE Alt. 1 – NAE Alt. 2 – NAE
WATER-4. Would the Project increase peak and total runoff such that downstream conveyance or storage facilities (creeks, reservoirs, pipes, basins, etc.) no longer have adequate capacity, create new sources of chronic erosion or be located in areas of	Action – NAE Alt. 1 – NAE Alt. 2 – NAE	None	Action – NAE Alt. 1 – NAE Alt. 2 – NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
known chronic soil erosion in the Daggett Creek watershed (NV-2+5)?			
WATER-5: Would the Project increase peak and total runoff such that downstream conveyance or storage facilities (creeks, reservoirs, pipes, basins, etc.) no longer have adequate capacity, create new sources of chronic erosion or be located in areas of known chronic soil erosion in the Edgewood Creek watersheds (NV-3, EDGE-1, EDGE-2)?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
WATER-6: Would Construction and Operation of the Project Lead to Noncompliance with Surface Water Quality Standards and Thresholds in Heavenly Valley Creek?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
WATER-7: Would Construction and Operation of the Project Lead to Noncompliance with Surface Water Quality Standards and Thresholds in Edgewood Creek?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
WATER-8: Would Construction and Operation of the Project Lead to Noncompliance with Surface Water Quality Standards and Thresholds in Mott and Daggett Creeks?	Action – NAE Alt. 1 – NAE Alt. 2 – NAE	None	Action – NAE Alt. 1 – NAE Alt. 2 – NAE
WATER-C1: Would the Project have significant cumulative impacts to water resources in watershed CA-1?	Action – S/PAE Alt. 1 – S/PAE Alt. 2 – S/PAE	WATER-C1a: CA-1 ERA and Erosion Reduction Measures WATER-C1b: Amendment to MPA 07 Mitigation Measure 7.5-2, Environmental Monitoring Program	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
WATER-C2: Would the Project have significant cumulative impacts to water resources in watershed CA-7?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
WATER-C3: Would the Project have significant	Action – PAE	WATER-C3: NV-1 ERA and Erosion Reduction Measures	Action – NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
cumulative impacts to water resources in watershed NV-1?	Alt. 1 – PAE Alt. 2 – PAE	WATER-C1b: Amendments to Mitigation Measure 7.5-2, Environmental Monitoring Program	Alt. 1 – NAE Alt. 2 – NAE
WATER-C4: Would the Project have significant cumulative impacts to water resources in watershed NV-2+5?	Action – NAE Alt. 1 – NAE Alt. 2 – NAE	None	Action – NAE Alt. 1 – NAE Alt. 2 – NAE
WATER-C5: Would the Project have significant cumulative impacts to water resources in watershed NV-3?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	Existing MPA 07 mitigation measures and standard design features	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
3.2 Stream Environment Zones and Jurisdictional Waters and Wetlands			
See Chapter 3.1 and Chapter 3.8	--	Addressed in Chapter 3.1, Chapter 3.4 and Chapter 3.8	--
3.3 Water Use, Water Rights and Groundwater			
None	--	None	--
3.4 Geology and Soils			
GEO-1: Would the project result in covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System?	Action – PS Alt. 1 – PS Alt. 2 – LS	GEO-1: Relocate Sky Challenge Course Outside the Mapped SEZ	Action – LS Alt. 1 – LS Alt. 2 – LS
GEO-2: Would Project construction of new summer activities impact soil quality and function or create unstable soil conditions?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	Existing MPA 07 measure 7.4-1 Ongoing Construction Erosion Reduction Program	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
GEO C-1: Cumulative Geological Effects	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
3.5 Air Quality and Greenhouse Gases/Climate Change			
AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
AQ-2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
AQ-3: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
AQ-4: Would the project expose sensitive receptors to substantial pollution concentrations?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
AQ-5: Will the Project Generate Objectionable Odors?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
GHG-1: Would the project generate more than 25,000 MT CO ₂ e GHG emissions?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
GHG-2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	Action – LS/NAE Alt. 1 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
	Alt. 2 – LS/NAE		Alt. 2 – LS/NAE
3.6 Noise			
NOISE-1: Adventure Peak Activities Noise Impacts	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
NOISE-2: East Peak Lake Basin Activities Noise Impacts	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
NOISE-3: Sky Meadows Basin Activities Noise Impacts	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
NOISE-4: Construction Noise Impacts	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
NOISE-5: Traffic Noise Impacts	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
NOISE C-1: Cumulative Noise Effects	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
3.7 Transportation, Parking and Circulation			
TRANS-1: Will the Project result in the generation of 200 or more new Daily Vehicle Trip Ends?	Action – S/NAE Alt. 1 – S/NAE	TRANS-1: Traffic and Air Quality Mitigation Program	Action – LS/NAE Alt. 1 – LS/NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
	Alt. 2 – S/NAE		Alt. 2 – LS/NAE
TRANS-2. Will the Project result in a substantial impact upon the existing transportation systems, including roadways and intersections?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
TRANS-3. Will the Project result in changes to existing parking facilities or create a demand for parking that cannot be served by existing parking facilities?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
TRANS-4. Will the Project result in a substantial impact upon the existing transportation systems, including bicycle or pedestrian facilities?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
TRANS-5. Will the Project result in a substantial impact upon the existing transportation systems, including transit facilities?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
TRANS-6. Will the Project result in alterations to the present patterns of circulation or movement of people and/or goods?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
TRANS-7. Will the Project result in substantial increased traffic congestion on mountain roadways and trails?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
TRANS-8. Will the Project result in a temporary impact upon existing transportation systems due to construction traffic?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
TRANS-9. Will the Project result in an increase in traffic hazards to motor vehicles, bicyclists, or	Action – LS/NAE	None	Action – LS/NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
pedestrians?	Alt. 1 – LS/NAE Alt. 2 – LS/NAE		Alt. 1 – LS/NAE Alt. 2 – LS/NAE
TRANS-C1: Will the project result in a substantial impact upon cumulative transportation systems, including roadways and intersections?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
3.8 Vegetation			
VEG-1: Would the Project increase the risk of introduction or spread of invasive plants (aquatic or terrestrial)?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	Existing MPA 07 measure 7.5-24 Noxious Weed Management	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
VEG-2: Would the Project result in an overall decrease in long term trends in Tahoe draba populations within the Project area?	Action – PS/PAE Alt. 1 – PS/PAE Alt. 2 – PS/PAE	VEG-1: Update MPA05 Mitigation Measure 7.5-20: <i>Protect Tahoe Draba Populations within Heavenly Mountain Resort</i> Existing MPA 07 measure 7.5-22 Tahoe Draba Long-Term Conservation Strategy	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
VEG-3: Would the project result in an increase to the risk/threat factors for listing of whitebark pine?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
VEG-4: Would the project result in a loss of TESPC, CNPS, FSS, or Nevada at Risk Botanical Species?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	Existing MPA 07 measures including: 7.5-21 Protect Tahoe Draba Populations within Heavenly Mountain Resort 7.5-22: Tahoe Draba Long-Term Conservation Strategy 7.5-23: Minimize Loss/Degradation of Sensitive Plant Species 7.5-24 Noxious Weed Management	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
VEG-5: Would the project adversely affect other botanical resources (e.g. LTBMU watch list,	Action – LS/NAE Alt. 1 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
uncommon plant list communities, special aquatic features or Stream Environment Zones)?	Alt. 2 – LS/NAE		Alt. 2 – LS/NAE
VEG-6: Will the Project result in the removal of any native live trees larger than 24–inch dbh, and late seral habitat as defined by TRPA or SNFPA?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
VEG-C1: Will the project have significant cumulative impacts to vegetation?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	Existing MPA 07 measures including: 7.4-15 Minimize Removal/Modification of Deciduous Trees, Wetlands, and Meadows 7.5-21 Protect Tahoe Draba Populations within Heavenly Mountain Resort 7.5-22: Tahoe Draba Long-Term Conservation Strategy 7.5-23: Minimize Loss/Degradation of Sensitive Plant Species 7.5-24 Noxious Weed Management	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
3.9 Wildlife and Fisheries			
BIO-1: Would the Project, directly or indirectly, cause a loss of individuals or occupied habitat of endangered or threatened fish or wildlife species?	Action – PS/PAE Alt. 1 – PS/PAE Alt. 2 – PS/PAE	BIO-1: Delay Sky Meadows Challenge Course, Sky Basin Coaster and East Peak Lake Water Activities Until Sierra Nevada Yellow-legged Frog Surveys and USFWS Consultation Are Complete	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
BIO-2: Would the Project cause a permanent loss of sensitive wildlife individuals, or habitat (e.g. Forest Service Sensitive, CA Species of Concern, NV At-Risk, TRPA Special Interest Species)?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
BIO-3: Would the Project have an adverse effect to migratory land bird species or their associated habitats?	Action – PS/AE Alt. 1 – PS/AE Alt. 2 – PS/AE	BIO-3: Migratory Bird Limited Operating Period and Habitat Utilization Survey	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
BIO-4: Would the Project cause a loss of wildlife nursery/den sites and associated habitat?	Action – PS/PAE Alt. 1 – PS/PAE	BIO-4: Wildlife Nursery Site Survey	Action – LS/NAE Alt. 1 – LS/NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
	Alt. 2 – PS/PAE		Alt. 2 – LS/NAE
BIO-5: Would the Project substantially block or disrupt major fish or wildlife migration or travel corridors?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
BIO-6: Would the Project alter the existing bioregional trend in habitats and ecosystem components, or lead to a change in the distribution of Management Indicator Species (MIS) across the Sierra Nevada Bioregion?	Action – NI/NAE Alt. 1 – NI/NAE Alt. 2 – NI/NAE	None	Action – NI/NAE Alt. 1 – NI/NAE Alt. 2 – NI/NAE
BIO-7: Would the Project conflict with any federal, local, regional, or state policies or TRPA ordinances protecting wildlife resources, or with any applicable habitat conservation plans?	Action – NI/NAE Alt. 1 – NI/NAE Alt. 2 – NI/NAE	None	Action – NI/NAE Alt. 1 – NI/NAE Alt. 2 – NI/NAE
BIO-8: Would the Project result in increased human/wildlife interactions?	Action – S/AE Alt. 1 – S/AE Alt. 2 – S/AE	BIO-8: Wildlife Trash Management and Education Program	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
BIO-C1: Will the project have significant cumulative impacts to biological resources?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
3.10 Visual Resources			
SCENIC-1: Emergency Gondola Snow Cat Evacuation Route Would Create New Forest Clearings and Would be Visible Offsite	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
SCENIC-2: Ridge Run Lookout Tower Would be Visible Off-site	Action – LS/NAE Alt. 1 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
	Alt. 2 – LS/NAE		Alt. 2 – LS/NAE
SCENIC-3: The Forest Flyer Alpine Coaster Top Terminal, Sky Meadows Zipline Canopy Tour and Sky Basin Coaster Would Create New Forest Clearings and Would be Visible Off-site	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
SCENIC-4: Proposed Project Components Would Create Changes to the Scenic Quality of Views within Heavenly Mountain	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
SCENIC-5: Proposed Project Components Would Be Visible from the Tahoe Rim Trail	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
SCENIC-C1: Cumulative Visual Resource	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
3.11 Cultural Resources			
CULT-1: Would the Project comply with Section 106 of the National Historic Preservation Act and TRPA Ordinances included in Code Chapter 67?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	Existing MPA 07 measures including: 7.4-19 Evaluate and Monitor Known Archaeological Resources within the Comstock Logging Historic District 7.4-20 Identify and Protect Undiscovered Archaeological Resources	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
CULT-C1: Will the project have significant cumulative impacts to cultural resources?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
3.12 Land Use			
LU-1: Will the Project be inconsistent with the TRPA Regional Plan, Code of Ordinances or Plan	Action – LS Alt. 1 – LS	None	Action – LS Alt. 1 – LS

Table Summary-2

Summary of Potential Effects and Required Mitigation Measures/Design Features

Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
Area Statements 086 or 087?	Alt. 2 – LS		Alt. 2 – LS
LU-2: Will the project be inconsistent with the LTBMU Forest Plan and Forest Service policy for Additional Year-Round Recreation Activities at Ski Areas?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
LU-3: Will the project be inconsistent with local General Plan designations?	Action – LS Alt. 1 – LS Alt. 2 – LS	None	Action – LS Alt. 1 – LS Alt. 2 – LS
3.13 Recreation			
REC-1: Is the Project consistent with Forest Plan Standards and Guidelines and objectives for summer recreation at ski areas as authorized by SAROEA?	Action –NAE Alt. 1 –NAE Alt. 2 –NAE	Existing MPA 07 measure 7.4-21 – Protect the Tahoe Rim Trail	Action –NAE Alt. 1 –NAE Alt. 2 –NAE
REC-2: Would the Project result in decreased availability or degradation of a high quality recreational experience?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
REC-3: Would the Project conflict with an established recreational use in the area?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
REC-4: Would the Project result in the need for new or expanded parks or recreational facilities?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE
REC-C1: Will the project result in cumulative impacts to recreational uses or resources?	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE	None	Action – LS/NAE Alt. 1 – LS/NAE Alt. 2 – LS/NAE

Table Summary-2

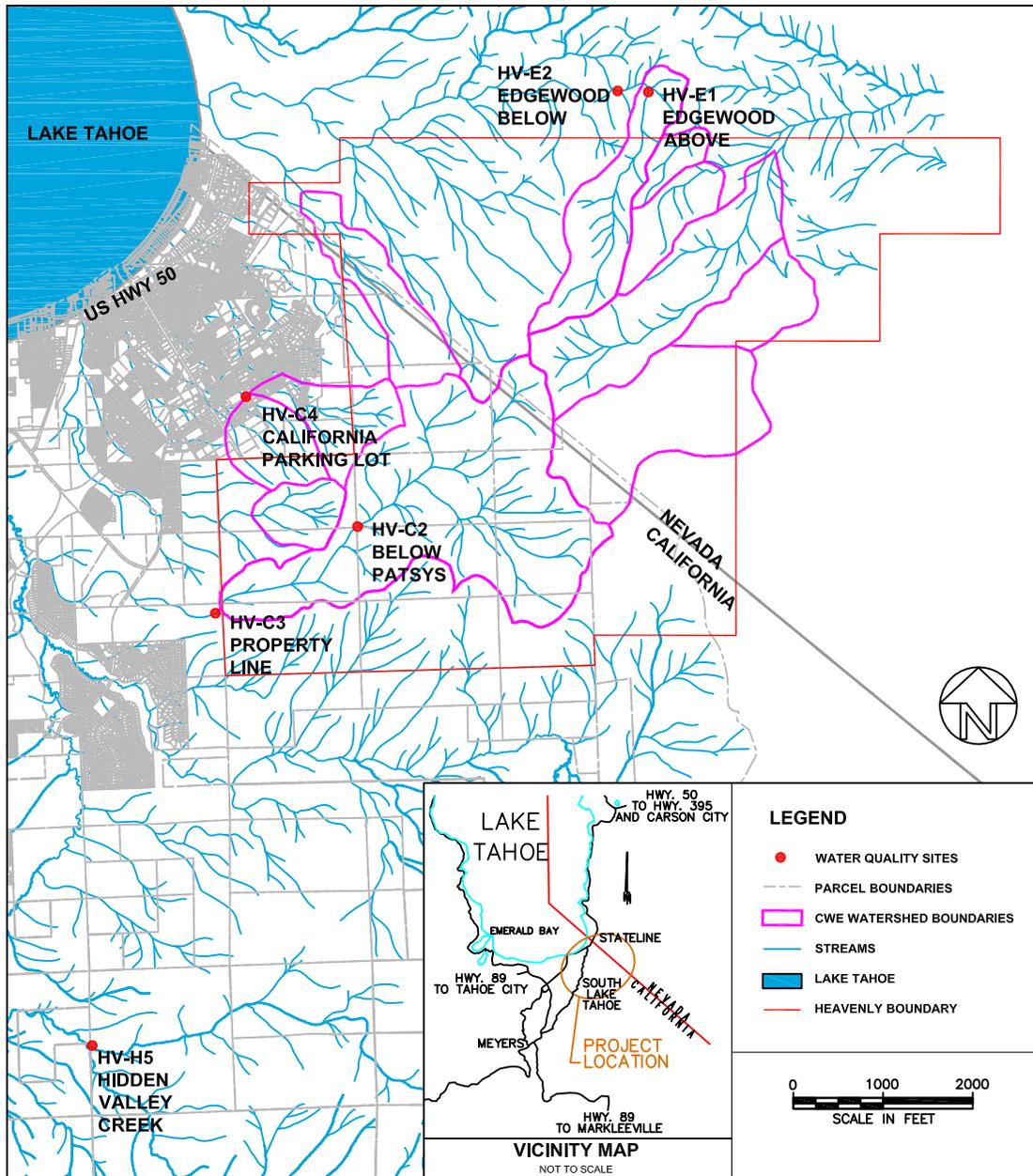
Summary of Potential Effects and Required Mitigation Measures/Design Features

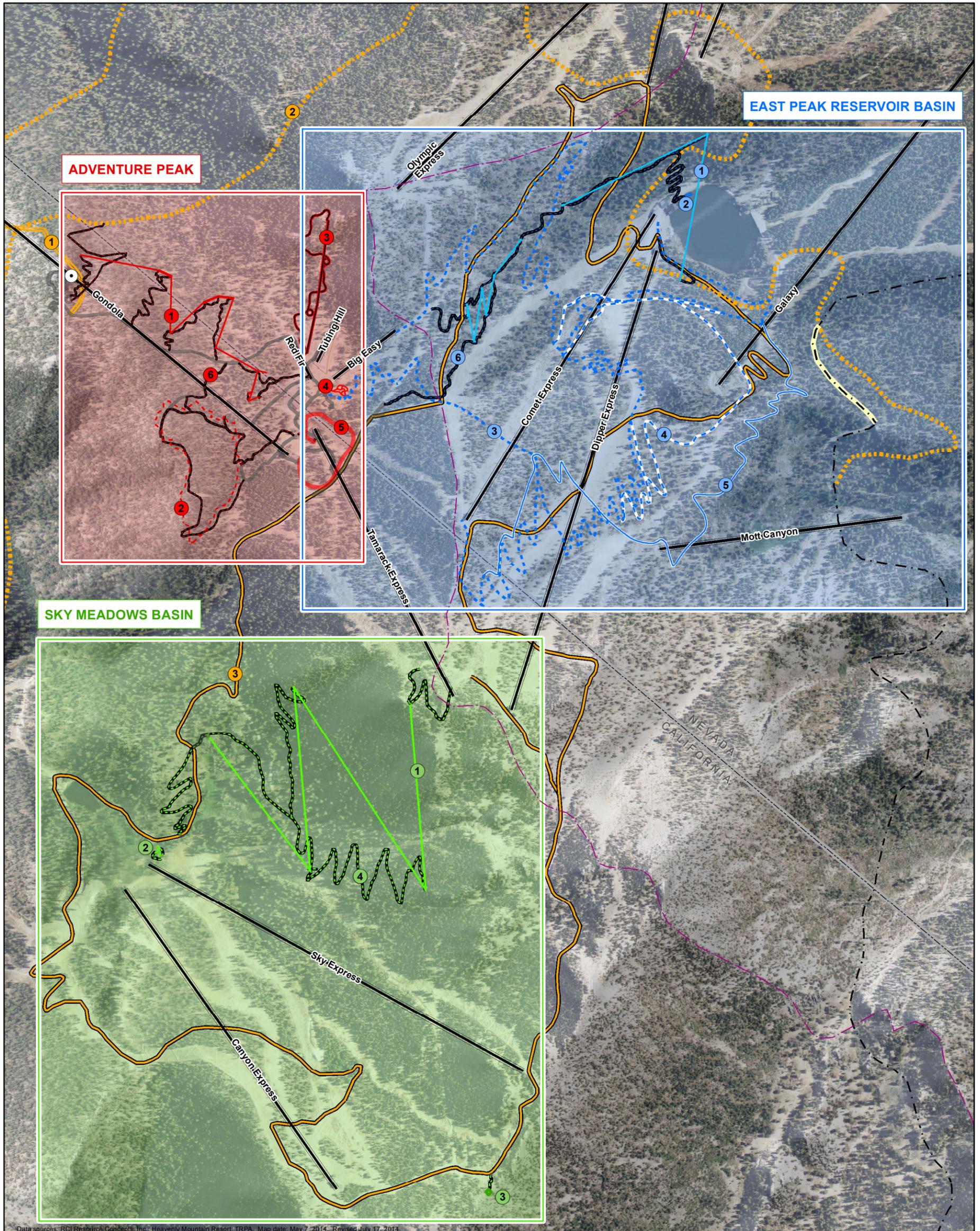
Potential Effects	Significance Before Mitigation	Mitigation Measures/Design Features	Significance After Mitigation
3.14 Socioeconomics			
None	--	None	--

ENCLOSURE 2

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Figure 1





Data sources: RCI Resource Concepts, Inc.; Heavenly Mountain Resort; TRPA. Map date: May 7, 2014. Revised July 17, 2014.

ADVENTURE PEAK

- 1. Mid-Station Zipline Canopy Tour
- 2. Sky Cycle Canopy Tour
- 3. Forest Flyer Alpine Coaster
- 4. Infill Activity - Mountain Bike Skills Park
- 5. Infill Activity - Disc Golf, Gem Panning, Kids Zipline
- 6. Hiking/Maintenance Trails

MOUNTAINWIDE

- 1. Emergency Gondola Snow Cat Evacuation Route
- 2. Panorama Trail
- 3. Mountain Excursion Tour

EAST PEAK LAKE BASIN

- 1. East Peak Zipline Canopy Tour
- 2. East Peak Water Activities
- 3. Mountain Bike Park - Beginner Trail
- 4. Mountain Bike Park - Intermediate Trail
- 5. Mountain Bike Park - Advanced Trail
- 6. East Peak Lodge Hiking Trail

SKY MEADOWS BASIN

- 1. Sky Meadows Zipline Canopy Tour
- 2. Sky Meadows Challenge Course
- 3. Ridge Run Lookout Tower & Observation Deck
- 4. Hiking/Maintenance Trails

EXISTING FEATURES

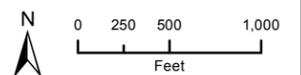
- Gondola Mid Station
- Tahoe Rim Trail
- Tahoe Rim Trail - to be removed & restored
- Ski Lifts
- Roads

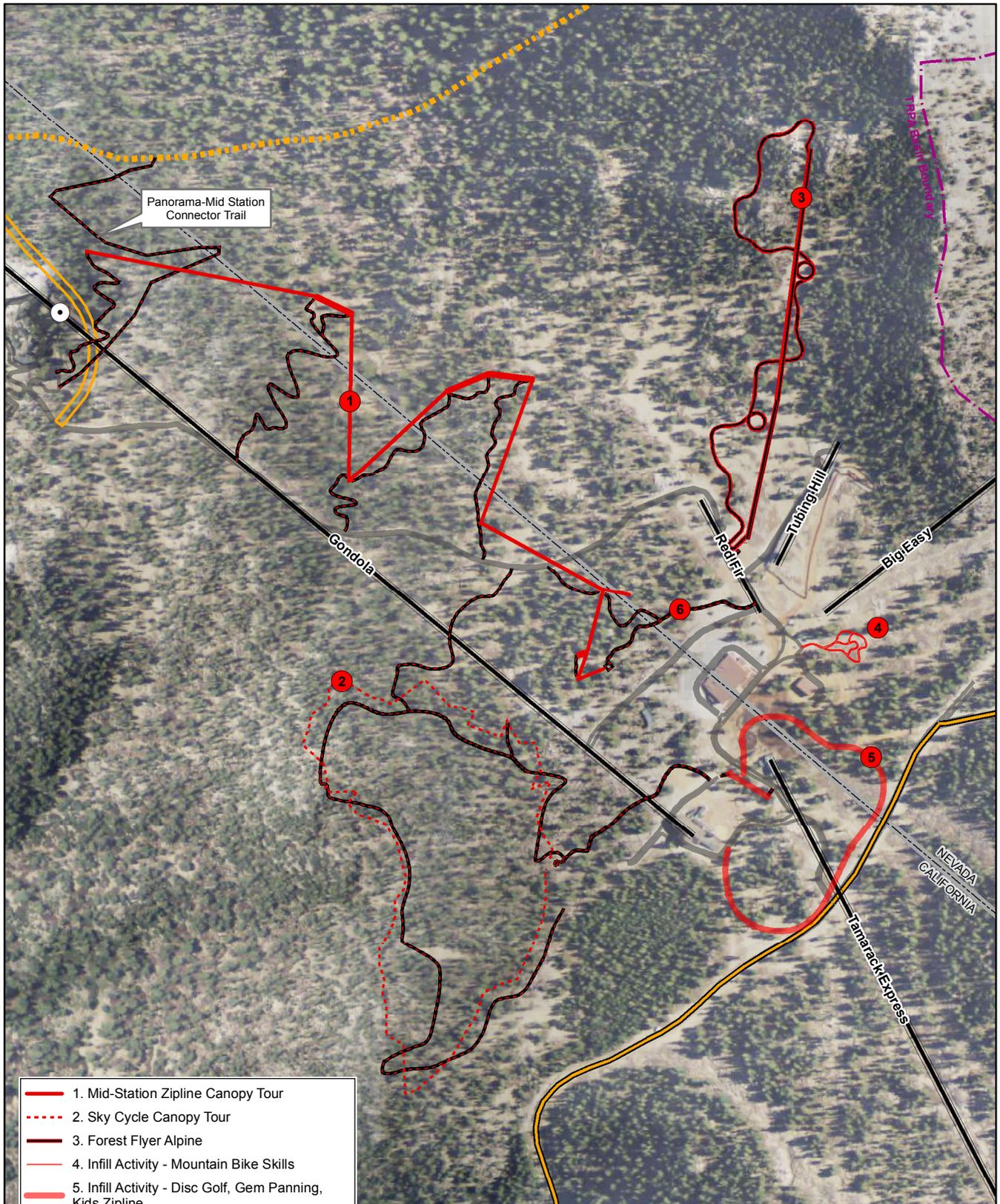
BOUNDARIES

- TRPA Basin Boundary

HEAVENLY MOUNTAIN RESORT EPIC DISCOVERY PROJECT

Figure 2-1: Proposed Epic Discovery Activities





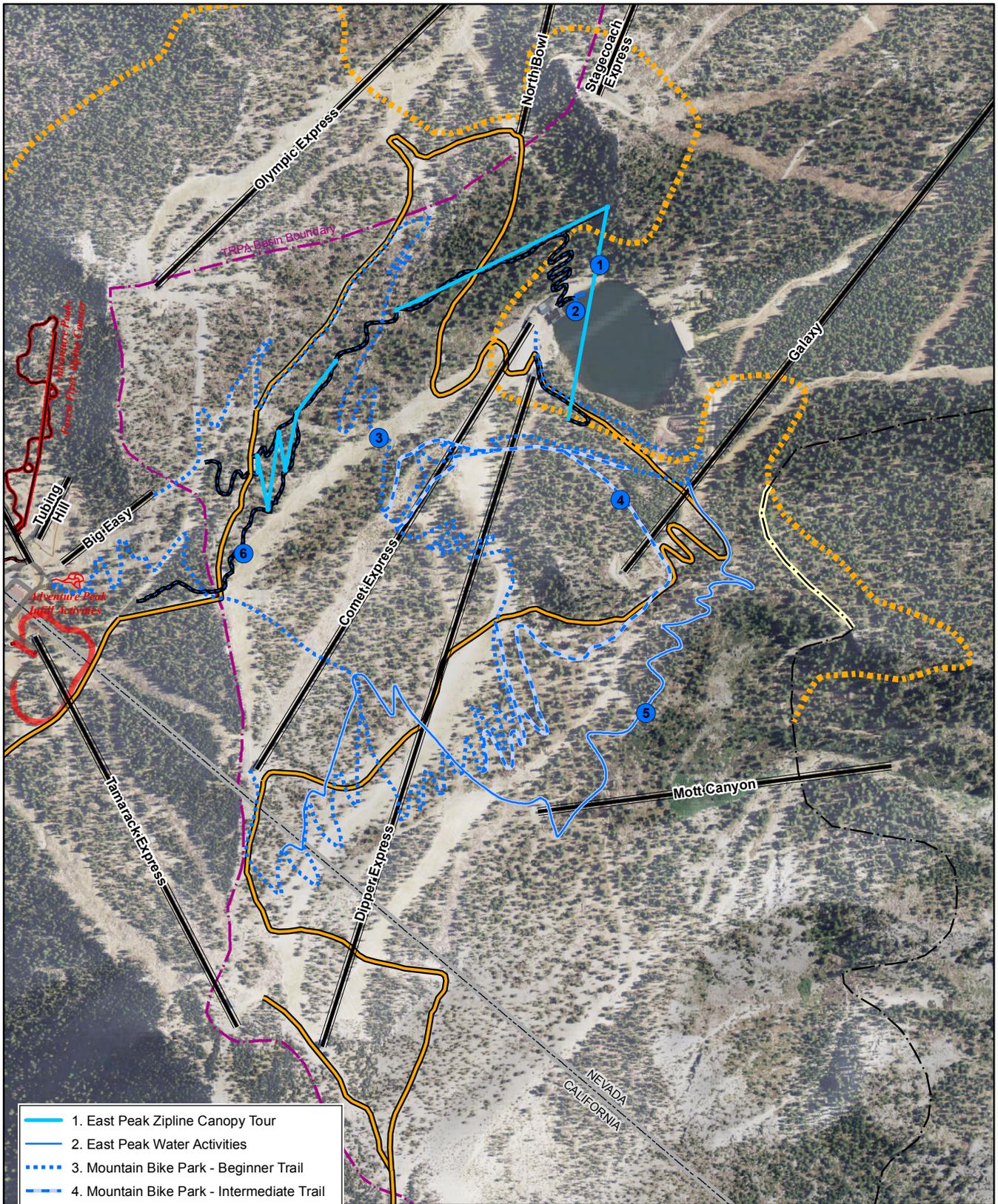
- 1. Mid-Station Zipline Canopy Tour
- - - 2. Sky Cycle Canopy Tour
- 3. Forest Flyer Alpine
- 4. Infill Activity - Mountain Bike Skills
- 5. Infill Activity - Disc Golf, Gem Panning, Kids Zipline
- 6. Hiking/Maintenance Trails
- Emergency Gondola Snow Cat Evacuation Route (Mountainwide)
- - - Panorama Trail (Mountainwide)
- Mountain Excursion Tour (Mountainwide)
- Gondola Mid-Station (Existing)
- Ski Lifts (Existing)
- Roads (Existing)

HEAVENLY MOUNTAIN RESORT EPIC DISCOVERY PROJECT
 Figure 2-2: Adventure Peak Proposed Activities



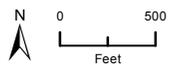
HAUGE BRUECK
 ASSOCIATES

Data sources: RCI Resource Concepts, Inc.; Heavenly Mountain Resort, Map date: May 7, 2014.



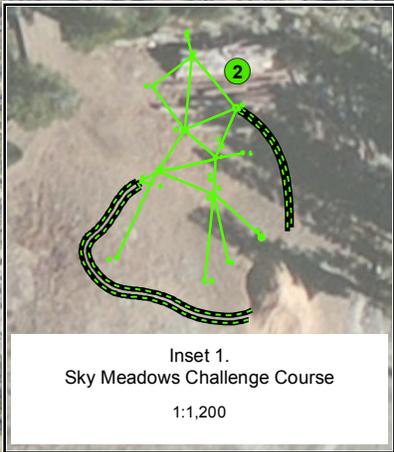
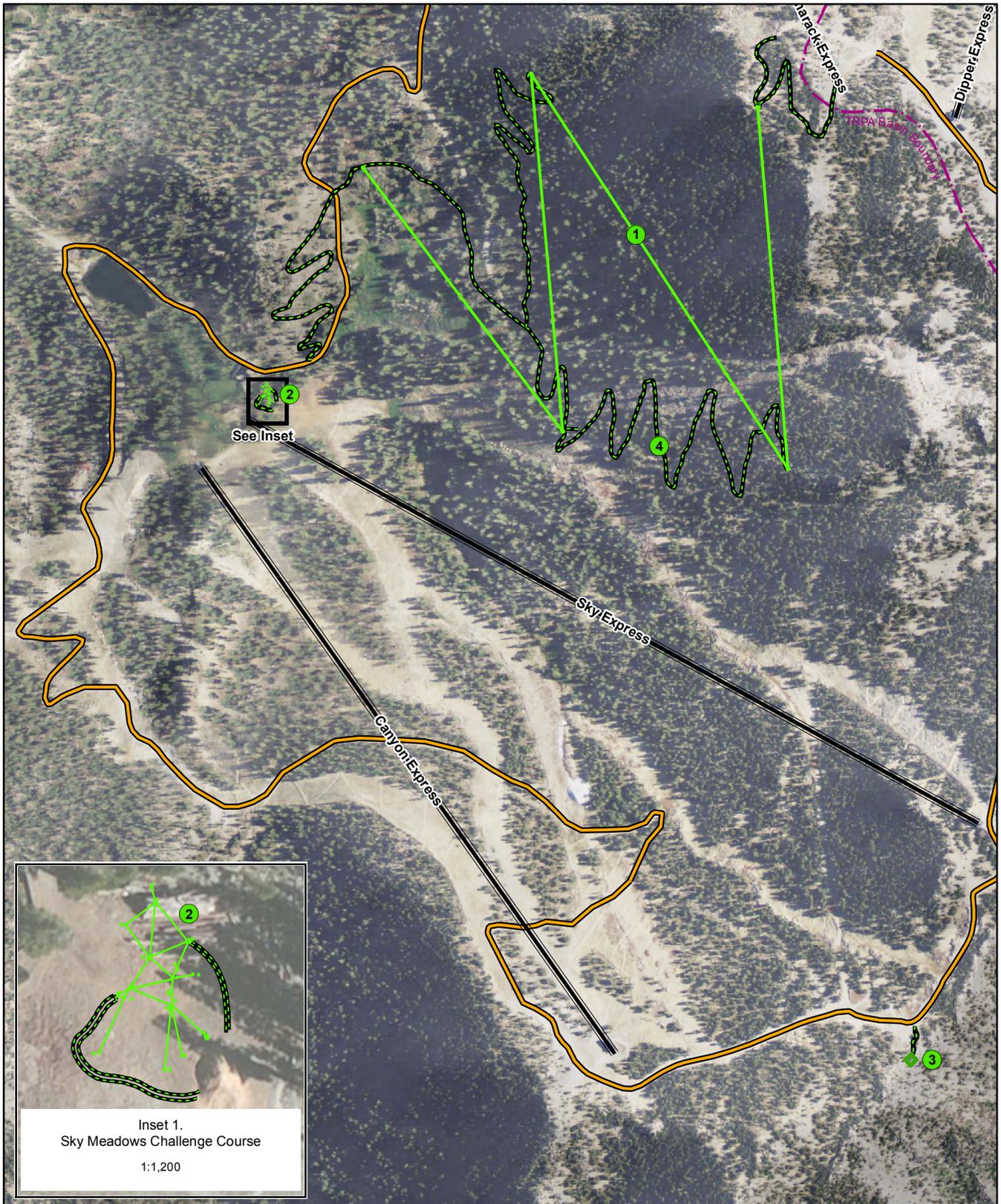
- 1. East Peak Zipline Canopy Tour
- 2. East Peak Water Activities
- ⋯ 3. Mountain Bike Park - Beginner Trail
- - - 4. Mountain Bike Park - Intermediate Trail
- 5. Mountain Bike Park - Advanced Trail
- 6. East Peak Lodge Hiking Trail
- Mountain Excursion Tour (Mountainwide)
- ⋯ Panorama Trail (Mountainwide)
- Roads (Existing)
- Ski Lifts (Existing)
- - - Tahoe Rim Trail (Existing)
- - - Tahoe Rim Trail - to be removed & restored

HEAVENLY MOUNTAIN RESORT EPIC DISCOVERY PROJECT
Figure 2-3: East Peak Lake Basin Proposed Activities



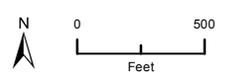
HAUGE BRUECK
ASSOCIATES

Data sources: RCI Resource Concepts, Inc.; Heavenly Mountain Resort, Map date: May 7, 2014.



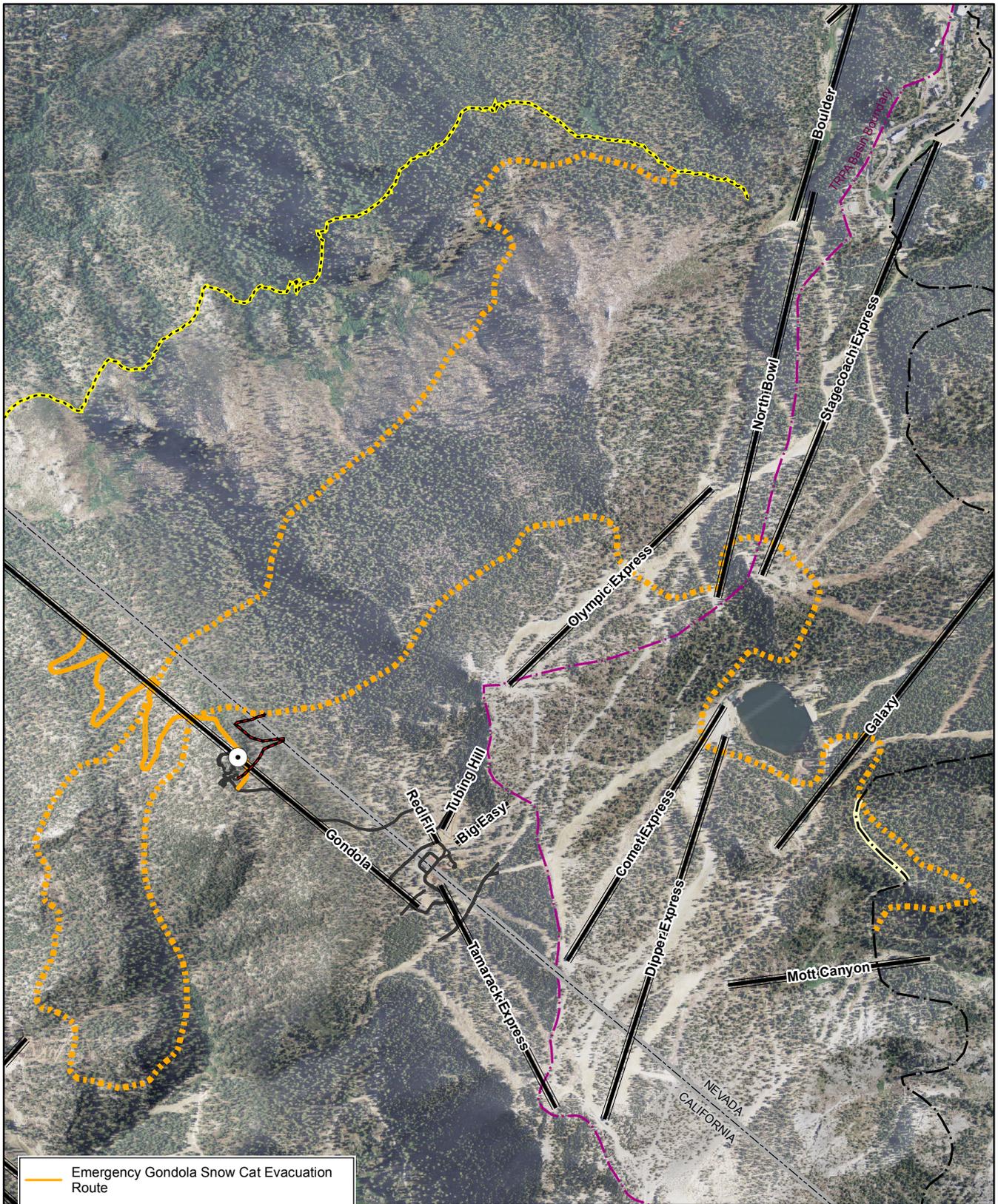
- 1. Sky Meadows Zipline Canopy Tour
- - - 2. Sky Meadows Challenge Course
- ◆ 3. Ridge Run Lookout Tower & Observation Deck
- - - 4. Hiking/Maintenance Trails
- Mountain Excursion Tour (Mountainwide)
- Ski Lifts (Existing)

HEAVENLY MOUNTAIN RESORT EPIC DISCOVERY PROJECT
Figure 2-4: Sky Meadows Basin Proposed Activities



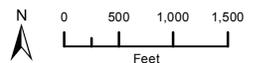
**HAUGE BRUECK
ASSOCIATES**

Data sources: RCI Resource Concepts, Inc.; Heavenly Mountain Resort, Map date: May 7, 2014.



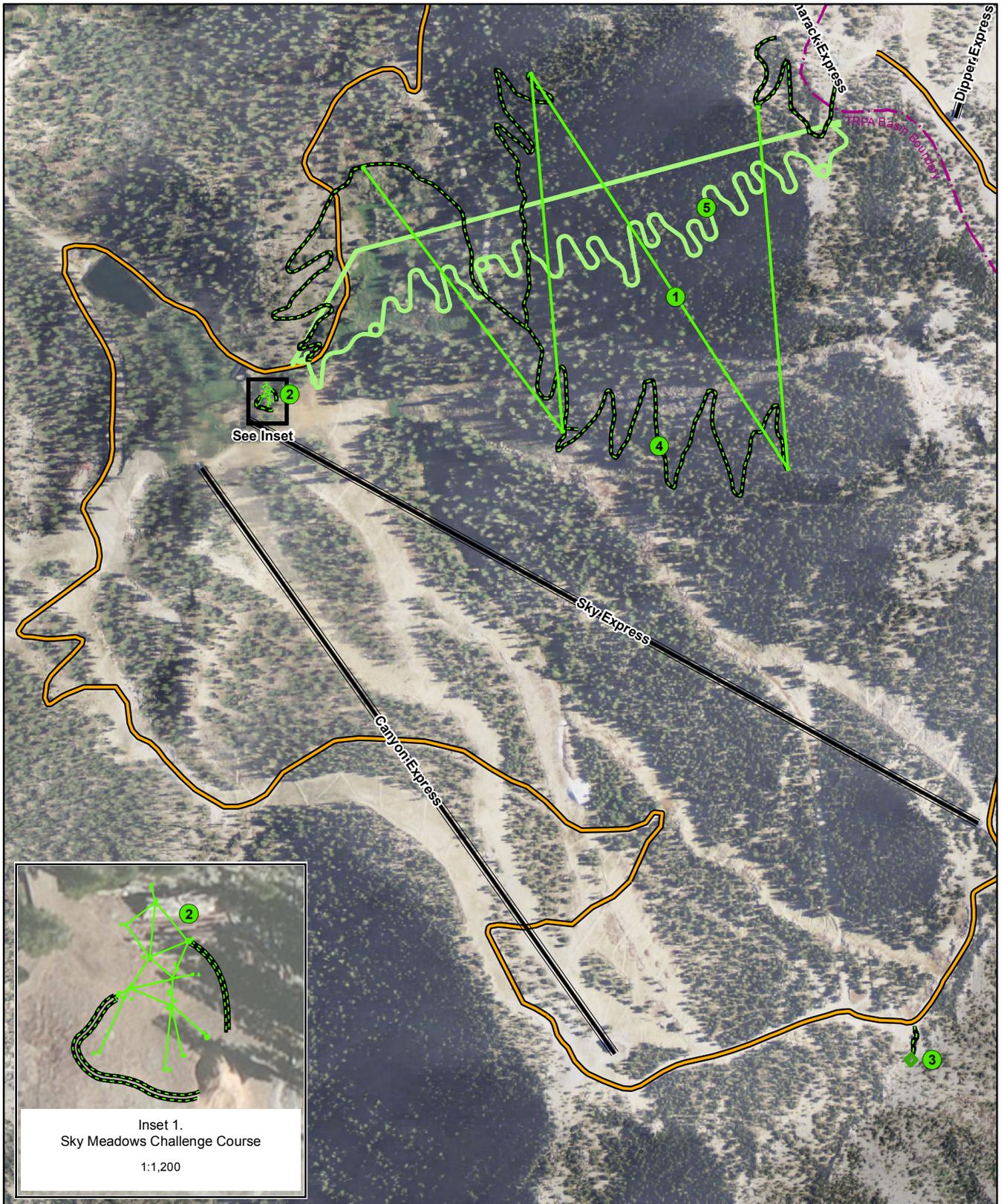
- Emergency Gondola Snow Cat Evacuation Route
- ⋯ Panorama Trail
- Panorama-Mid Station Connector Trail
- - - Van Sickle Trail
-  Gondola Mid-Station
-  Ski Lifts
-  Roads
-  Tahoe Rim Trail
-  Tahoe Rim Trail - to be removed & restored

HEAVENLY MOUNTAIN RESORT EPIC DISCOVERY PROJECT
 Figure 2-5: Emergency Gondola Evacuation Route and Panorama Trail Connection



HAUGE BRUECK
 ASSOCIATES

Data sources: RCI Resource Concepts, Inc.; Heavenly Mountain Resort, Map date: May 8, 2014.



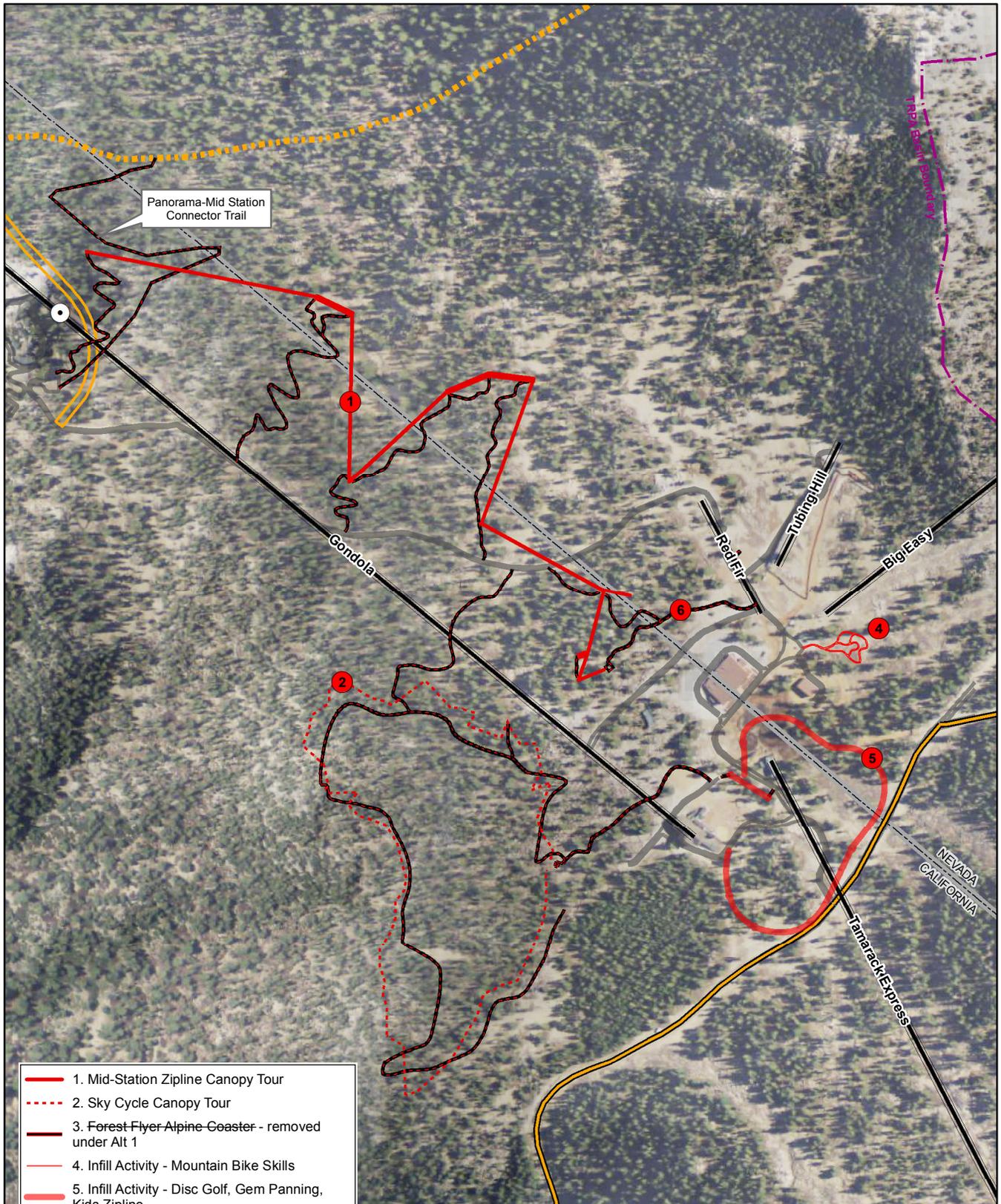
- 1. Sky Meadows Zipline Canopy Tour
- 2. Sky Meadows Challenge Course
- 3. Ridge Run Lookout Tower & Observation Deck
- - - 4. Hiking/Maintenance Trails
- 5. Sky Meadows Basin Coaster - added under Alt 1
- Mountain Excursion Tour (Mountainwide)
- Ski Lifts (Existing)

HEAVENLY MOUNTAIN RESORT EPIC DISCOVERY PROJECT
Figure 2-6: Sky Meadows Basin Proposed Activities
Alternative 1



HAUGE BRUECK
ASSOCIATES

Data sources: RCI Resource Concepts, Inc.; Heavenly Mountain Resort, Map date: July 16, 2014.



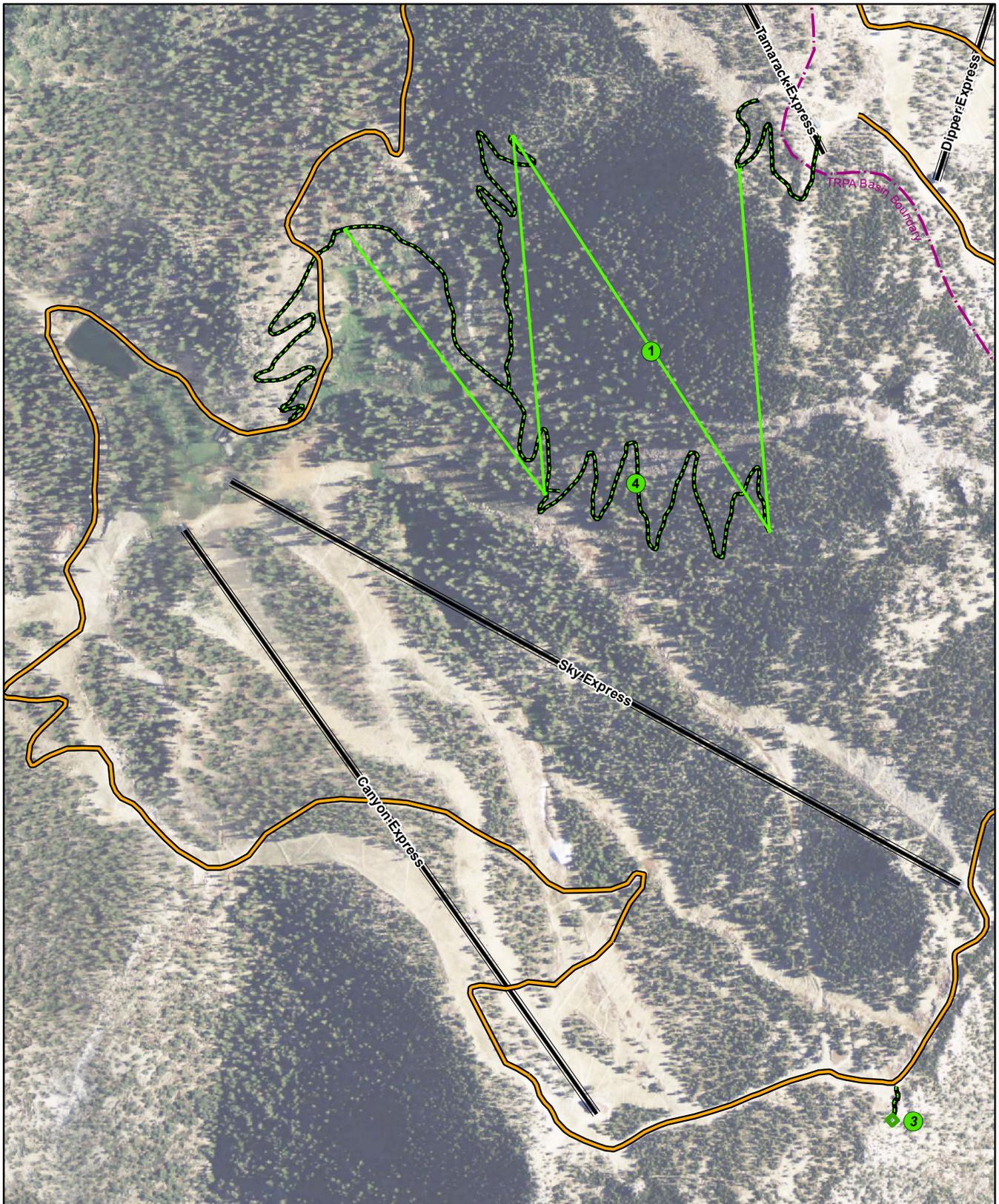
- 1. Mid-Station Zipline Canopy Tour
- - - 2. Sky Cycle Canopy Tour
- 3. Forest Flyer Alpine Coaster - removed under Alt 1
- 4. Infill Activity - Mountain Bike Skills
- 5. Infill Activity - Disc Golf, Gem Panning, Kids Zipline
- 6. Hiking/Maintenance Trails
- Emergency Gondola Snow Cat Evacuation Route (Mountainwide)
- - - Panorama Trail (Mountainwide)
- Mountain Excursion Tour (Mountainwide)
- Gondola Mid-Station (Existing)
- Ski Lifts (Existing)
- Roads (Existing)

HEAVENLY MOUNTAIN RESORT EPIC DISCOVERY PROJECT
Figure 2-7: Adventure Peak Proposed Activities
Alternative 1



HAUGE BRUECK
ASSOCIATES

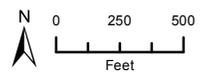
Data sources: RCI Resource Concepts, Inc.; Heavenly Mountain Resort, Map date: July 16, 2014.



- 1. Sky Meadows Zipline Canopy Tour
- - - 2. Sky Meadows Challenge Course - removed under Alt 2
- ◆ 3. Ridge Run Lookout Tower & Observation Deck
- - - 4. Hiking/Maintenance Trails
- Mountain Excursion Tour (Mountainwide)
- Ski Lifts (Existing)

HEAVENLY MOUNTAIN RESORT EPIC DISCOVERY PROJECT

Figure 2-8: Sky Meadows Basin Proposed Activities
Alternative 2



HAUGE BRUECK
ASSOCIATES

Data sources: RCI Resource Concepts, Inc.; Heavenly Mountain Resort, Map date: July 16, 2014.

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ENCLOSURE 3

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Heavenly Epic Discovery Project

Bud Amorfini
Engineering Geologist

- Project summary
- CEQA lead agency
- Draft EIR comments
- Water quality issues
- Heavenly presentation



1

Project Summary

- **Ski Area Recreational Opportunity Enhancement Act, November 2011** – policy to support year-round natural resource-based recreation at ski areas on public lands
- **Epic Discovery Project** – proposal to integrate summer recreation and interpretive venues at existing ski area facilities at Heavenly Mountain Resort
- **New attractions** – includes a variety of attractions located both in and outside of California and the Lake Tahoe Basin

2

Project Summary

- **Activity Centers**

- Adventure Peak (top of gondola - California)
- East Peak Basin (Nevada)
- Sky Meadows Basin (California)
- Mountain wide

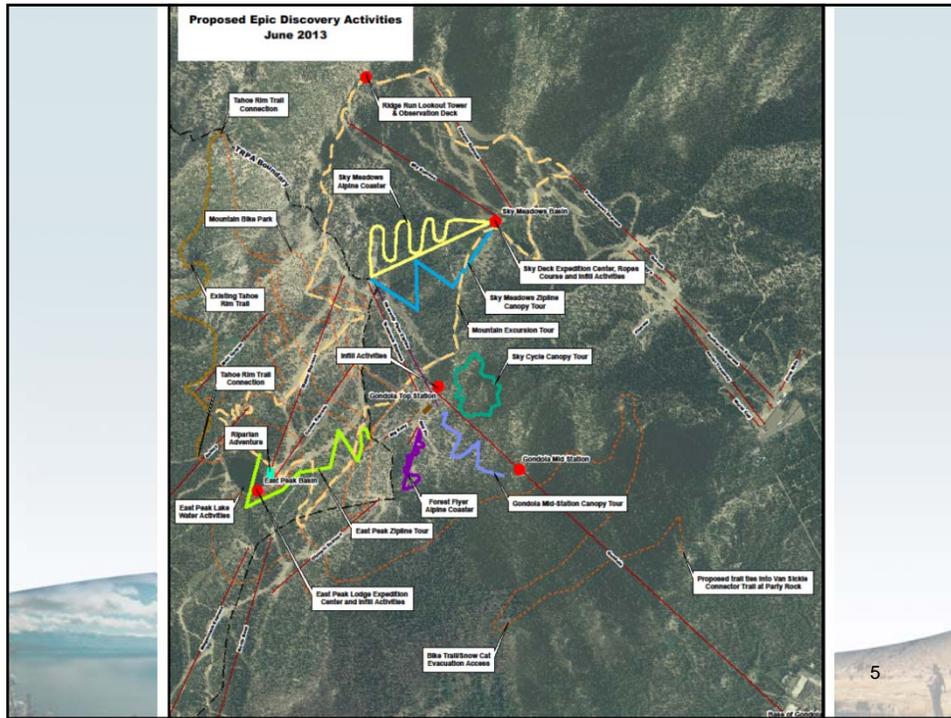


Project Summary

- **California Activities**

- ropes/challenge courses
- zip line canopy tours
- sky cycle canopy tour
- alpine coaster
- lookout tower and observation deck
- multi-use public trails (Panorama Trail)
- interpretive centers/information
- Mountain excursion tour
- emergency gondola snow cat evacuation route (winter only)





CEQA Compliance

- **Joint Environmental Document - EIR/EIS/EIS**
 - Water Board, Forest Service, TRPA
- **Draft document circulated for 60-day public comment period ending October 27, 2014**
- **Water Board to consider certifying Final EIR in May 2015**
- **Water Board also to consider adopting updated WDRs in May 2015**

Draft EIR Comments

- **Project Support**

- USEPA
- Tahoe Douglas Fire Protection District
- Business community
- Mountain biking and recreation advocates
- Schools
- Private individuals



7

Draft EIR Comments

- **Concerns**

- **Van Sickle Bi-state Park impacts** (trail conflicts, parking, restrooms) - NV Conservation & Natural Resources, CTC
- **Flora and fauna impacts** (migratory birds, yellow-legged frogs, white bark pines, bears) - CDFW, NV Conservation & Natural Resources, Sierra Club
- **Public safety and emergency response** (emergency vehicles access and evacuation) – Tahoe Douglas Fire Protection District
- **Inconsistent with natural environment** (alpine coaster, traffic, noise) – Sierra Club and private individuals



8

Water Quality Issues

- **TMDL for Heavenly Valley Creek**

- WQ parameters (generally good)
- Stream Condition Inventory (good & stable)
- Benthic Macroinvertebrate (BMI) health (poor in Sky Meadows)

- **Monitoring Locations**

- Near Patsy's lift (high gradient)
- LTBMU property line (high gradient)
- Sky Meadows (low gradient)
- Reference stream (Hidden Valley Creek – high gradient)

9

Water Quality Issues

- **SEZ Disturbance**

- Sky Meadows ropes course designed to avoid all direct SEZ impacts
- 168 square feet SEZ disturbance from zip line crossings
- SEZ mitigation from banked SEZ restoration credits

- **Erosion/sedimentation control**

- Barriers/access controls to minimize indirect impacts
- 23 erosion hot spots identified in EIR for mitigation
- Updated WDRs to include ongoing/improved monitoring and erosion control requirements
- Additional substrate and WQ monitoring parameters for Sky Meadows

10

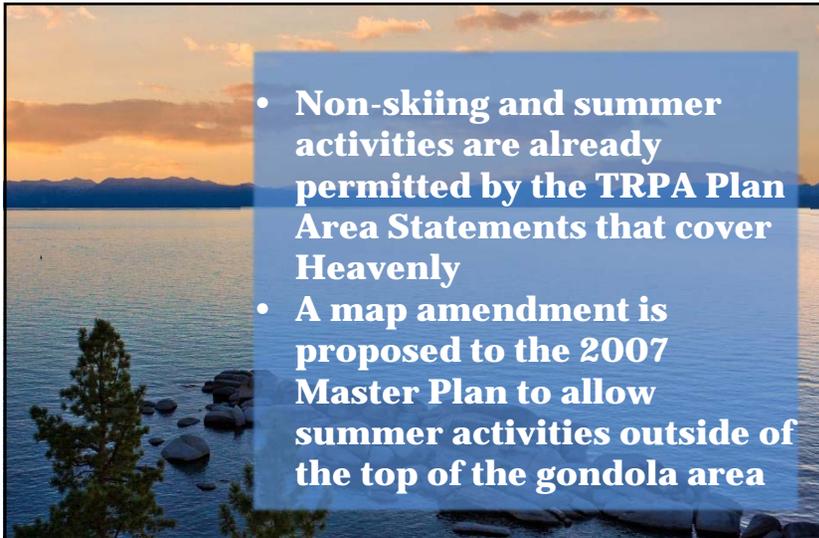
Questions?



ENCLOSURE 4

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- **Non-skiing and summer activities are already permitted by the TRPA Plan Area Statements that cover Heavenly**
- **A map amendment is proposed to the 2007 Master Plan to allow summer activities outside of the top of the gondola area**



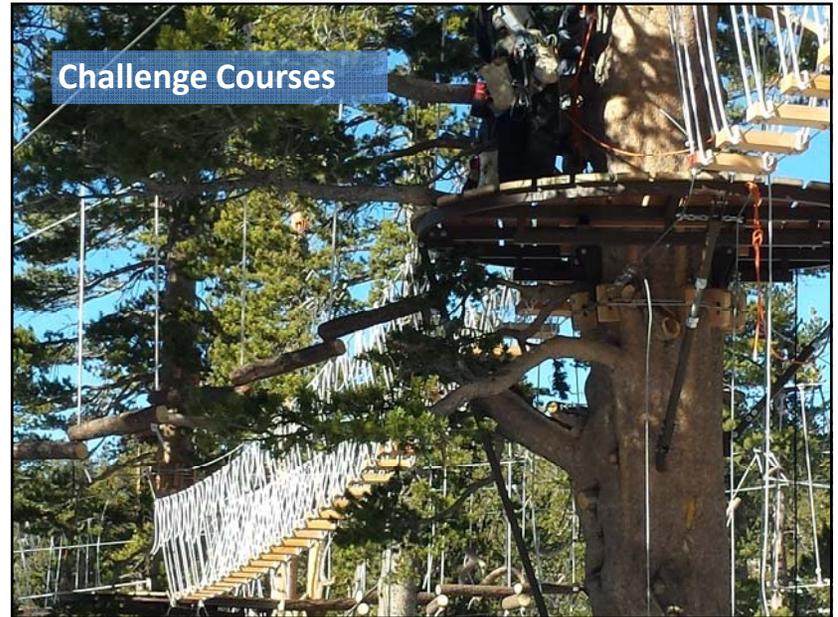
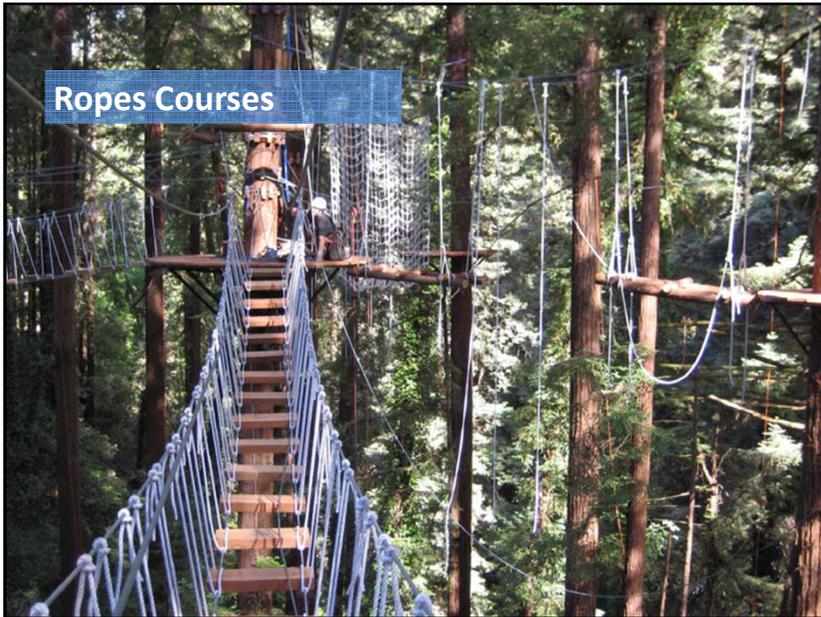
- **Gives kids and families a unique way to experience the mountains**
- **As part of the overall plan concept, promote forest stewardship to make advocates from the visitors**
- **Apply the *Learn Through Play* approach by mixing ecological principles with fun activities**
- **Makes National Forest lands accessible to non-skiers and riders**





- Utilizes the existing infrastructure and developed parts of the mountain for the new activities
- Design and build the activities to be compatible with the landscape setting
- Use slopes and gravity to let visitors experience the forest











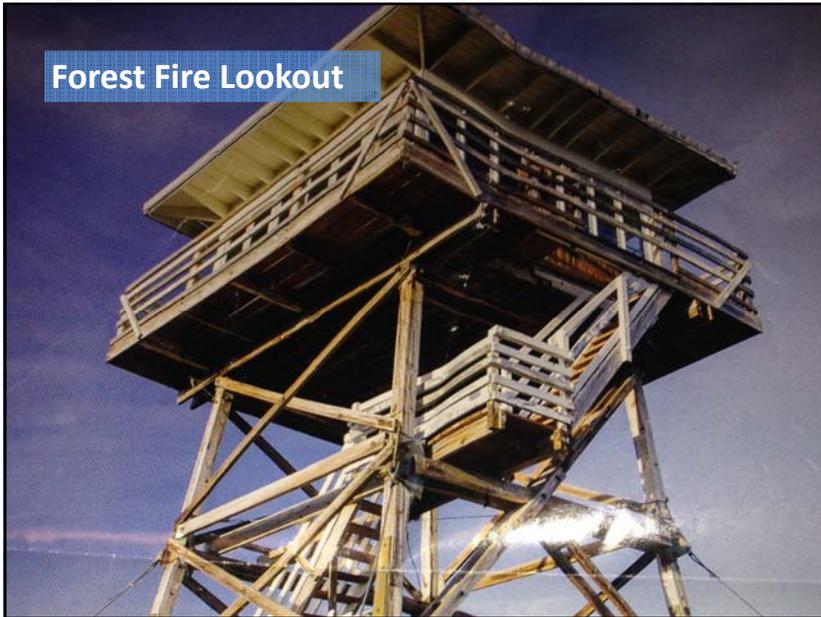
Sky Cycle Tour



Mountain Biking



Forest Fire Lookout

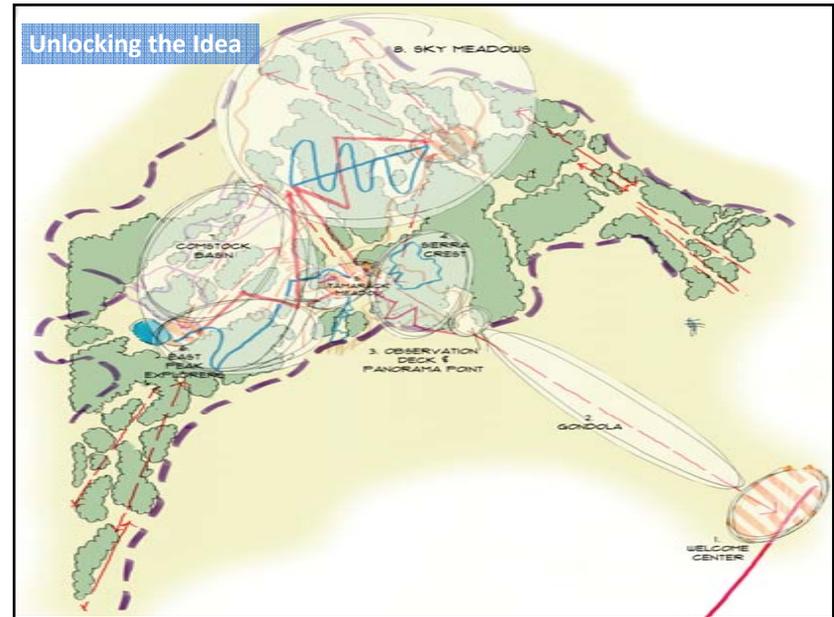


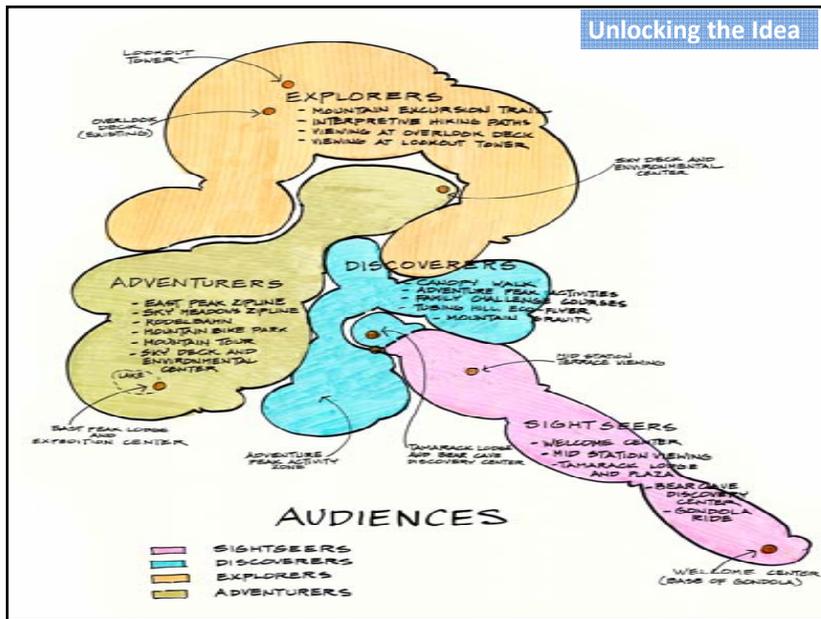
 **Heavenly**
LAKE TAHOE

“1% FOR THE FOREST”



- **New partnership with The Nature Conservancy**
- **In collaboration with TNC and others, develop the environmental education programs and stories**
- **Donate 1% of all summer activity revenue for watershed conservation**





INTERPRETATION
"HEAVENLY MOUNTAIN, WHERE PART IS PRESENT"

- 1. WELCOME CENTER (D)
- 2. GONDOLA RIDE MOUNTAIN ECOSYSTEM
- 3. WILDLIFE
- 4. EAST PEAK EXPLORERS HISTORY
- 5. TIERRA CREST ECOLOGY
- 6. MID STATION OBSERVATION
- 7. CONSTOCK BASIN ADVENTURERS TIME
- 8. SKY MEADOW EXPLORERS CLIMATE

Other nodes include: LOOKOUT TOWER, OVERLOOK DECK, SKY DECK AND ENVIRONMENTAL CENTER, TAMARACK LODGE AND BEAR CREEK RECOVERY CENTER, and BEAR CREEK DISCOVERY CENTER.

Heavenly LAKE TAHOE

INTERPRETIVE OPPORTUNITIES

