

Emergency Preparedness and Evacuation Plan

THE VILLAGE AT SQUAW VALLEY

6/28/2016

This Emergency Preparedness and Evacuation Plan (EPEP) has been prepared for The Village at Squaw Valley Specific Plan (VSVSP) project under the supervision of Placer County and in coordination with Pete Hnat, Chief Executive Officer, Emergency Management Consultants. The focus of the EPEP is primarily on emergency preparedness and evacuation protocols as related to emergency events, such as fire. However, other hazards are addressed as well, including avalanche, seismic and flood protection measures.

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1.0 INTRODUCTION

1.1 Introduction

This Emergency Preparedness and Evacuation Plan (EPEP) has been prepared for The Village at Squaw Valley Specific Plan (VSVSP). The focus of the EPEP is primarily on emergency preparedness and evacuation protocols for emergency events, such as fire. However, other hazards are also addressed, including avalanche, seismic and flood protection measures.

This EPEP is consistent with the concepts and goals of the Squaw Valley General Plan and Land Use Ordinance (SVGPLUO) and The Village at Squaw Valley Specific Plan, and is intended to be implemented in conjunction with Squaw Valley Fire Department Wildland Fire Evacuation Plan and the Placer County Operational Area East Side Emergency Evacuation Plan.

The VSVSP plan area encompasses approximately 85 acres of land located immediately north, west and east of the existing Squaw Valley Village at the base area of the Squaw Valley Resort. The plan area currently consists of parking lots, skier services, maintenance facilities, offices, employee housing facilities, open space and portions of Squaw Creek,. The topography of the plan area slopes gently from west to east and ranges in elevation from 6,200 to 6,270 feet above sea level with approximately 70 feet of elevation change from the highest to the lowest point on the site. The fire environment adjacent to the plan area includes steep mountainous terrain, which rises approximately 2,000 to 3,000 feet to the north, south and west within a regional landscape that is vulnerable to wildfire.

An 8.8-acre parcel, known as the East Parcel, is located 1.5 miles east of the main plan area and is also part of the VSVSP. The East Parcel is located immediately adjacent to Squaw Valley Road approximately 0.3 miles west of the SR 89 intersection and 1.3 miles east of the main Village area, and is bounded by Squaw Valley Road to the south, Squaw Creek and existing residences to the north and west, and a residential subdivision to the east.

The proximity to steep alpine mountains and to Squaw Creek leaves the plan area susceptible to avalanches during the winter months and potential flood hazards during the winter and spring months. Several active and potentially active faults are located in the region. Two unnamed fault traces run near or through a portion of the VSVSP area that, while having no known activity within the history of the developed valley, require further evaluation to determine whether they could be potentially active.

1.2 Purpose

This EPEP specifically applies to properties within the VSVSP boundaries. The EPEP provides a coherent road map to prepare and guide The Village at Squaw Valley staff in the event of an emergency due to fire, including localized fire events within the plan area and fire events originating from outside the plan area, avalanche, earthquake or flood event.

1.3 Project Summary

1.3.1 Location

The Village at Squaw Valley (VSVSP) is located within the unincorporated community of Olympic Valley, also known as Squaw Valley, a 4,700-acre area in northeastern Placer County within the

Sierra Nevada mountains (see Figure 1-1). The valley is located west of State Route (SR) 89, approximately nine miles south of the Town of Truckee, and seven miles northwest of Tahoe City. The main plan area, or "Village" area, sits at the base of the Squaw Valley Ski Resort and northwest and east of the existing Village at Squaw (previously developed by Intrawest), an existing resort residential development of approximately 305 condominium hotel units and associated retail commercial uses such as restaurants and retail shops. The site is generally bounded by Squaw Valley Road to the north, ski lifts and related ski operations to the south, lodging, single family homes, and undisturbed areas to the west, and the meadow and a golf course to the east. Ingress and egress access to the plan area is provided by Squaw Valley Road. Other internal roadways serving the main Village area include Village East Road, Far East Road, Squaw Peak Road, Squaw Peak Way, and Chamonix Place. Three bridges connect Squaw Valley Road to the internal private roads and parking areas within the Village area.

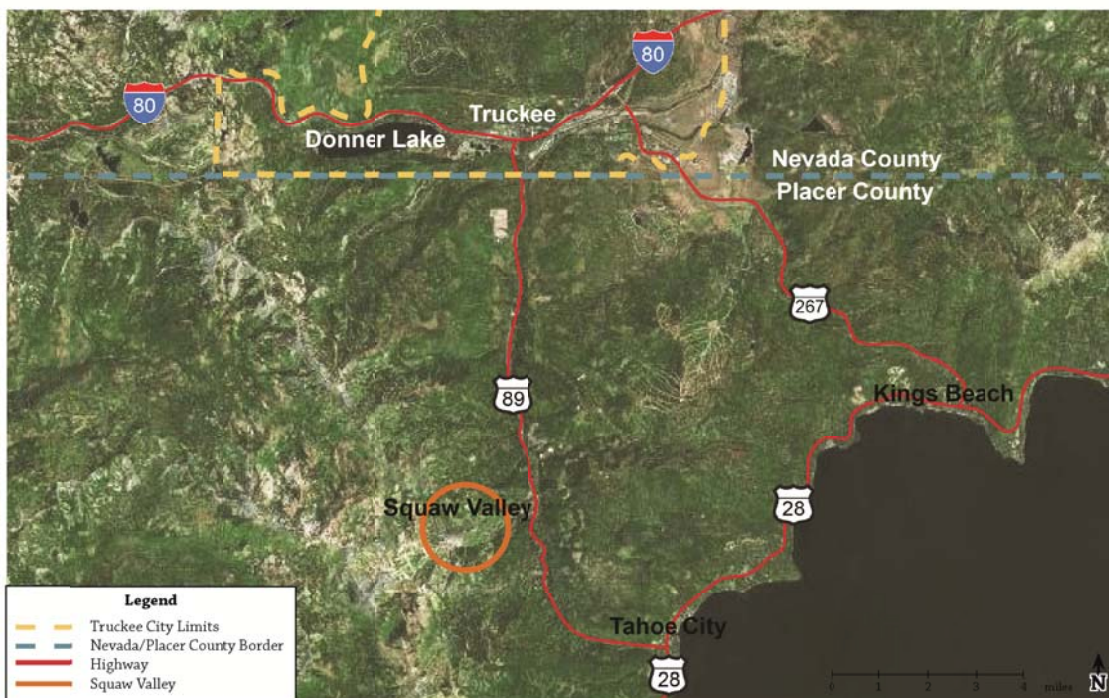


Figure 1-1 VSVSP Location and Regional Context

Source: SVRE, LLC 2016 (The VSVSP April 2016)

The 8.8-acre East Parcel is located immediately adjacent to Squaw Valley Road approximately 0.3 miles west of the SR 89 intersection and 1.5 miles east of the main Village area. It is bounded by Squaw Valley Road to the south, Squaw Creek and existing residences to the north and west, and a residential subdivision to the east.

Both the main Village and the East Parcel are located within the service area of the Squaw Valley Fire Department, which is located approximately 1.5 miles east of the main Village area and directly faces the East Parcel across Squaw Valley Road.

1.3.2 Project Description

The VSVSP encompasses approximately 94 acres and is broken into two sections. The main Village area includes approximately 85 acres and allows for development of up to 850 new resort hotel and residential units with a maximum of 1,493 bedrooms as well as other commercial, retail, recreational uses and parking areas. The East Parcel is an 8.8 acre parcel located approximately 1.5 miles east of the main Village and will be developed with the project serving employee housing (up to 50 units or a maximum of 300 employees), a shipping and receiving facility, community market and off-site employee parking. A conceptual plan for the VSVSP is shown in Figure 1-2.



Figure 1-2 VSVSP Conceptual Plan

Source: SVRE, LLC 2016 (The VSVSP April 2016)

The main Village area is comprised of two neighborhoods: the Village Core and the Village Neighborhood. The Village Core will be developed with a wide mix of uses and activities concentrated in close proximity to the ski slopes and the existing village and will include higher density lodging, a Mountain Adventure Camp consisting of both wet and dry indoor/outdoor recreational amenities, a variety of retail and restaurant spaces, and various ski service offices and facilities. The Village Neighborhood, located in the northwest portion of the plan area, will consist of medium-density resort residential uses such as condos, hotels, fractional ownership cabins and smaller-scale neighborhood-serving commercial uses. The two neighborhoods would be connected by a network of pedestrian routes including passageways, pedestrian and bicycle paths, and sidewalks.

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Total commercial space within the plan area (including the East Parcel) would be approximately 297,733 square feet.

Of the almost 94 acres within the plan area, there are about 11.5 acres of building footprint and about 47 acres of natural and landscaped areas. The residual 34 acres would be attributed to roads, parking areas, plazas, pools, hardscapes and pedestrian corridors.

2.0 EXISTING CONDITIONS

Olympic Valley is a classic alpine glacial valley northwest of Lake Tahoe in the Sierra Nevada of California. The valley floor ranges in elevation from approximately 6,100 feet at the east end to approximately 6,200 feet at the west end and is surrounded by steep mountain slopes that rise to peaks over 9,000 feet elevation. The valley floor is bisected by Squaw Creek, a tributary stream that flows into the Truckee River two miles east of the main Village area. In addition to the Squaw Valley Ski Resort, Olympic Valley is developed with approximately 1,034 single-family and multifamily homes, a variety of lodging uses, schools, a fire station and various recreation facilities including the Squaw Valley Community Park. The full time, permanent population is approximately 879 persons (based on the 2010 census), but the daytime visitor population can swell to more than 20,000 during peak resort usage and vacation periods. The overnight population is substantially less due to the limited number of homes overnight guest lodging accommodations and is currently estimated at 5,858 persons during peak usage periods.

2.1 Topography and Vegetation

The main plan area is located at the base of the mountain slopes on relatively level ground and is mostly on previously disturbed, graded surfaces. The mountain slopes to the north are relatively steep with forest cover and some adjacent residential development. To the west the mountain slopes up steeply to nearly vertical bedrock outcrops, and to the south is a mixture cleared and tree covered ski runs. On the east end, the plan area is located adjacent to a broad, gently sloping valley floor. Nearly all of the main Village area lies between 6,200 and 6,400 feet in elevation. Some lower elevations occur along Squaw Creek and the Olympic Channel tributary to Squaw Creek.¹

The East Parcel is located in the eastern portion of the valley near where Squaw Creek has cut down through terminal moraine glacial deposits that form a broad ridge looping around the east end of the meadow. Much of the East Parcel, including its southern edge along Squaw Valley Road, has been disturbed by past aggregate mining activities and is relatively level. Swales and depressions are located along the northern edge of the site adjacent to Squaw Creek.¹

The ski resort surrounding the plan area to the south and west contains cleared ski runs, forested areas, and alpine terrain with relatively sparse vegetation. Portions of the Resort terrain are above tree line and create a natural fire break. Lands to the north of the main plan area include a mixture of undeveloped subalpine forest lands over bedrock and developed residential uses in a forested setting. Forested areas within the resort holdings are thinned to reduce fuel load and have large open areas that provide significant fuel breaks accessible by mountain roads. These more open, discontinuous and generally healthy forested areas that wrap the western and southern edges of the valley provide areas of low or reduced fuel load. A wind-driven fire from the southwest would encounter areas with less favorable fuel sources for fire propagation that would aid in the defense of populated areas.

¹ Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 12-1.

The mountains flanking the north side of the valley are steep and feature significant open terrain with areas of scree fields, low vegetation and discontinuous forested areas. The mountains adjacent to the south edge of the valley where ski resorts are not located are also steep and include the most heavily forested terrain. A mixture of open, rocky subalpine terrain and open forest is located at the far at the west end of the valley in the Shirley Canyon area. Portions of the privately owned ski resort lands on the south slope and ridge have been the subject of significant mechanical thinning efforts by the ski resort. These areas contain generally healthy forest with significantly cut areas for glade skiing and is reasonably accessible by mountain roads.

Within the portion of the valley east of the main Village area is the meadow, which provides a significant fire break between forested areas on the north, south and west sides of the valley. The developed resort base area at the west end of the valley provides a buffer between the mountains and forest to the south and residential development on the forested slopes to the north. Shirley Canyon is located to the west, and the canyon holds snow well into the spring. The forest in this location is reasonably healthy with open areas of understory vegetation and even some areas of granite that would provide fuel breaks for a low intensity ground fire. At the east end of the valley, State Route 89 and the Truckee River provide a fire break between Olympic Valley and forested areas to the east.

2.2 Climate

Olympic Valley is located just east of the crest of the Sierra Nevada and has an overall climatic pattern similar to the surrounding montane area: cool, wet winters (average daytime highs of 42F) and mild, dry summers (average daytime highs of 82F). Overall average monthly temperatures are mild in the summer and cold in the winter. Average annual wind speed is approximately four miles per hour (mph) from the south. Most of the precipitation occurs as snow between December and March, while a small percentage is received as rain in the spring and summer months.²

Average monthly precipitation is highest in the winter and spring and little to no precipitation occurs in July, August, and September. The valley floor is represented by data collected at the Squaw Valley Fire Station gage, at an elevation of approximately 6,000 feet. The mountains are represented by data collected at the Squaw Valley Ski Resort SNOTEL gage, at an elevation of 8,029 feet. Average annual precipitation of approximately 47 inches on the valley floor and 76 inches on the mountain (includes snowfall as snow water and rainfall combined) occurs primarily during the months of November through March.³

² Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 10-1.

³ Farr West Engineering et al. 2014, *Village at Squaw Valley Specific Plan Water Supply Assessment 2015 Update*, July 22, 2015, Table 3-1.

Relative humidity for the Squaw Valley (as measured at the Truckee-Tahoe Airport) typically ranges from a low of 20% to a high of 96%. Humidity is typically lowest in August and highest in December.⁴

Prevailing winds during the summer are from the south and southwest.⁵

2.3 Existing Land Uses

The main Village area has historically been used for winter and summer sports activities and resort facilities including parking, mountain maintenance, skier services, offices, lodging and related commercial uses. The plan area has hosted numerous events such as the 1960 Winter Olympic Games, Iron Man, and the Wanderlust Yoga Festival. The East Parcel has historically been used for aggregate mining, off-site winter snow storage and temporary equipment storage. Most of the plan area, including the East Parcel, has been previously developed or disturbed. Approximately 53 acres of the 94 acre project site is developed with existing resort buildings, maintenance facilities and paved parking lots. Other portions of the plan area have been previously disturbed by human activity (e.g. Squaw Creek trapezoidal channel, historic aggregate mine at East Parcel) and only about 6 acres are currently considered undisturbed lands.

Existing land uses surrounding the main village area include single-family residences, condominiums, small offices, and retail/commercial uses to the northeast; the PlumpJack hotel and restaurant to the south and east; the existing Village at Squaw Valley (Intrawest) to the south and west; forest land to the northwest; single-family residences off Granite Chief Road to the southwest; mountains, ski runs and undisturbed areas to the west and south; and meadow lands and a golf course to the east. The Olympic Village Inn is located immediately adjacent to the northwest portion of the plan area and the plan area would neighbor the Inn on three sides.

The East Parcel is currently bordered by trees to the north, east, and west. The area beyond the trees to the west and north contains single-family residences and the trees to the east border a single-family residential subdivision. Squaw Valley Road is located along the southern boundary of the East Parcel and on the other side of the road is Squaw Valley Academy, the Squaw Valley Public Service District (SVPSD) offices, the Squaw Valley Fire Department (SVFD), and the Tavern Inn condominiums.

2.4 Fire History

In Placer County, the wildland fire hazard extends from early spring to late fall. Fire conditions arise from a combination of hot weather, an accumulation of vegetation, and low moisture content in air and fuel.

Past incidences of wildland fire can be best described in two ways: fires that have occurred within the service area of SVFD and fires occurring outside of the service area boundary, with

⁴ <https://weatherspark.com/averages/31796/Truckee-California-United-States>, accessed April 4, 2016.

⁵ Western Regional Climate Center, <http://www.wrcc.dri.edu/htmlfiles/westwinddir.html>, accessed April 13, 2016.

the potential to burn into the service area. The following discussion of the history of fires within the SVFD service area was provided by Chief Bansen of the SVFD.

Within the Squaw Valley Fire Department Service Area

There have been fewer than two dozen wildland fires within the SVFD service area in the past 30 years, all of them small events (involving an acre or less). None have burned for more than one 24-hour operational period and all have been extinguished before damaging any structures or facilities. Most were ignited by lightning strikes, but there have been a handful of human-caused fires. Because of the relatively small size of the service area and the fact that virtually all of the area is visible from either the community of Squaw Valley or State Route 89, early detection and reporting of wildland fires is virtually assured. Many fires, even small ones, are reported by more than one party. The Martis Peak fire lookout, located to the east of Squaw Valley, can see a considerable portion of the higher terrain surrounding the valley and provides a reliable report and location during the months that the lookout is staffed.⁶

Access to fires within the service area is generally very good by road, although there are pockets of a few hundred acres that do not provide easy access to engines or crew transport vehicles. While fire hydrants provide the primary water source for most accessible fires within the valley, fires occurring in more remote locations may rely on other water sources for helicopter bucket-drops and water tenders, including the Truckee River in the area north and south of Squaw Valley. The combination of early detection and generally good access has resulted in rapid extinguishment in most cases. A handful of lightning-caused fires have occurred in more remote locations with more challenging access issues. Due to early detection and reporting, these fires (generally a single tree with minimal involvement on the ground) have been handled with an immediate single engine response from SVFD augmented by a Forest Service or CAL FIRE engine company, hand crew or helitack crew as they became available.⁷

Outside the Squaw Valley Fire Department Service Area

In rarer instances, large fires have occurred outside of the SVFD service area and have caused concern because of the potential to burn into lands surrounding the valley. The 2014 King Fire was particularly problematic, because after making a run of more than ten miles in the middle of the night, the head of the fire reached to within approximately 6 miles of the southwestern boundary of the SVFD service area which is located at the very top of the mountain at Squaw Peak. The unusual and extreme fire behavior of the King Fire, which was exacerbated by severe drought and very low fuel moisture levels, has provided valuable information to fire managers as the fire behavior deviated from behavior predicted by the fuel model. Other, smaller fires within the Granite Chief Wilderness and lands to the west of the valley have been discovered promptly and either contained and extinguished rapidly or allowed to burn at a low level for resource management purposes.⁷

⁶ Peter Bansen, Chief, Squaw Valley Fire Department, written communication, January 22, 2016.

⁷ Peter Bansen, Chief, Squaw Valley Fire Department, written communication, January 22, 2016.

2.5 Fire Hazard Severity Zones and State Responsibility Areas

The State Board of Forestry identifies those lands where the California Department of Forestry and Fire Protection (CAL FIRE) has the primary duty for wildland fire prevention and suppression; these lands are commonly known as state responsibility areas (SRAs). Lands are mapped by county in two categories: (1) wildland areas that could contain substantial forest fire risks and hazards (wildland areas or SRAs); and (2) very high fire hazard severity zones.

Squaw Valley is located in a SRA for management of wildland fire hazards. Most of the plan area and surrounding lands are designated as very high fire hazard severity zone, with smaller portions of the project site and land to the south designated as moderate fire hazard severity zone, as shown in Figures 2-1 and 2-2.

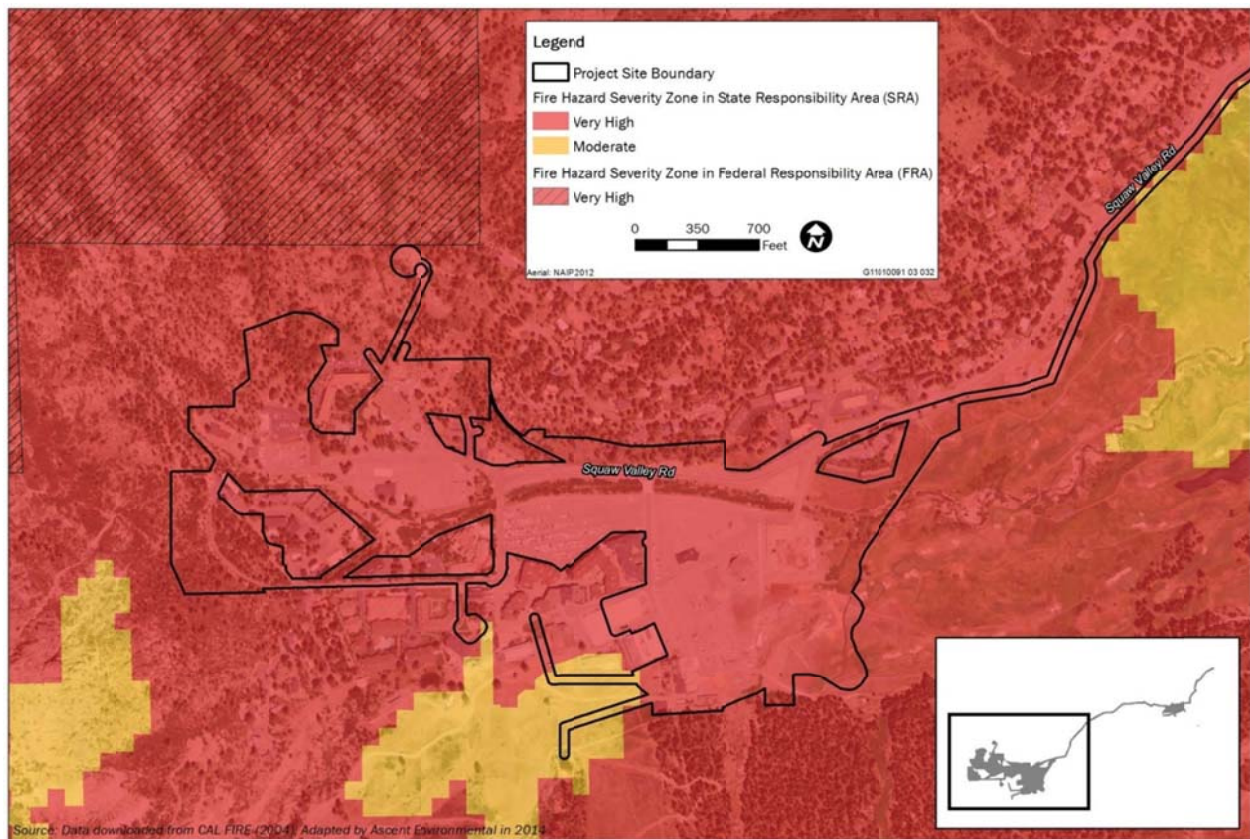


Figure 2-1 Fire Hazard Responsibility Areas and Severity Zones – Main Village

Source: Data downloaded from CAL FIRE 2004; adapted by Ascent Environmental 2014

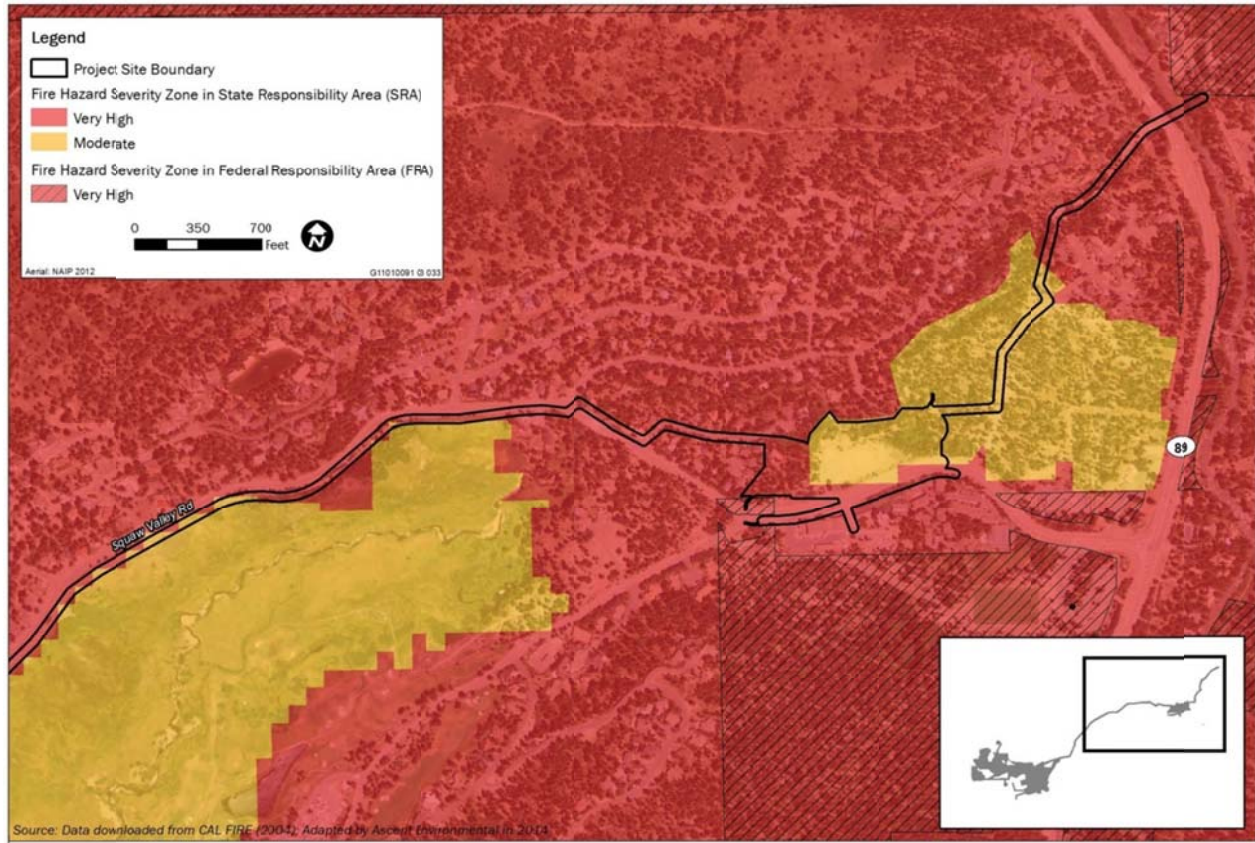


Figure 2-2 Fire Hazard Responsibility Areas and Severity Zones – East Parcel

Source: Data downloaded from CAL FIRE 2004; adapted by Ascent Environmental 2014

2.6 Fire and Emergency Response

2.6.1 Squaw Valley Public Service District/Squaw Valley Fire Department

The Squaw Valley Fire Department (SVFD) currently provides fire protection services to a 14-square-mile area that includes Squaw Valley and the Truckee River Corridor between Alpine Meadows Road and Cabin Creek Road (approximately 2.5 miles south of Truckee).

Fire Station and Equipment

The closest SVFD station to the project site is Station 21, located at 305 Squaw Valley Road, about 0.3-mile west of the Squaw Valley Road and SR 89 intersection, and 1.5 miles east of the main Village area. The SVFD owns the following fire apparatus⁸:

- ▲ 2001 all-wheel drive, Type 1 structure fire engine;
- ▲ 2001 rear-wheel drive, Type 1 structure fire engine;

⁸ Citygate Associates, LLC, *Assessment of Project Impacts and Appropriate Fire Service Mitigations for the Proposed Village at Squaw Project*, September 30, 2014, page 8.

- ▲ 1998 Type 3 wildland fire engine;
- ▲ 1994 Water Tender (2100 gal, 750 gpm);
- ▲ 2006 Light/Medium rescue unit;
- ▲ 2012 F150 crew-cab utility; and
- ▲ 2004 Ford Expedition command vehicle (used by the Fire Chief).

Staffing

A total of 13 firefighters are on staff at Station 21, with three or four personnel on duty per day—a Captain, a Fire Engineer (apparatus driver), and one to two Firefighter/Paramedics. The full-time staff is augmented by part-time, paid firefighters and firefighter-paramedics during peak periods.

All full-time firefighters are paramedics, and the SVFD provides Advanced Life Support at all times. Two firefighter/paramedics are scheduled each day. In addition, two of the three SVFD engineers are paramedics and two of the four part-time firefighters are paramedics.⁹

SVFD personnel are also trained to a Haz-Mat First Responder-Operations level and officers typically have the Haz-Mat Incident Commander certification as well.¹⁰

Services

In addition to fire suppression, the SVFD provides information to residents and property owners regarding fire prevention, defensible space, and other fire safety issues. The SVFD also reviews development proposals for projects within Squaw Valley, issues burn permits and coordinates with the ski resort regarding avalanche control. With approximately 60% of SVFD emergency calls being related to accidents, injuries or illness, the department also provides emergency medical services. Currently, emergency transport services are provided by the North Lake Tahoe Fire District and Care Flight air ambulance service.

Response Times

The SVFD's independent Insurance Services Office rating (a rating which can be used to assess the effectiveness of fire protection services) was reassessed in May 2014 with a Public Protection Class 2 rating (ratings are made on a scale of 1 to 10, with 1 being the highest).¹¹ The SVFD's goal for response times to calls within its service area is to arrive on-site within 5 minutes of dispatch 80 percent of the time.¹² Depending on weather or traffic, the current response time could be 4 to

⁹ Peter Bansen, Chief, Squaw Valley Fire Department, electronic communication, April 7, 2016.

¹⁰ Peter Bansen, Chief, Squaw Valley Fire Department, electronic communication, April 7, 2016.

¹¹ Citygate Associates, LLC, *Assessment of Project Impacts and Appropriate Fire Service Mitigations for the Proposed Village at Squaw Project*, September 30, 2014, page 9.

¹² Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 14-10.

5 minutes or more from the station to the main plan area.¹¹ The East Parcel is located directly across the street from the SVFD, so the response time would be minimal.

Wildland Fire Response

The SVFD owns and operates fire apparatus that are capable of direct attack, fire suppression, and structure protection. The Department conducts ongoing professional training including events such as the California Office of Emergency Services strike team responses state-wide and local wildland fire exercises (a large annual wildland-urban interface training exercise has been held in Squaw Valley for the past several years). In addition, SVFD is subject to automatic and mutual aid agreements to provide and coordinate emergency response with local government, state and federal resources when needed. Those agreements include:

- ▲ Automatic aid, “boundary drop” agreements with North Tahoe and Truckee Fire Protection Districts and Northstar Fire Department,
- ▲ Lake Tahoe Regional Fire Chiefs’ Association mutual aid agreement, and
- ▲ Mutual Aid Agreement/Annual Operating Plan with USDA Forest Service, Tahoe National Forest.¹³

Emergency Dispatch and Initial Incident Response

The SVFD is dispatched by the CAL FIRE Grass Valley Emergency Command Center. The Grass Valley ECC also dispatches CAL FIRE resources from across the region as well as U.S. Forest Service Tahoe National Forest fire assets. All agencies involved in an active incident are dispatched from the Grass Valley ECC, which ensures that incident response is coordinated to place emergency response resources where they are needed. Emergency response resources include local, state and federal engine companies, hand crews, dozers, air tankers, air tactics coordinators, helitack crews and helicopters/helitankers of various sizes and capacities.¹³

SVFD, in accordance with industry standards, uses the Incident Command System for all incidents involving more than a single unit response. Typically, the first-arriving company’s most senior level officer will be assigned as the Incident Commander (IC) and will transfer command to either a higher-ranking officer or a representative of the authority having jurisdiction for the incident upon their arrival at scene. Typically, the agency having authority for investigation has jurisdiction. Within the SVFD service area, different agencies have jurisdiction for different geographic locations, including the Local Responsibility Area (LRA), State Responsibility Area (SRA) and Federal Responsibility Area or Direct Protection Area (FRA or Federal DPA). If there is a question as to jurisdictional responsibility, the Grass Valley ECC can determine jurisdictional responsibility.¹³

¹³ Peter Bansen, Chief, Squaw Valley Fire Department, written communication, January 22, 2016.

Emergency Medical Response

The SVFD provides Advanced Life Support (ALS) medical response, but does not have ambulance service. Ambulance service to Olympic Valley is provided by North Tahoe FPD. The NTFPD provides fire and emergency services to approximately 31 square miles within the Tahoe Basin, from the California/Nevada border near Kings Beach to Tahoma, and also serves Alpine Meadows. NTFPD maintains 6 fire stations staffed by 50 uniformed and support personnel.¹⁴ In 2014, the NTFPD responded to 2,200 calls.¹⁵ NTFPD operates 7 paramedic ambulances, one of which has the capacity to carry up to 3 injured patients at one time.¹⁶

The SVFD ALS engine company responds within 4 to 5 minutes to calls within the Olympic Valley. The medic unit typically comes from NTPF Station 56 in Alpine Meadows, usually 1 to 1.5 minutes after the SVFD engine. However, according to the SVFD, the level of care is not based on when the ambulance arrives.¹⁷

VSVSP development would increase traffic on local roadways, which could increase the amount of time that an ambulance needs to travel to Squaw Valley or to take a patient to Truckee for hospital care. However, congestion is not expected to have a substantial effect on travel time. As an example, during the morning peak skier traffic period, the total effect of VSVSP traffic would be a 12-second increase in travel time from Truckee to Squaw Valley, based on the sum of roadway and intersection delays included in the LOS analysis. In the busier afternoon peak skier traffic period, the project would increase travel times from Squaw Valley to Truckee by 42 seconds. This corresponds to a 4 percent increase in travel time from Squaw Valley to Truckee in the afternoon, and 1 percent in the morning.¹⁸

Emergency Communication with the Public

Technological changes have provided distinct advantages for communicating to the public about emergencies. In the recent past, the most effective means of conveying emergency information to the residents of an area was the use of a 'reverse directory' listing of telephone numbers in order of street address. While that method is still available, current technology allows for telephone messages to be sent to all landline phones for a set range of street numbers on a specified range of streets. As the use of landline telephones declines, that method is becoming less useful, but for a community like Squaw Valley with a relatively stable long-term population, this technology can be effective. In addition to this technology, the SVFD uses its website and a text-messaging system called Nixle to disseminate information to community members who have subscribed to Nixle feeds for the 96146 zip code. The SVFD has found the Nixle system to be very effective and during the King Fire had over 700 people subscribing to the Nixle updates. Placer

¹⁴ North Tahoe Fire Protection District, *About Us*, accessed at <http://www.ntfire.net/about-us/>, April 6, 2016.

¹⁵ North Tahoe Fire Protection District, *Annual Report 2014*, page 16.

¹⁶ North Tahoe Fire Protection District, *Annual Report 2014*, pages 18 and 19.

¹⁷ Peter Bansen, Chief, Squaw Valley Fire Department, electronic communication, April 7, 2016.

¹⁸ Ascent Environmental, *Final Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 3.2.5-551.

County uses a similar system called Placer Alert or Everbridge.¹⁹

Social media sites, such as Facebook or Twitter, can be used effectively as well, but must be managed closely to prevent the dissemination of inaccurate information. Because the ability to push information through Nixle is limited to bona fide emergency services agencies, registered and qualified in advance, the credibility of a Nixle or Everbridge message is considerably greater for circulating the most current and up-to-date emergency information. For that reason, the SVFD uses Nixle as the primary method of disseminating emergency information and providing links to a more detailed, explanatory web page. Similarly, Placer County will post emergency information to its website in coordination with County emergency response departments (e.g., OES, Sheriff's Department).¹⁹

In addition, the SVFD is considering installation of permanent, changeable message boards (CMB) along Squaw Valley Road and a low power FM radio transmitter that can broadcast a repeating loop of emergency information. The two work best in tandem - the CMB showing a message and the frequency of the FM radio broadcast and the FM transmitter providing more detailed information or instructions. Portable CMB's and a portable low-power transmitter are available from North Tahoe Fire District, but in a significant fire situation, it's very likely that those assets would already be in use and would be unavailable to borrow, so the SVFD has applied for grant funding for the CMB's and will be evaluating costs and product specifications with which to write a grant for a low power FM transmitter.¹⁹

Project Evacuation Route

Evacuation from the project subdivisions and commercial facilities would be accomplished in the reverse of the route of entry. The evacuation route for the main Village area and the East Parcel would be Squaw Valley Road east to SR89 (see Figure 2-3). Evacuees would turn onto SR 89 in the direction indicated by law enforcement, which would be directing traffic control during an evacuation.

¹⁹ Peter Bansen, Chief, Squaw Valley Fire Department, written communication, January 22, 2016.

The Village at Squaw Valley- Evacuation Route Exhibit

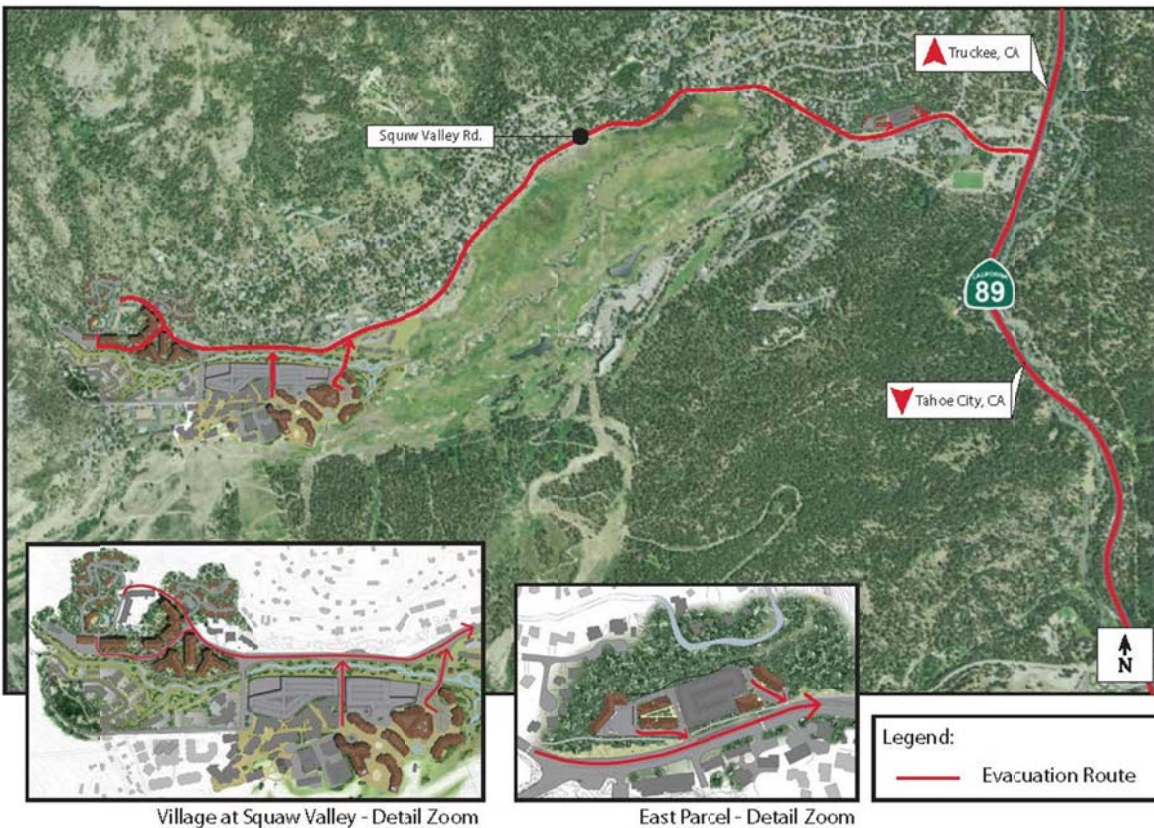


Figure 2-3 Emergency Evacuation Route

Source: SVRE, LLC

2.6.2 Other Resources

Mutual Aid

The SVFD is a member of the Eastern Placer County Joint Powers Authority (JPA), along with Alpine Springs Community Service District, North Tahoe Fire Protection District, Tahoe City Public Utility District, Placer County Service Area 16, Placer County Service Area 21, Meeks Bay Fire Protection District, and Donner Summit Public Utility District. The JPA provides mutual aid, as well as a shared radio repeater and equipment purchases, between other member districts. In addition, the Valley and surrounding forested areas are classified as a State Responsibility Area and receive fire protection assistance from the California Department of Forestry and Fire Protection (CAL FIRE).

Eastside Emergency Evacuation Plan

Placer County adopted an update to the East Side Emergency Evacuation Plan in March 2015 to address physical evacuation of one or more communities in unincorporated eastern Placer County. The Plan covers the portion of the county from just west of Cisco Grove to the Nevada State line, but does not include areas that are within the Tahoe National Forest or the Lake Tahoe Basin Management Unit. The Plan prescribes specific responsibilities for first responders and other agencies that would be involved in an emergency evacuation, defines typical

evacuation scenarios, establishes incident command responsibilities, and addresses traffic control, transportation, resources and support, communications, care and shelter and animal services. A number of public agencies were involved in the development of the plan, including the Placer County Office of Emergency Services, Placer County Sheriff's Office, the Nevada County Sheriff's Office, Town of Truckee, five eastern Fire Protection Districts/Departments (including Squaw Valley Fire Department), California Highway Patrol, US Forest Service, American Red Cross, and Nevada County Office of Emergency Services.

The full Eastside Emergency Evacuation Plan is provided in Appendix B.

2.7 Current Fire Protection Status within the VSVSP Area

As discussed above, fire protection services are provided by Squaw Valley Fire Department (SVFD), which is located approximately 1.5 miles east of the main Village area. The main route to the plan area for fire and emergency personnel is Squaw Valley Road. From Squaw Valley Road, there are two secondary roads into the Village Core; Far East Road and Village East Road. Chamonix Place, off Squaw Valley Road, provides initial access to the Village Neighborhood. The East Parcel is located directly across Squaw Valley Road from the SVFD.

Water for fire suppression is currently provided via a 1.0 million gallon tank operated by the Squaw Valley Public Service District (SVPSD). Water lines and fire hydrants are located throughout the developed portions of the plan area.

More recently constructed buildings have sprinkler systems. However, some older buildings do not have sprinklers.

Squaw Valley complies with defensible space and fuel management provisions. However, most of the plan area is either paved or covered in buildings. There is relatively little forest within the plan area.

The large surface parking lots that provide day-skier parking have been designated by the SVFD as a shelter in place location. The SVFD Wildland Fire Evacuation flyer instructs people to drive their cars to the parking Squaw Valley parking lot if it is not possible to leave the Valley.

2.8 Law Enforcement

General law enforcement for Squaw Valley is provided by the Placer County Sheriff's Department. The California Highway Patrol provides traffic-related enforcement services. The Tahoe Substation in Tahoe City (2501 North Lake Boulevard) is the closest Placer County Sheriff's substation, approximately 2.5 miles north from the intersection of SR 89 and SR 28, and approximately 7 miles from the main Village area. Current staffing at this station includes one field operations lieutenant, 18 patrol deputy positions, six patrol sergeants, four detectives, one detective sergeant, one problem-oriented deputy (neighborhood disputes and Placer County

code violations), one administrative sergeant, two jail deputies, one evidence technician, two community services officers, and five professional staff.²⁰

2. 9 Transit Resources and Agencies

The Eastside Emergency Evacuation Plan indicates that transit vehicles may be used to evacuate those who do not have their own vehicles. If transit vehicles are available during evacuations, evacuation bus stops would be identified.

There are several transit service providers that serve the Squaw Valley, Truckee, Tahoe City and environs. Tahoe Area Regional Transit (TART), operated by Placer County, connects Squaw Valley with Truckee and Tahoe City. The SR 89 route operates on a daily basis, year-round from approximately 6 a.m. to 6 p.m. TART also provides other transit routes/services in the vicinity including the TART Mainline, which operates along SR 28 and SR 89 between Incline Village and Tahoma. This route offers connections with the Highway 89 route at the Tahoe City Transit Center. An additional bus is typically provided on the peak AM commute run on busy winter days to expand capacity.

TART has a total of 17 busses in the current fleet with a capacity of 30 to 38 passengers per vehicle. The total seating capacity of the entire fleet is 602 passengers.²¹

The Truckee North Tahoe Transportation Management Association (TNT-TMA), provides evening service connecting Squaw Valley with the North Shore of Lake Tahoe, called the “Night Rider” in both summer and winter.

The free North Tahoe-Truckee Free Ski Shuttle operates on weekends and holidays, serving the majority of ski resorts on the north shore of the Tahoe Basin. The service consists of pre-scheduled pick-up (at major lodging areas and key attractions) and resort drop-off locations.

Squaw Valley Resort operates the Squaw Valley-Alpine Meadows Express Shuttle, which operates daily between the Squaw Valley and Alpine Meadows ski resorts. The Village at Squaw Valley also provides complimentary shuttle service between the Resort at Squaw Creek and the Squaw Valley Ski Resort which is provided to guests of both resorts. The current Squaw Valley fleet includes two 29-passenger shuttles, three 25-passenger busses and one 20 passenger ADA-accessible shuttle. The Alpine Meadow fleet includes two 49-passenger shuttles, four 25-passenger shuttles and one 10-passenger van. Total capacity for the combined fleets is 364 passengers.

The North Lake Tahoe Water Shuttle transports passengers across Lake Tahoe with stops at Tahoe City, Homewood, and Carnelian Bay.

Shuttle service is also provided to other parts of the Lake Tahoe (via TART route connections and the North Lake Tahoe Water Shuttle), and the Reno Tahoe International Airport via the North Lake Tahoe Express Shuttle.

²⁰ Ascent Environmental, *Village at Squaw Village Specific Plan Draft Environmental Impact Report*, May 2015, page 14-12.

²¹ Gordon Shaw, LSC Transportation Consultants, Inc., electronic communication, April 8, 2016.

2.10 Seismic and Geologic Hazards

The plan area is located in a potentially active seismic area and has experienced moderate ground shaking from historic earthquakes. The plan area lies within the Western Nevada Seismic Zone (WNSZ), a poorly defined 150-mile-long shear zone with a system of strike slip and dip slip faults. The WNSZ covers the eastern portion of the Sierra Nevada and the western portion of Nevada, and is designated as a Type C source (i.e., with low rate of slip and low rate of recurrence).²²

The plan area is not located in a designated Alquist-Priolo active fault zone; however, several active and potentially active faults are located in the region.²³ No faults are mapped as crossing or trending towards the East Parcel, so the surface rupture potential at that location is considered low²⁴. There is, however, a high potential for the plan area to be subject to at least moderate shaking from earthquake activity one or more times over the next century. The probability of earthquake shaking (1 sec frequency) in the next 50 years in eastern Placer County along the SR 89 corridor between Lake Tahoe and Truckee is estimated to be 21 to 30 percent.²⁵

Four unnamed fault traces that cross Squaw Valley have been identified near and possibly through the main Village area²⁶ (see Figure 2-3). Two (Faults 3 and 4) of the four possible faults shown as crossing the plan area are considered to be pre-Holocene faults based on their poor geomorphic expression, irregular surface trace, relatively short and discontinuous extent, and lack of indications of Quaternary movement (the Quaternary Period extends from approximately 2.5 million years ago to present). Pre-Holocene faults show no signs of surface displacement within the Holocene epoch [past 11,000 years] and are not considered “active faults.” Faults 2 and 5, which also are shown as crossing the project site based on previous mapping, may also be pre-Holocene, but require further evaluation²⁷. Mitigation Measure 12-1 of the VSVSP EIR requires that additional evaluation be conducted, as discussed in more detail in Section 3.

2.11 Avalanche Hazards

Snow avalanches occur when load stress from accumulating new snow increases faster than strength develops in the underlying snow pack; commonly on steep slopes and especially where

²² Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 12-5.

²³ Holdrege & Kull, *Preliminary Geotechnical Engineering and Geologic Review for Squaw Valley Development Project*, November 29, 2011, page 10.

²⁴ Holdrege & Kull, *Preliminary Geotechnical Engineering and Geologic Review for Lot 4 Poulsen Property*, July 9, 2012, page 4.

²⁵ Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 12-9.

²⁶ Holdrege & Kull, *Fault Evaluation Project*, April 22, 2015, page 7.

²⁷ Holdrege & Kull, *Fault Evaluation Project*, April 22, 2015, page 9.

wind-drifting snow accumulates. Snow avalanches can occur either as loose slides or as slabs (which require a snow structure including a slab overlying a weak layer).²⁸

Squaw Valley is located in the coastal zone of the three snow avalanche climate zones of the western United States. It is characterized by mild temperatures, abundant heavy snowfall, a high density snow cover, and low temperature gradient in the snowpack. Coastal climates tend to have avalanches resulting from large snowfalls, but involve only the new snowfall. The maritime climate and snowpack pose a primary avalanche risk from large direct action avalanches resulting from intense, extended storms with both high rates and large amounts of precipitation and snowfall and accompanying high winds. Mid-winter rain on new snow layers over a deep snowpack could also produce deep slabs with both wide fracture lengths and long runout distances.²⁹

Several avalanche events associated with property loss, deaths, and injuries were reported in Placer County between 1960 and 2005, including a February 21, 2001, avalanche at Squaw Valley that resulted in two fatalities. Historically, avalanches in Placer County have occurred between December and March, following large snowstorms, and primarily on hill slopes between 30 and 45 degree angles. Several historic avalanche incidents have been recorded at Squaw Valley, but only the Poulsen Gully and Tram Face avalanche paths have the potential to extend into the main Village area. No avalanche paths are located on the East Parcel.

²⁸ Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 12-10.

²⁹ Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 12-9.

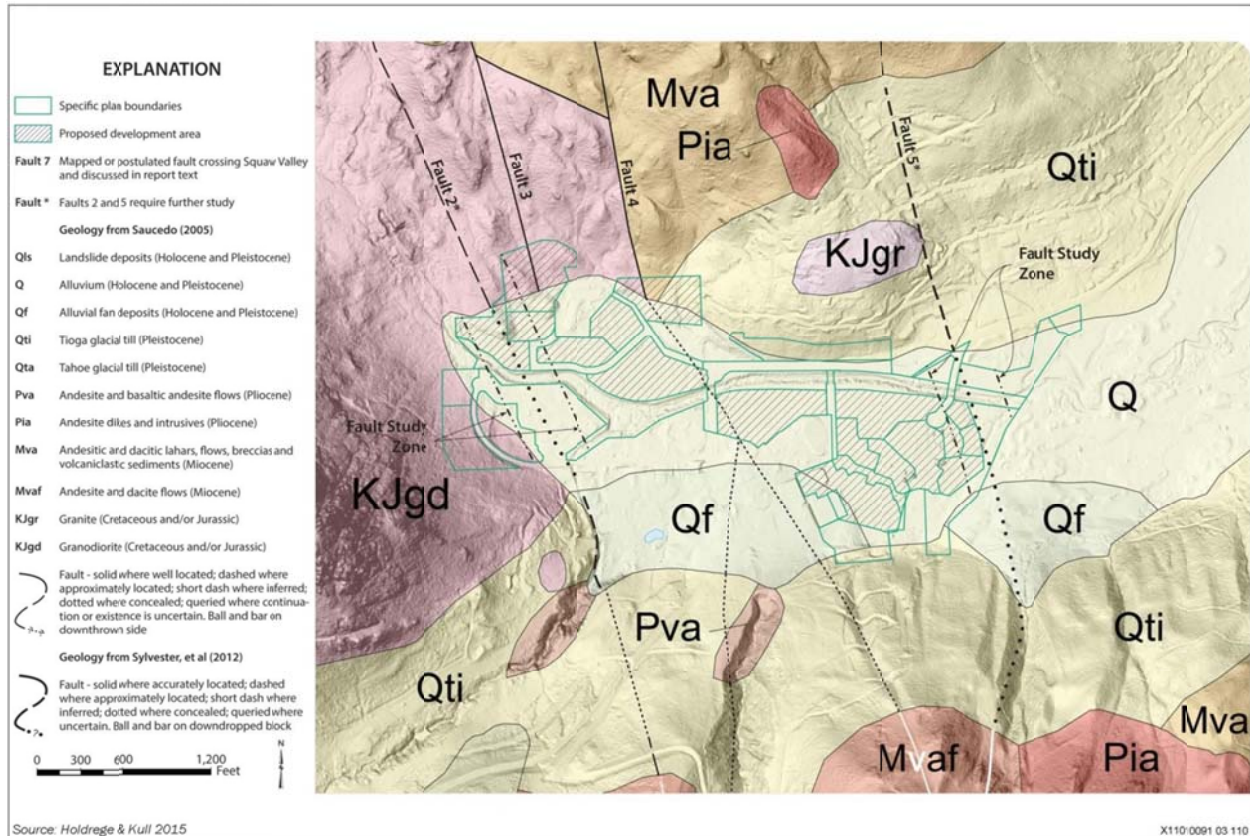


Figure 2-4 Potential Fault Locations

Source: Holdrege & Kull 2015

There is a long history of avalanche study and mitigation at Squaw Valley by the Professional Ski Patrol. The concept of active avalanche mitigation involves frequently triggering small slides to help reduce the build-up of snow that would result in large avalanches. Passive avalanche mitigation or protection involves avoidance of development or activities in avalanche areas or construction of snow stabilizing, resisting, or deflecting structures. The Squaw Valley comprehensive and detailed Avalanche Mitigation Program (AMP) conducted by the ski patrol includes detailed weather and snowpack observations, avalanche hazard assessment and forecasting, and avalanche mitigation measures (i.e., explosive triggering of small avalanches, skier compaction, and snow cat compaction). The AMP is periodically updated, and the Ski Patrol keeps abreast of developments in avalanche control through International Snow Science Workshop (ISSW) conferences and networking with other professionals involved in avalanche control. Recently, Squaw Valley Ski Resort installed a Gazex exploder, which can trigger avalanches by computer from remote locations, resulting in a safer and more efficient method of avalanche management. The Ski Resort is considering installing additional Gazex exploders.

A total of four Potential Avalanche Hazard Areas (PAHAs) located within the Squaw Valley Ski Resort boundary have the potential to affect the VSVSP project area. Three are located on the south slopes of the Resort and one is located on the western end of the Resort (see Figure 2-5). The PAHA exhibits prepared in support of the VSVSP DEIR replace prior County mapping of avalanche paths for the VSVSP area. These PAHAs are subject to avalanche occurrence with a

probability greater than one in one hundred (100) per year and include dry and wet snow avalanches and rain-on-snow triggered avalanche events. Two zones are identified:

Red (high hazard) Zones: Areas where avalanches that could damage standard wood-frame structures and/or bury automobiles are expected to occur with a probability of one chance in twenty per year.

Blue (moderate hazard) Zones: Areas where avalanches that could damage standard wood-frame structures and/or bury automobiles are expected to occur with a probability of less than one chance in twenty per year, but more than one chance in one hundred per year.

As shown in Table 2-1, Squaw Valley avalanche paths each have diverse starting zones, flow paths, and runout zone characteristics, reflecting both natural and managed conditions, and they have changed over the decades since initial ski run clearing associated with the 1960 Olympics.

As part of the VSVSP approvals, the revised PAHAs were adopted as a more precise and up-to-date reflection of hazard areas. No structures would be allowed within the high hazard areas, but structures could be built within the moderate hazard areas in accordance with County Building Code and policies of the VSVSP. As discussed in more detail in Section 3, a preliminary Avalanche Mitigation Plan has been prepared for the VSVSP (see Appendix D), which addresses placement of buildings in moderate hazards zones. In addition, Mitigation Measure 12-3 of the VSVSP EIR requires submittal of an Avalanche Hazard Mitigation Plan prior to approval of a small lot tentative map with land in an avalanche zone.

Source: Data provided by Heywood, 2014; adapted by SVRE, LLC 2016 (The VSVSP April 2016)

Table 2-1 Squaw Valley Avalanche Path Descriptions

Path Name	Starting Zone	Flow Path	Runout Zone
Poulsen Gully	Complex cirque with ridge up to 7,500 feet; heavily treed.	Heavily skied, narrow gully from 6,700 to 6,300 feet.	No large avalanches reaching below gully for decades, but extremely large event may runout to valley floor. This path extends into the VSVSP plan area on the east side.
Ski Jump	Created by clearing for 1960 Olympics; slowly reforested over the decades.	Treed ski runs with considerable skier traffic.	May still produce avalanches, but no longer expected to runout to valley floor.
Red Dog	Ridge up to 6,940 feet. Cleared for 1960 Olympics, but allowed to reforest in last couple decades.	Considerable skier traffic, but profile, smoothness, lack of trees allows long runout even from low volumes.	Anticipate potential runout distances to decrease, but still extends to 6,220 feet (south side of present 'Squaw Kids' building).
Exhibition Gully	Very large, entire cirque spanning both sides of Olympic Lady lift with multiple starting zones.	Directed along lift to gully then 2,000 feet of 10 degree profile to an earthen dam.	Not expected to extend below beyond the dam at 6,350 feet.
Powderhorn	West of the KT22 chair lift up to ridge.	Large and complex path, but runs northerly to the south fork of Squaw Creek and to the west, uphill of the base of KT22.	Modified path based on new analysis ends at the south fork of Squaw Creek.
Funitel	East-facing rocky slope with scattered trees ranging from 6,700 to 6,800 feet.	Directly under the Funitel, but not skied; open slope with scattered trees.	Large avalanches could extend to terminate near Granite Chief Way at 6,340 feet.
Tram Face (AKA 'Rock Pile')	Very steep, complex starting area.	Steep track under and north of the Tram, but not skied.	Possible for runout to dam Squaw Creek. This path extends into the VSVSP plan area on the west side.

Sources: Heywood 2014, Ascent Environmental, 2015

2.12 Flooding

The plan area is wholly contained within the Squaw Creek watershed, a sub-watershed of the middle Truckee River watershed. The Squaw Creek watershed drains from Squaw Creek to the

Truckee River. The Truckee River initial source is the outlet of Lake Tahoe and terminates at Pyramid Lake in Nevada.

Squaw Creek traverses across the northern portion of the plan area as a small seasonal stream, flowing from two tributaries, a north tributary and south tributary, which converge in the western portion of the Plan Area. It exits the plan area on the east, approximately 2,700 feet downstream of the confluence of the two tributaries. The existing floodplain for Squaw Creek varies in width from 50 feet to 250 feet within the plan area and is generally contained within the stream corridor. For reference, a floodplain is any area adjacent to a river, creek, lake, or other water source that is subject to being inundated by water during significant run-off events.

Portions of parking lots and open space within the plan area are located within the 100-year flood plain. The existing 100-year floodplain at the main Village area does not affect any existing structures, as the mapped inundation areas are parking lots and/or open space.

The VSVSP provides for restoration of Squaw Creek through the plan area, which will modify the 100-year floodplain boundaries and water surface elevations. Based on preliminary modeling, with completion of the creek restoration the 100-year floodplain would be confined to the creek channel and open space areas. The portions of the existing parking areas currently prone to flooding during the 100-year flood event would continue to be vulnerable to inundation until completion of the creek restoration element. No VSVSP buildings would encroach on the post-development floodplain, shown in Figure 2-6. However, there would be trails within the floodplain, so future trail users could be exposed to flood hazards on the trail segments along Squaw Creek. Mitigation Measure 13-8 of the VSVSP EIR requires that signage be provided along the trail within the creek corridor to warn trail users of the potential for flooding.

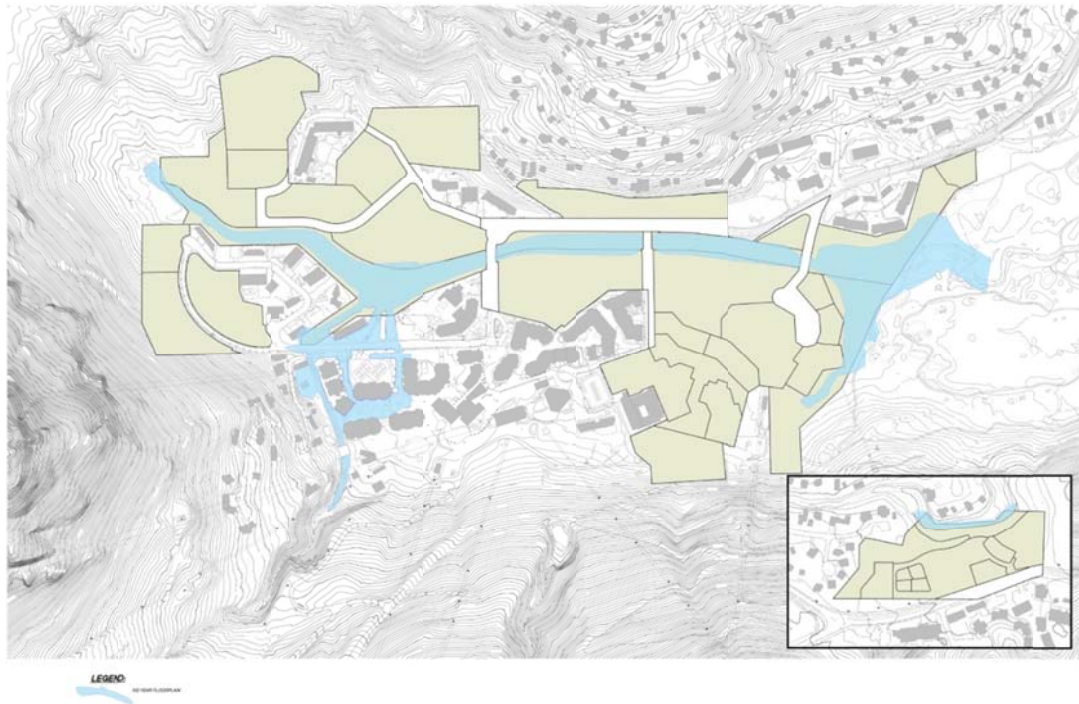


Figure 2-6 Post Development Unmitigated 100-year Floodplain

Source: MacKay & Soms 2016; adapted by SVRE, LLC (The VSVSP April 2016)

2.13 Hazardous Materials Handling and Response

Placer County Environmental Health Department is responsible for responding to hazardous materials incidents within Placer County. Placer County maintains an East Side Haz-Mat team, which is a cooperative effort of the eastern Placer fire departments, with a dedicated Haz-Mat response and command vehicle housed at Truckee Fire Station 96.³⁰ As stated above, the SVFD has staff that are Haz-Mat certified.

Squaw Valley does not have access to natural gas, so propane is the primary heating fuel for residences and commercial operations. In response to a high number of propane-related issues in 1993, due to a heavy winter, the SVFD inspected every propane tank, contacted property owners who had deficient assemblies, and achieved 100% compliance by the following winter. SVFD continues to inspect residential tanks as part of its defensible space program. Propane tanks at commercial uses are inspected as a component of an annual fire and life safety inspection program. There has not been a widespread propane tank issue since 1993.³¹

Propane is currently the main source of energy for heating and hot water in the plan area, and will continue to be used under the VSVSP. The existing tanks are owned and serviced by Truckee Tahoe Propane/Amerigas. The tanks are routinely serviced, and inspected when refilled. Snow removal is conducted to maintain access to the tank. Amerigas also inspects the buried propane line between High Camp (on the mountain) and the base area once a year.

The Ice Rink uses Freon for refrigeration. The refrigeration unit is serviced at least twice a year, prior to opening and upon closing.

³⁰ Peter Bansen, Chief, Squaw Valley Fire Department, electronic communication, April 7, 2016.

³¹ Peter Bansen, Chief, Squaw Valley Fire Department, electronic communication, April 7, 2016.

3.0 REGULATORY REQUIREMENTS

Development under the VSVSP will be subject to federal and state laws, county ordinances and regulations and mitigation measures identified in the Draft EIR. The key provisions that would address hazards and emergencies within the plan area are summarized below, and, in some cases, reproduced in the appendix.

3.1 Fire Prevention and Response

3.1.1 California Public Resources Code Section 4291

California Public Resources Code (PRC) Section 4291 sets forth minimum fire safety standards for development in or adjoining mountainous areas and forest-covered lands. Provisions that would apply to development under the VSVSP include:

- ▲ Defensible space must be maintained 100 feet from the side, front and rear of a structure, or up to the property line where the property line is less than 100 feet from the structure;
- ▲ Any portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe must be removed;
- ▲ Any tree, shrub, or other plant adjacent to or overhanging a building must be free of dead or dying wood;
- ▲ The roof of any structure must be free of leaves, needles, or other vegetative materials;
- ▲ Prior to constructing a new building, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable state and local building standards.
- ▲ Prior to final inspection approval of any building, the Fire Department must inspect the building and the fire suppression facilities to certify that the fire suppression improvements comply with Building Code and fire department service requirements.

Violation of the above provisions may result in a fine. PRC Section 4291 also requires the Department of Forestry and Fire Protection (CalFire) to develop, periodically update and post on the internet a guidance document regarding fuels management. The full text of the measure is provided in Appendix C.

The SVFD has had a defensible space program for the past 20 years. This program entails a physical inspection of every property in the department's jurisdiction for compliance with California's defensible space laws. Properties that are not in compliance at the time of the first

inspection receive follow-up visits and notices until they are brought into compliance. This ensures that every property complies with the defensible space regulations every year.³²

3.1.2 Government Code Section 66474.2

Before approving a tentative map (or a parcel map where a tentative map is not required) for an area located in a SRA or a very high fire hazard severity zone, the legislative body of the county must find that: the design and location of each lot in the subdivision, and the subdivision as a whole, are consistent with any applicable regulations adopted by CAL FIRE pursuant to PRC Sections 4290 and 4291; structural fire protection and suppression services will be provided to the subdivision by a county, city, special district, or other entity organized solely to provide fire protection services, or CAL FIRE; and ingress and egress meets the road standards for fire equipment access adopted pursuant to PRC Section 4290 and any applicable local ordinance.³³

3.1.3 Placer County General Plan

The Health and Safety Element of the *Placer County General Plan* (2013) includes the following policies regarding fire hazards within Placer County:

- ▲ **Policy 8.C.1.** The county shall ensure that development in high-fire-hazard areas is designed and constructed in a manner that minimizes the risk from fire hazards and meets all applicable state and county fire standards;
- ▲ **Policy 8.C.2.** The county shall require that discretionary permits for new development in fire hazard areas be conditioned to include requirements for fire-resistant vegetation, cleared fire breaks, or a long-term comprehensive fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas;
- ▲ **Policy 8.C.3.** The county shall require that new development meets state, county, and local fire district standards for fire protection;
- ▲ **Policy 8.C.4.** The county shall refer development proposals in the unincorporated county to the appropriate local fire agencies for review for compliance with fire safety standards. If dual responsibility exists, then both agencies shall review and comment relative to their area of responsibility. If standards are different or conflicting, the more stringent standards shall be applied;
- ▲ **Policy 8.C.5.** The county shall ensure that existing and new buildings of public assembly incorporate adequate fire protection measures to reduce the potential loss of life and property in accordance with state and local codes and ordinances.

³² Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 15-4.

³³ Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 15-12.

3.1.4 Placer County Fire Code

Placer County has adopted the 2013 California Building Code, Title 24 of the California Code of Regulations, and the 2013 Fire Code (Sections 15.04.700 and 15.04.710 Fire Code Amendment). The Fire Code addresses emergency access, access gates, sprinkler systems, fire alarms within buildings, and construction of access roads to accommodate fire apparatus. The Fire Code requires that an automatic fire sprinklers and/or fire extinguishing system be installed throughout new one- and two-family dwellings and commercial buildings 3,600 square feet and larger.

3.1.5 SVPSD Water Code

The SVPSD Water Code Section 7.09 requires that water distribution systems meet fire flow demands, as defined by the most recent version of the Fire Code. Provisions for fire hydrants are also included.

3.1.6 SVPSD Fire Prevention Code

The SVPSD Fire Prevention Code incorporates the most recent California Fire Code, the most recent National Fire Protection Association National Fire Codes and Standards, and PRC Section 4291 (discussed above). The Fire Prevention Code requires that an automatic fire sprinklers and/or fire extinguishing system be installed throughout new structures, with exceptions for one- and two-family dwellings and replacement of a demolished building.

3.1.7 Squaw Valley Wildland Fire Evacuation Plan

Access to Squaw Valley is limited by the configuration of the valley and the Truckee River canyon; there is only one means of ingress and egress, and a single road (SR 89) connects Squaw Valley to adjoining communities. Squaw Valley has an established *Wildland Fire Evacuation Plan* (SVPSD 2014) that includes evacuation protocol, guidance for preparing homes for evacuation, and evacuation routes. The plan calls for evacuating via Squaw Valley Road to SR 89; or, if it is not possible to leave the Valley, driving to the Squaw Valley Ski Resort parking lot to shelter in place.

3.1.8 VSVSP EIR Mitigation Measures

The VSVSP EIR includes mitigation to ensure that the SVFD is adequately staffed and has the facilities necessary to meet the demand for fire protection services resulting from development of the VSVSP; that construction activities do not interfere with emergency access; and to ensure that buildings are designed and constructed in compliance with state law. The text of the mitigation measures is provided below:

Mitigation Measure 9-8: Develop a Construction Traffic Management Plan

Prior to recordation of the first Small Lot Final Map, the project applicant shall prepare a Construction Traffic Management Plan (CTMP) to the satisfaction of the Placer County Department of Public Works and the Engineering and Surveying Division. The plan shall include (but not be limited to) items such as:

- ▲ guidance on the number and size of trucks per day entering and leaving the project site;
- ▲ identification of arrival/departure times that would minimize traffic impacts;

Emergency Preparedness and Evacuation Plan

- ▲ approved truck circulation patterns;
- ▲ locations of staging areas;
- ▲ locations of employee parking and methods to encourage carpooling and use of alternative transportation;
- ▲ methods for partial/complete street closures (e.g., timing, signage, location and duration restrictions);
- ▲ criteria for use of flaggers and other traffic controls;
- ▲ preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;
- ▲ monitoring for roadbed damage and timing for completing repairs;
- ▲ limitations on construction activity during peak/holiday weekends and special events;
- ▲ preservation of emergency vehicle access;
- ▲ coordinate with applicants of other projects under construction concurrently in Squaw Valley to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences of similar signage), and maximize effectiveness of traffic mitigation measures (e.g., joint employee alternative transportation programs);
- ▲ removing traffic obstructions during emergency evacuation events; and
- ▲ providing a point of contact for Squaw Valley residents and guest to obtain construction information, have questions answered, and convey complaints.

The CTMP should be developed such that the following minimum set of performance standards are achieved throughout project construction. It is anticipated that additional performance standards will be developed once details of project construction are better known.

1. Delivery trucks do not idle/stage on Squaw Valley Road.
2. Squaw Valley Road does not feature any construction-related lane closures on peak activity days.
3. All construction employees shall park in designated lots owned by Squaw Valley Resort.
4. Roadways, sidewalks, crosswalks, and bicycle facilities shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.

Mitigation Measure 14-7b: Provide additional fire protection facilities and staffing

To ensure that there is sufficient funding and resources to maintain desired response times, the project applicant shall enter into a development agreement with the SVPSPD containing defined benchmarks for staffing, facilities, and equipment at various phases of project

development. A copy of this agreement shall be provided to Placer County prior to approval of the initial subsequent Tentative Map. If benchmarks cannot be met with funding from development-generated fees and taxes, the project applicant shall provide the additional funding needed to meet the benchmarks to ensure that adequate levels of service are maintained.

The following development benchmarks that trigger staffing additions may occur in any order, but the staffing increases outlined in the five steps below shall be followed in order, until the fifth staffing measure is met.

- ▲ development in Lots 1 through 8 triggers a staffing mitigation phase (described below),
- ▲ a single condo hotel on Lot 1 triggers a staffing mitigation phase,
- ▲ a single condo hotel on Lot 13 triggers a staffing mitigation phase,
- ▲ both condo hotels in Lots 14 and 15 cumulatively trigger a staffing mitigation phase,
- ▲ residential development at 25 percent plus any single condo hotel triggers a staffing mitigation phase, or
- ▲ medium-density residential development in Lots 16 and 18 cumulatively trigger a staffing mitigation phase.

Fire Staffing Mitigation Phases:

1. Provide a career staffing level of four personnel on-duty 24/7/365 at the Certificate of Occupancy of the first of any of the development phases described above.
2. Provide one part-time firefighter on 52 weekends for 10 hours per day at the Certificate of Occupancy of the second of any of the development phases described above.
3. Add a second part-time firefighter on 22 weekends for 10 hours per day at the Certificate of Occupancy of the third of any of the development phases described above.
4. Add a fifth career position 24/7/365 and drop the part-time firefighter on 22 weekends for 10 hours per day at the Certificate of Occupancy of the fourth of any of the development phases described above.
5. When the last phase, that includes one or more hotels and 75 percent of the residential units, has already been built, add a sixth career position 24/7/365 and drop the part-time firefighter on 52 weekends.

Also included in the development agreement will be the provision for project applicant support of a new fire substation in the western Squaw Valley area. Support could consist of the provision of land within the Specific Plan area for the substation, provision of land elsewhere in the Village area, assistance with conversion of the "old" fire station on Chamonix Place to the substation, or other measures. The development agreement will include the condition that by the time 50 percent of any combination of the condo hotel units has been built, the SVFD will have the fire substation in place and active. The substation

will, at a minimum, have the capacity to house a two-person crew on weekends and peak activity holidays. The apparatus bay shall be large enough for one quick attack unit and one fire department reserve unit or specialty unit (two bays wide, one unit deep). The developer will be responsible for funding its equitable share of any gap in financing for the new fire substation, which is more specifically defined as its prorated share of the cost (based on qualified assessment benefit engineering) less incremental and cumulative tax revenues earned by the SVPD that are specifically related to development of the project that have not been employed in funding gaps for other required mitigation obligations of the project.

Mitigation Measure 15-6a: Verify compliance with CAL FIRE regulations, California Government Code 66474.02

To verify compliance with California Government Code 66474.02, and to support the County's ability to make findings required by 66474.01, with each application for a tentative map with land in a state responsibility area or a high fire hazard severity zone, the project applicant will provide the following information related specifically to the lands within the state responsibility area or a high fire hazard severity zone:

Documentation that the design and location of each lot in the subdivision, and the subdivision as a whole, are consistent with any applicable regulations adopted by the State Board of Forestry and Fire Protection pursuant to Sections 4290 and 4291 of the Public Resources Code.

Documentation that structural fire protection and suppression services will be available for the subdivision through any of the following entities:

A county, city, special district, political subdivision of the state, or another entity organized solely to provide fire protection services that is monitored and funded by a county or other public entity; or

The Department of Forestry and Fire Protection by contract entered into pursuant to Section 4133, 4142, or 4144 of the Public Resources Code.

Documentation that, to the extent practicable, ingress and egress for the subdivision meets the regulations regarding road standards for fire equipment access adopted pursuant to Section 4290 of the Public Resources Code and any applicable local ordinance.

3.2 Seismic Hazards

3.2.1 California Building Code

In California, seismic hazards are addressed primarily through building code requirements intended to ensure that new construction is built to withstand seismic activity likely to occur within the area being developed. The California Building Code (CBC) (California Code of Regulations, Title 24) is based on the International Building Code (IBC). The IBC Seismic Zone Map of the United States places Placer County, including the Project area, within Seismic Hazard Zone III, which corresponds to an area that may experience damage due to earthquakes having moderate intensities of V or more on Modified Mercalli Scale, which corresponds to maximum momentum magnitudes of 4.9 or greater. The CBC has been modified for California

conditions with more detailed and/or more stringent regulations. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC. The CBC identifies seismic factors that must be considered in structural design. Chapter 18 of the CBC regulates the excavation of foundations and retaining walls, while Chapter 18A regulates construction on unstable soils, such as expansive soils and areas subject to liquefaction.³⁴

The plan area is not in an Alquist-Priolo Earthquake Fault Zone, so PRC Sections 2621-630 would not apply to the VSVSP.

3.2.2 Placer County General Plan

The relevant policies of the *Placer County General Plan* (2013) with respect to hazards are listed below:

- ▲ **Policy 8.A.1.** The county shall require the preparation of a soils engineering and geologic seismic analysis prior to permitting development in areas prone to geological or seismic hazards (i.e., ground shaking, landslides, liquefaction, critically expansive soils, and avalanche);
- ▲ **Policy 8.A.2.** The county shall require submission of a preliminary soils report, prepared by a registered civil engineer and based upon adequate test borings, for every major subdivision and for each individual lot where critically expansive soils have been identified or are expected to exist;
- ▲ **Policy 8.A.7.** In areas subject to severe ground shaking, the county shall require that new structures intended for human occupancy be designed and constructed to minimize risk to the safety of occupants;
- ▲ **Policy 8.A.9.** The county shall require that the location and/or design of any new buildings, facilities, or other development in areas subject to earthquake activity minimize exposure to danger from fault rupture or creep;
- ▲ **Policy 8.A.10.** The county shall require that new structures permitted in areas of high liquefaction potential be sited, designed, and constructed to minimize the dangers from damage due to earthquake induced liquefaction;
- ▲ **Policy 8.A.11.** The county shall limit development in areas of steep or unstable slopes to minimize hazards caused by landslides or liquefaction.

3.2.3 VSVSP EIR Mitigation Measures

As discussed in Section 2, there are two fault traces that are shown to run through or near the plan area. The VSVSP EIR identified Mitigation Measure 12-1, reproduced below, to determine the location of the faults and determine whether they are active. If active faults are present, new construction would be set back from the fault to avoid impacts from fault rupture.

Mitigation Measure 12-1: Prepare final fault evaluation and implement recommendations

³⁴ Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 12-15.

As recommended by Holdrege & Kull's Preliminary Fault Evaluation Report (2012) and Fault Evaluation Report (2015), a focused study of the fault traces with uncertain activity status shall be made for any building or structure proposed within 200 feet of the mapped trace of Fault 2 or Fault 5, as identified in the Fault Evaluation Report. The focused study shall determine whether the on-site traces are 'active' and provide recommendations, including setbacks, or reconfigurations of building layouts if needed, and said recommendations shall be implemented during preparation of proposed improvement plans (see Mitigation Measure 13-2a in Chapter 13, "Hydrology and Water Quality," for more information on the content of Improvement Plans and the submittal and review process);

Prior to the recordation of the initial Small Lot Tentative Map for any parcel that proposes a habitable building or structure within 200 feet of the mapped trace of Fault 2 or Fault 5, including podium parking and parking structures, the project applicant shall prepare and submit a Final Fault Evaluation Report produced by a California Registered Civil Engineer or Geotechnical Engineer. The Final Fault Evaluation Report shall make recommendations which, at a minimum, include:

A written text addressing existing conditions, evidence suggesting geologically recent fault activity, all appropriate calculations, logs, cross sections, testing, and test results, fault trace location map(s) overlaid with proposed on- and off-site improvements, and site maps showing applicable building setbacks, or possible setbacks, based on various scenarios resulting from the final investigation;

In accordance with the Alquist-Priolo Earthquake Fault Zoning Act and standard engineering practice, appropriate setbacks shall be established to reduce any hazards related with any determined surface rupture risks;

The maps shall be of a suitable scale to accurately locate structure setbacks. Corresponding building setbacks shall also be shown on Final Subdivision Map(s);

Once approved by the Placer County Engineering and Surveying Division (ESD), two copies of the Final Fault Evaluation Report shall be provided to the ESD and one copy to the Building Services Division for its use.

3.2.4 Placer County Local Hazard Mitigation Plan

The Placer County 2010 Local Hazard Mitigation Plan (LHMP) addresses a wide range of potential natural hazards within the western and eastern county, including flooding, wildfire, drought, snow and other severe weather conditions as well as other hazards such as West Nile virus and earthquakes. The LHMP is currently being updated by the County, in partnership with other local agencies within the County, including cities and fire districts. The purpose of the update is to assess risk to natural hazards; implement actions to reduce future losses; and maintain eligibility for federal mitigation funds.

3.3 Avalanche Regulations

There are no federal or State laws governing development in avalanche zones. The relevant county policies and regulations are provided below.

3.3.1 Placer County General Plan

The relevant policies of the *Placer County General Plan* (2013) with respect to seismic and geologic hazards are listed below.

- ▲ **Policy 8.A.1.** The county shall require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geological or seismic hazards (i.e., ground shaking, landslides, liquefaction, critically expansive soils, and avalanche);
- ▲ **Policy 8.A.12 and 8.H.3 (the same language is in each policy).** The county shall not issue permits for new development in potential avalanche hazard areas (PAHA) as designated in the Placer County Avalanche Management Ordinance unless project proponents can demonstrate that such development will be safe under anticipated snow loads and conditions of an avalanche;
- ▲ **Policy 8.H.2.** The county shall require new development in areas of avalanche hazard to be sited, designed, and constructed to minimize avalanche hazards.

3.3.2 Squaw Valley General Plan and Land Use Ordinance

The SVGPLUO addresses risks from snow avalanche that could affect development³⁵. As part of the VSVSP approvals, the SVGPLUO was amended to include more recent avalanche maps (reproduced in Section 2 of this EPEP) for the plan area, and to revise text addressing avalanche hazards. As revised, the SVGPLUO provides the following limitations on development in Potential Avalanche Hazard Areas (PAHAs):

- ▲ High hazard zones: no buildings (with the exception of ski lift and snow-making infrastructure) or winter parking facilities should be permitted;
- ▲ Potential avalanche hazard zones: some structures may be designed to withstand the potential avalanche forces. Lodges, schools, residences, or any buildings which encourage a gathering of people should not be constructed in either of these areas, unless the structures can be shown to withstand the predicted avalanche, consistent with Placer County Code Article 12.40, Avalanche Management Areas, and measures are in place to ensure that people do not gather in the PAHA during periods with a substantial risk of an avalanche occurring in the area. Summer-only recreation facilities and summer-only parking could be considered;
- ▲ Further, site-specific study and review is necessary for any developments on sites in potential avalanche hazard areas to determine the most appropriate type of development, if any, and the most effective mitigation protective systems for the site, consistent with the Placer County Code, Article 12.40, Avalanche Management Areas.

The SVGPLUO also states that tree removal within any of the avalanche zones must be carefully planned to avoid the creation of long continuous openings that could enhance avalanche movement. This must be considered prior to the issuance of tree cutting permits within any area

³⁵ Placer County, *Squaw Valley General Plan and Land Use Ordinance*, 1983, page 13.

of Squaw Valley located within a PAHA. The construction of ski lifts and trails must carefully allow for avalanche control, where appropriate, and avoidance of some areas where control is not feasible.

3.3.3 Avalanche Management Ordinance

Article 12.40 of the Placer County Code addresses Avalanche Management Areas and establishes the Placer County Avalanche Management Ordinance. The Article describes PAHAs as those areas where, after investigation and study, the county finds that an avalanche potential exists because of steepness of slope, exposure, snow pack composition, wind, temperature, rate of snowfall, and other interacting factors. PAHA zones are established to identify those areas with avalanche potential based on approved studies that designate a minimum probability of occurrence greater than one in 100 per year, or where avalanche damage is documented.

Placer County limits construction in PAHAs and will not issue a building permit for construction in a PAHA without certifying that the structure will be safe under the anticipated snow loads and conditions of an avalanche.

Placer County Code (Section 12.40.040B) requires all persons who sell, rent, lease, or sublet any building within a PAHA, whether as an owner, agent, real estate salesperson, or broker representing an owner, shall:

Prior to occupancy by such tenant, provide to such person a copy of the notice specified in Section 12.40.040A (*reproduced as Exhibit 12-8 below*);

Prior to the sale of the property, provide full disclosure to the prospective buyer of the information contained in the notice specified in Section 12.40.040A (*reproduced as Exhibit 12-8 below*);

As required by the Placer County Code (Section 12.40.040A), post the following notice (*reproduced as Exhibit 12-8 below*) at a prominent location within the main winter entries of any building constructed within a PAHA.

3.3.4 Avalanche Mitigation Plan

A draft Avalanche Mitigation Plan was prepared for the project and is provided in Appendix D. The plan identifies parcels within the VSVSP that include a portion of an avalanche path, and explains that any development within an avalanche path must comply with the county avalanche ordinance, discussed above. The Avalanche Mitigation Plan also identifies additional steps to be taken by the owners/operators of any building located within a PAHA, including development of notification protocols, consultation with the SVFD and Squaw Valley Resort after snowfall events to determine whether there is a substantial risk of avalanche and closure of public areas if there is a risk of avalanche. In addition, provisions for notification of tenants, owners and guests of potential avalanche risks are identified. Finally, snow height clearances must be maintained at buildings within the PAHAs.

3.3.5 VSVSP EIR Mitigation Measure

The VSVSP EIR includes the following mitigation measure to ensure that final building design and construction is adequate to withstand the avalanche risk specific to the building site, that

avalanche risk is minimized through mountain operations, and that people would be informed of avalanche risk.

Mitigation Measure 12-3: Confirm implementation of avalanche hazard mitigation actions

Prior to approval of a Tentative Small-Lot Subdivision Map that includes lands within a PAHA, the project applicant shall provide the county a complete Avalanche Hazard Mitigation Plan. The plan shall be subject to review and approval by the county and the SVFD, and map approval will be conditioned on ongoing implementation of the plan. The Avalanche Hazard Mitigation Plan shall be reflected in Improvement Plans for areas within PAHAs (see Mitigation Measure 13-2a in Chapter 13, "Hydrology and Water Quality," for more information on the content of Improvement Plans and the submittal and review process) and supported by special avalanche hazard studies within the Geotechnical Engineering Report (see Mitigation Measure 12-2, above, which requires submittal of a final Geotechnical Engineering Report). The plan shall include all elements identified in the project specific Avalanche Hazard Study (Heywood 2014), as well as the following additional element:

On-site structures: The Building Services Division shall review building permit applications for structures within moderate PAHAs to confirm that they incorporate the structural specifications of the Geotechnical Engineering Report;

Up-slope conditions: Policy procedures and necessary agreements and permissions shall be included to ensure that operations on the ski terrain of Squaw Valley continue to implement avalanche mitigation programs and that slope development and management avoids the creation of new long continuous openings that could increase the potential for avalanche release and movement that could affect Specific Plan developments. No new large openings shall be created on slopes steeper than 30 degrees that could influence avalanche runouts leading to the Specific Plan area;

Persons in identified PAHA areas: Policy and practices shall be included to inform and educate workers, visitors and residents congregating in identified PAHA areas about the on-site geological hazards, particular snow avalanche, and to include mapped information and physical noticing in outside areas within a PAHA as well as indoor spaces as required by the existing county ordinance. Educational information shall include preparedness guidance and specific emergency response and evacuation instructions at locations within PAHAs.

Plans and measures shall be instituted to effectively provide notice of any urgent warnings, watches, or evacuation orders using multiple media and/or venues to communicate.

3.4 Flood Regulations

3.4.1 National Flood Insurance Act

The Federal Emergency Management Agency (FEMA) is tasked with responding to, planning for, recovering from and mitigating against disasters. Formed in 1979 to merge many of the separate disaster related responsibilities of the federal government into one agency, FEMA is responsible for coordinating the federal response to floods, earthquakes, hurricanes, and other natural or man-made disasters and providing disaster assistance to states, communities and individuals. The Federal Insurance and Mitigation Administration within FEMA is responsible for administering the National Flood Insurance Program (NFIP) and administering programs that provide

assistance for mitigating future damages from natural hazards. Established in 1968 with the passage of the National Flood Insurance Act, the NFIP is a federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the federal government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the federal government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. Placer County participates in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage.

3.4.2 FEMA Community Rating System

The Federal Insurance and Mitigation Administration (FEMA) has a voluntary program for recognizing and encouraging community floodplain management activities that exceed National Flood Insurance Program (NFIP) standards. Under the Community Rating System, NFIP policy holders within participating communities receive discounts on their flood insurance premiums. Ratings range from 1 to 9, with 1 being the highest and receiving the greatest discount. Most communities enter with a rating of 9 or 8, with discounts of 5 or 10 percent, respectively. Placer County is rated 5, so policyholders within the County receive a 25 percent discount.

3.4.3 Placer County General Plan

The Placer County General Plan includes the following flood-related policies:

- ▲ **Policy 4.E.11.** The county shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on adjoining lands in the unincorporated area and on properties in jurisdictions within and immediately adjacent to Placer County;
- ▲ **Policy 4.F.1.** The county shall require that arterial roadways and expressways, residences, commercial land industrial uses and emergency facilities be protected, at a minimum, from a 100-year storm event;
- ▲ **Policy 4.F.2.** The county shall recognize floodplains as a potential public resource to be managed and maintained for the public's benefit;
- ▲ **Policy 4.F.4.** The county shall require evaluation of potential flood hazards prior to approval of development projects. The county shall require proponents of new development to submit accurate topographic and flow characteristics information and depiction of the 100-year floodplain boundaries under fully developed, unmitigated runoff conditions;
- ▲ **Policy 4.F.5.** The county shall attempt to maintain natural conditions within the 100-year floodplain of all rivers and streams except under the following circumstances:

Where work is required to manage and maintain the stream's drainage characteristics and where such work is done in accordance with the Placer County Flood Damage Prevention Ordinance, California Department of Fish and Wildlife regulations, and Clean Water Act provisions administered by the U.S. Army Corps of Engineers.

- ▲ **Policy 4.F.8.** The county shall, where possible, view flood waters as a resource to be used for waterfowl habitat, aquifer recharge, fishery enhancement, agricultural water supply, and other suitable uses;
- ▲ **Policy 4.F.10.** The county shall preserve or enhance the aesthetic qualities of natural drainage courses in their natural or improved state compatible with flood control requirements and economic, environmental, and ecological factors;
- ▲ **Policy 4.F.13.** The county shall continue to implement and enforce its Grading, Erosion and Sediment Control Ordinance and Flood Damage Prevention Ordinance;
- ▲ **Policy 4.F.14.** The county shall ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the county's Land Development Manual.

3.4.4 Placer County Flood Control and Water Conservation District

The Placer County Flood Control and Water Conservation District (PCFCWCD) was formed by legislative resolution on Senate Bill 1312 and made effective on August 23, 1984. Formulation and guidance of the PCFCWCD was made by consensus of other participating local government agencies, including the Placer Resource Conservation District and Soil Conservation Service. The objective of PCFCWCD is to reduce the effects of flooding by maintenance of drainage basins and the use of detention/retention basins; offer technical support; perform studies, advise, and collect data; and coordinate with adjacent jurisdictions. The PCFCWCD's Stormwater Management Manual (1990) includes standards and methods for the planning and design of drainage and flood control infrastructure.

3.4.5 Squaw Valley General Plan and Land Use Ordinance

Section 139 of the SVGPLUO addresses setbacks for residential structures (Section 139.10) and commercial structures (Section 139.12), setbacks in areas where the floodplain has not been established (Section 139.14), and additional special setbacks (Section 139.10).

3.4.6 VSVSP EIR Mitigation Measure

The VSVSP EIR identifies the following measure to ensure that the drainage system is adequate, and to inform trail users of potential flood risks on trails located within the creek channel.

Mitigation Measure 13-8: Provide flood hazard prevention and signage.

The following measure shall be implemented to avoid the possibility of localized flooding within the on-site portion of the existing, interim, or developed drainage system:

During the Subsequent Conformity Review Process, the final Drainage Master Plan shall require, and all interim and final storm drainage improvements shall comply with refined, iterative modeling to properly size conveyance facilities including consideration and

avoidance of potential connections of mountain system drainage segments with 100-year conveyance capacity to any existing or proposed on-site system drainage segments of 10-year conveyance capacity.

The following measure shall be implemented to avoid or minimize the risk of flood hazards to recreational trail users:

Improvement Plans submitted to the county that include recreational facilities within the Squaw Creek 100-year flood hazard area (as identified by FEMA at the time of submittal) shall include identification of locations for installation of informational flood hazard warning signs. The signs shall including emergency response contact (e.g., 9-1-1) and shall be installed and maintained at key locations along trail segments within the 100-year floodplain boundary. The content and design of the signs shall be approved by the Placer County Office of Emergency Services.

3.5 Hazardous Materials Regulations

Federal laws require planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and if such materials are accidentally released, to prevent or mitigate injury to health or the environment. EPA is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations are primarily contained in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. The CFR includes laws related to the use, removal, and disposal of hazardous materials. Part 61 applies to removal of regulated asbestos containing materials in renovations and demolitions of commercial buildings. Management of hazardous materials is governed by the following laws.³⁶

The U.S. Department of Transportation regulates transport of hazardous materials between states and is responsible for protecting the public from dangers associated with such transport. The federal hazardous materials transportation law, 49 USC 5101 et seq. (formerly the Hazardous Materials Transportation Act 49 USC 1801 et seq.) is the basic statute regulating transport of hazardous materials in the United States. Hazardous materials regulations are enforced by the Federal Highway Administration, the Federal Railroad Administration, and the Federal Aviation Administration.³⁷

Propane distribution systems are regulated under Title 49 of the CFR. The California Public Utilities Commission's Utilities Safety Branch administers the propane safety program, scheduling each jurisdictional system for a safety audit at least once every five years to assure compliance with the federal pipeline safety regulations adopted by the California Public Utilities Commission under General Order 112-E.³⁸

36 Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 15-8.

37 Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 15-8.

38 Ascent Environmental, *Draft Environmental Impact Report, Village at Squaw Valley Specific Plan*, May 2015, page 15-9.

4.0 FIRE PREVENTION AND EMERGENCY PLANNING

This section addresses steps to be taken in the planning, design and construction of VSVSP development to minimize hazards and to facilitate access for emergency service providers. In addition, ongoing measures to reduce the risk of fire and other hazards are identified. The measures identified below are based on State law, VSVSP policies and standards, County regulations, VSVSP EIR mitigation, and best practices.

4.1 VSVSP Policies

The VSVSP establishes policies and development standards for development of the plan area including development requirements for specific land uses, community and building design, circulation, open space, services and utilities. Goals and policies addressing hazards and emergency response include:

Fire & Emergency Services

- ▲ **Policy CP-12:** Design the circulation system so that emergency vehicles can gain access quickly and safely, and in compliance with Squaw Valley Fire Department Standards.
- ▲ **Goal PU-1:** Create a comprehensive system of public services and utilities that accommodates the development within the Plan Area.
- ▲ **Goal PU-3:** Minimize the risk of loss of life, injury, and damage to property and resources resulting from unwanted fires.
- ▲ **Policy PU-5:** Provide for fire, police, and other community services adequate to serve the needs of the Plan Area.
- ▲ **Policy PS-1:** Comply with existing law and fire safety measures and protocols and work with law and fire on implementing a comprehensive security and emergency system that is calibrated to current and future protocols/emergency response systems.
- ▲ **Policy PS-2:** Incorporate design features that comply with applicable safety regulations to minimize injury risk within the improved areas of the Plan Area.
- ▲ **Policy PS-3:** Design and site all new structures in a manner that minimizes the risk from fire hazards and meets all applicable State, County, and Squaw Valley Fire District fire safety standards.
- ▲ **Policy PS-4:** Provide adequate fire protection services by working with fire department staff to determine if and when existing fire services or equipment need to be expanded to serve new phases of development.

The VSVSP also provides for a helicopter landing, or helipad, that is 100x100 feet square upon recordation of the map that creates the 300th bedroom in accordance with the project's Master Phasing Plan.

Avalanche

- ▲ **Goal RM-4:** Design and construct building and outdoor areas in a manner that protects people from avalanche hazards.
- ▲ **Policy AH-1:** No structures or winter parking areas shall be permitted in High Hazard avalanche areas.
- ▲ **Policy AH-2:** All structures constructed in areas identified as subject to a Moderate Hazard shall be designed to withstand avalanches, consistent with the Placer County Code.
- ▲ **Policy AH-3:** Outdoor gathering spaces, paths, and trails within the Moderate Hazard zone shall be designed so that access to those areas can be quickly and easily prohibited when there is a high risk of avalanche.
- ▲ **Policy AH-4:** Development shall cooperate with the Squaw Valley Ski Patrol as needed to disseminate information about avalanche risks and to limit access to areas that are considered to be of heightened risk of avalanche due to weather conditions.

Flooding

- ▲ **Policy PU-1:** Build the necessary water, wastewater, and drainage infrastructure and dry utilities to serve the Plan Area with each phase of development.

The VSVSP provides for drainage improvements that would accommodate storm flows from the plan area. Drainage improvements will be designed to conform to the Placer County Flood Control District's Stormwater Management Manual. In order to accommodate building envelopes, the 100-year floodplain would be reconfigured. No buildings would be located in the post-development 100-year floodplain.

4.2 Fire Prevention Measures

The VSVSP will incorporate a wide range of fire prevention measures, including physical measures, such as infrastructure sized to provide adequate fire flow, emergency vehicle access, fire-resistant building materials, and maintenance of defensible space. In addition, the EPEP includes provisions for staff training and coordination, staff and guest education and coordination with emergency service providers in order to prepare for a wildland fire. These measures are discussed in more detail below.

4.2.1 Water Supply and Fire Flow

Water for fire suppression is currently provided via a 1.0 million gallon tank operated by the Squaw Valley Public Service District (SVPSD). As part of the VSVSP, a second 750,000 gallon tank will be developed and will sit adjacent to the existing 1.0 million gallon tank. The tank will be constructed prior to or concurrent with the Final Map that records the 600th bedroom

The two tanks together are anticipated to provide sufficient pressure via gravity flow and capacity to store water for peak day demands plus fire flows for the plan area and existing development (MacKay and Soms 2014).

4.2.2 Fire Apparatus and Emergency Access

The main route to the plan area for Fire and Emergency personnel is Squaw Valley Road, which connects to SR 89 at the east end of the Valley. SR 89 runs north to south and connects to other regional serving roadways and state highways in Truckee and in Tahoe City. From Squaw Valley Road, there are two secondary roads into the Village Core: Far East Road and Village East Road. Chamonix Place, off Squaw Valley Road, provides initial access to the Village Neighborhood. The East Parcel is located directly across Squaw Valley Road from the SVFD.

Policy CP-12 in The Village at Squaw Valley Specific Plan states that vehicular circulation within and around the plan area shall be designed in compliance with Squaw Valley Fire Department standards so that emergency vehicles may gain access to the plan area quickly and safely. Additionally, Emergency Vehicle Access (EVA) routes shall be incorporated within the plan area to provide secondary access to structures or land uses when needed.

The following standards shall apply to development in the plan area in order to ensure that emergency vehicles can easily access all areas within the plan area.

Road Widths and Circulation

EVAs shall meet the following standards:

- ▲ Roads that are considered EVAs shall be no less than 24 feet wide with a minimum pavement width of 20 feet with 2 feet of shoulders on both sides.
- ▲ Pedestrian and bike paths that are to be utilized as EVAs shall have a minimum pavement width of 16 feet with 2 feet of shoulders on both sides.
- ▲ Curves in EVA lanes shall have as a minimum, 50 foot outside and 30 foot inside radius curves to address fire apparatus turning movement.
- ▲ Pavement section for EVA shall be a minimum of 3 inches of standard asphalt or asphaltic concrete on a minimum of 8 inches of compacted road base.
- ▲ Subgrade material shall be compacted to 95% relative compaction.

Gates

Access gates shall comply with applicable fire code requirements. Public roads will not be gated. Any gates on private roads or driveways will comply with state and SVFD standards for electric gates, and be subject to SVFD review.

Building Identification

A building identification (i.e., addressing) plan that emphasizes visibility for emergency responders shall be developed and submitted to SVFD for approval.

Helipad

In support of advanced emergency medical services related to resort activities and the village expansion, a dedicated helipad for patient evacuation to regional emergency care providers shall be established. The helipad will be a minimum of 100 feet by 100 feet and shall be conveniently located to assure timely access by ambulance and other emergency vehicles. It is anticipated that the helipad will be a raised structure over the Preferred Parking lot adjacent to

the Member's Locker Room; however, it may be developed in another location that meets the minimum size requirements and has acceptable EVA access.

4.2.3 Building Fire and Ignition Resistance and Fire Protection Systems

The Village at Squaw Valley Specific Plan will be developed in compliance with all applicable and current local and state building and fire codes and their associated amendments, as adopted by Placer County. Currently, Placer County has adopted the 2013 California Building Code, Title 24 of the California Code of Regulations, and the 2013 Fire Code (Sections 15.04.700 and 15.04.710 Fire Code Amendment).

Consistent with the California Building and Fire Code, the following measures will be used to minimize the potential for structure ignition:

- ▲ ignition and ember resistant building materials;
- ▲ fire protection systems; interior sprinklers;
- ▲ spark arrestors on all chimneys and vents, outdoor fireplaces;
- ▲ private barbeques will be prohibited. Mobile barbeques may be used for special events;
- ▲ designated sheltering structure(s); and
- ▲ compliance with all other applicable California Building Code requirements.

4.2.4 Defensible Space/Vegetation Management

California law (PRC 4291) requires any person who owns, leases, controls, operates or maintains a building or structure in an adjoining mountainous area; lands covered in forest, brush, or grass; or any land that is covered with flammable material and is within the State Responsibility Area to create 100 feet of defensible space around the perimeter of all buildings (or to the property line if less than 100 feet). The VSVSP plan area is in a SRA, and so must comply with these measures.

All properties within the plan area that abut vegetated or natural open space as defined above will abide by California's defensible space laws for fuel management around the perimeter of each building by implementing the following measures.

Defensible Space BMPs

- ▲ Rake and remove pine needles to 100 feet from structure or to property line.
- ▲ Remove accumulated pine needles, leaves and other vegetation from roofs.
- ▲ Cut grasses, thin brush and other flammable vegetation to 100 feet from structure or property line.
- ▲ Clear flammable debris such as vegetation piles and construction debris from around the structure.
- ▲ Remove brush, limbs, grass, needles and debris 10 feet in all directions around propane tanks.

- ▲ Trim mature trees a minimum of 10 feet from the ground.
- ▲ Remove dead tree limbs touching or overhanging roofs and decks.
- ▲ Remove all dead and dying trees from the property.

4.2.5 Shelter in Place

In the event of certain emergencies, it may be safer to “shelter-in-place”, rather than to leave the valley. For example, if a chemical release occurs, it may be safest for people in the area to remain indoors. Or, if a fire is present at the east end of the valley, the SVFD may direct people to remain on the west end. Currently, the SVFD identifies the Squaw Valley Resort parking lots as the shelter-in-place location for valley residents. When the parking lots are replaced with parking garages, the garages will continue to serve as a shelter-in-place option.

In addition, shelter-in-place options shall be provided within VSVSP buildings with capacity for, at a minimum, VSVSP property owners, guests and employees. Two shelter-in-place gathering areas shall be established as part of the VSVSP. Within the Village Core, the shelter-in-place location will be defined as the first resort-residential building constructed within the area, excluding buildings on lots 6 and 7 due to their scale and occupancy limitations. An additional shelter-in-place gathering area would be located within the Village Neighborhood. This will be either building 13 or 15, whichever is developed first.

Upon construction of a building that will serve as a shelter-in-place, VSV staff will conduct an exercise to test the protocols for directing guests and staff to the shelter-in-place location, and managing the shelter-in-place during an emergency. Based on this exercise, the protocols will be revised as needed.

The International Building and Fire Codes focus on built-in fire protection features such as automatic sprinkler systems, fire-resistance-rated building materials, applications and assemblages to prevent fire spread, and properly designed egress systems.³⁹ Additionally, the exterior of designated shelter-in-place buildings will be designed and constructed with all non-combustible materials and have air filtration and ventilations systems designed to handle a shelter-in-place situation wherein a large number of people may be gathered inside the building and a potentially hazardous atmosphere (i.e. air quality) persists outside the building. Occupancy duration during a shelter-in-place event would be expected to be less than 24 hours. The maximum occupancy for shelter use for each building shall be determined by the local Fire Marshall and the normal maximum occupancy and the shelter maximum occupancy shall be clearly posted.

Shelter-in-place buildings will be clearly identified as “Emergency Shelter-In-Place” areas. Emergency supplies, including food, water, blankets, and first aid supplies shall be kept on-site and replaced as needed. All property owners will receive an information packet that identifies the shelter-in-place location and the situations in which shelter-in-place may be used.

³⁹ 2013 California Fire Code

4.2.6 Staff Preparedness

The Village at Squaw Valley Specific Plan envisions development by multiple developers; therefore, there will be multiple owners and managers of properties within the plan area. However, it is critical that all properties work in accord to ensure the successful implementation of the EPEP. The master developer will appoint a Chief Safety and Emergency Director (Director) whose primary role will be to facilitate the implementation of the EPEP amongst all property managers and Safety Coordinators (Coordinators) in the Village.

The Director and Coordinators shall work together to update the EPEP as needed due to changes in State or County law, new technologies or best practices, and other changing conditions. They will develop guest emergency education materials and manage the guest notification strategy. They shall also design, update and implement staff training programs and materials. Each staff member shall receive an orientation for fire prevention and response procedures upon starting work and at least annually thereafter. Employees will also receive a copy of the **“Ready, Set, Go”** plan (see Section 5.3) upon their initial hire and again on a yearly basis via email and will be encouraged to subscribe to Nixle and/or Everbridge feeds for our zip code. Nixle and Everbridge are both free community information services dedicated to helping disseminate pertinent information such as emergency alerts and advisories from local agencies, such as Squaw Valley Fire Department and the Placer County Sheriff’s office.

Parking staff shall be trained to safely and efficiently direct traffic within the parking garages during an evacuation.

4.2.7 Evacuation Planning

The measures identified in this chapter are intended to reduce the potential for fire or other emergencies to occur, to facilitate public education for VSVSP guests and property owners, to develop an early notification strategy, and to strengthen overall staff preparedness. In rare instances, evacuation from the valley may become imminent. The decision to evacuate due to wildland fire would ultimately be determined by Incident Command as outlined in the Eastside Emergency Evacuation Plan. This EPEP presents an internal emergency preparedness and evacuation contingency plan specific to the Village at Squaw Valley and is meant to be utilized in conjunction with the Placer County East Side Emergency Evacuation Plan and the local law enforcement and fire authority’s emergency protocols in the event of an actual evacuation situation. Evacuation is further addressed in Section 5.

The Director will be available to cooperate with local and regional emergency agencies during training and/or table-top exercises/simulations being held by those agencies that pertain to the VSV plan area.

4.3 Avalanche Protection Measures

Avalanche Prevention and Protection

Avalanches are a common feature within certain alpine areas, particularly where there are steep slopes that are not well vegetated, such as ski slopes. Several avalanche paths have been identified within Squaw Valley. Two of these, Tram Face and Poulsen Gully, extend into buildable parcels within the VSVSP (see Section 2 for an exhibit showing the paths).

Squaw Valley Pro Patrol is responsible for managing avalanches within the Squaw Valley ski resort (note that ski resort operations are operated separately from the Village at Squaw Valley). When conditions indicate the potential for avalanches, such as after a large snow fall, SV Pro Patrol uses

explosive hand charges and a Gazex exploder, which can be operated remotely, to trigger avalanches when the ski area is closed. By releasing multiple, small avalanches, the potential for larger avalanches is minimized.

There are two aspects to minimizing risks associated with avalanches—planning and design to ensure that structures in avalanche paths can withstand avalanches and keeping people outside of avalanche paths during conditions that increase avalanche risk.

Pursuant to County Code and the SVGPLUO, no development will be allowed within a High Hazard Area. Buildings are allowed in low hazard Potential Avalanche Hazard Areas (PAHA) pursuant to compliance with Placer County Code Article 12.40, which requires that buildings that will be constructed within PAHAs be designed to withstand anticipated avalanche snow loads. In addition, the VSVSP Avalanche Mitigation Plan (AMP, provided in Appendix D) requires that snow height clearances for buildings in PAHAs be maintained.

In addition, the VSVSP will comply with Placer County Code Article 12.40, Avalanche Management Areas, which addresses potential avalanche risks in outdoor public areas that are part of a building in a PAHA (e.g., access points to the snow beach, terraces). A “Notice to Occupant” explaining that the building is in a PAHA must be provided in every room and/or provided to guests upon check in. Information must also be provided to property owners, guests, the public and staff regarding the limited access to outdoor areas when there is a substantial risk of an avalanche. The AMP requires that avalanche notification protocols be developed in consultation with the SVFD and Squaw Valley Resort (SVR) prior to occupancy of a building within a PAHA. Building management must confer with the SVFD and SVR after snowfall events to determine whether there is a substantial risk of avalanche on the Tram Face and/or Poulsen Gully paths. When there is such a risk, public areas within the PAHA must be closed, and signs erected to explain that the closure is due to avalanche risk.

Finally, Mitigation Measure 12-3 of the VSVSP EIR requires that an Avalanche Hazard Mitigation Plan (AMP) be prepared for any parcel that contains an avalanche path prior to approval of the small lot tentative map for that parcel. The AHMP would be specific to that parcel, and would expand on the requirements of the AMP for coordination with Resort staff and education and notification of employees and guests regarding avalanche hazards (see Section 3).

Avalanche Response

Squaw Valley/Alpine Meadows has prepared an internal Incident Command System (ICS) for responding to emergencies within the ski resort, including avalanches. The system defines incident levels ranging from those that do not require the involvement of outside agencies (e.g., a single injury requiring only conventional first aid) to more severe, prolonged (8 or more hours) incidents that may require the support of outside agencies. For avalanche response, typically, Squaw Valley Pro Patrol would conduct a search following an avalanche. Several steps would be taken, including visual survey, beacon searches, using search dogs, reconnaissance, and probe-line. Most avalanches at Squaw Valley do not require the involvement of outside agencies. For larger incidents requiring outside agencies, SVFD and the Placer County Sheriff’s Department would also be involved in response efforts.

4.4 Seismic Protection Measures

All VSVSP buildings will be constructed in compliance with building code standards that address seismic activity. For the most part, these standards will ensure that risks associated with seismic activity are minimized.

There are two fault traces (mapped trace of Fault 2 or Fault 5) that have been identified in the vicinity of the VSVSP. The exact locations of these fault traces and their activity statuses are unknown. In order to ensure that VSVSP buildings are not located on or near a fault trace that could be active, Mitigation Measure 12-1 of the VSVSP EIR requires a focused study for any building or structure proposed within 200 feet of the mapped trace of Fault 2 or Fault 5. The focused study must determine whether the on-site traces are 'active' and provide recommendations, including setbacks, or reconfigurations of building layouts if needed, and said recommendations must be implemented during preparation of improvement plans for Small Lot Final Maps. These measures will ensure that buildings are not exposed to risks associated with fault rupture.

4.5 Flood Protection Measures

The restoration of Squaw Creek will restore and enlarge the Trapezoidal Channel such that the 100-year floodplain, which currently includes portions of developed parking areas, would be confined to the creek channel and open space areas. No VSVSP buildings will be located within the floodplain. Therefore, there will not be a substantial risk of building occupants being exposed to flood risks. However, portions of recreational trails could be located within the floodplain. In order to minimize the risks of flood hazards for recreational trail users, Mitigation Measure 13-8 of the VSVSP EIR requires that informational flood warning signs be placed along trail areas that are within the 100-year floodplain. The signs must include an emergency response contact, and the design must be approved by the Placer County Office of Emergency Services. These warning signs will ensure that trail users are apprised of potential flood risks, and can take actions to protect themselves from the risks (i.e., stay off those portions of the trails during heavy rainfall).

4.6 Hazardous Materials Measures

All handling, storage and transport of hazardous materials will comply with federal, State and local laws and regulations. Propane tanks will be sited and designed to minimize leaks, and will be routinely inspected and maintained, consistent with current practices and applicable regulations. State-of-the-art, well-protected delivery systems will be employed, such as remote automatic shutoff valves and monitoring systems. Propane tanks will be located at the west end of the Village, as indicated in the VSVSP.

Annual refresher trainings will be provided for staff who handle propane, and will address safe handling, storage, and monitoring. The SVFD and propane providers will be invited to participate.

The VSV propane facilities will also be made available at least annually to the SVFD for training of SVFD staff on responding to propane leaks and related safety issues.

5.0 EVACUATION PLAN

5.1 Introduction

Developing a successful plan to implement effective emergency preparedness and communication/education strategies for VSVSP guests, property owners, and staff is the primary goal of this EPEP. Emergencies do occasionally occur and when they do, the relocation of guests and staff from an unsafe location to a safe location may be required.

There are two tiers of relocation per the EPEP: local evacuation and out-of-valley evacuation. Local evacuation would include evacuation of a specific area of the Village due to a small, centralized emergency such as a localized fire in which the safe location for evacuation may be in another part of the Village or valley, as determined by emergency services personnel. This type of event would be managed by local emergency services personnel such as the SVFD, CAL FIRE and/or the Sheriff's Department. The VSVSP project Chief Safety and Emergency Director would coordinate with the Incident Commander to determine the appropriate evacuation response and communicate the Incident Commander's directives to project Safety Coordinators. As part of the Relocation Readiness Plan and Checklist, a minimum of three pre-identified locations will be included to reduce the time immediately following an unexpected event to determine relocation areas and other procedures to reduce interference with emergency response operations.

An out-of-valley evacuation would include the evacuation of all guests, property owners and employees of the Village out of the valley completely due to a larger event such as a wildland fire. Orders to evacuate would be issued by the Incident Commander, and the Sheriff's Department would issue and manage any evacuation order.

5.2 Roles and Responsibilities

The Village at Squaw Valley Specific Plan envisions development by multiple developers; therefore, there will be multiple owners and managers of properties within the plan area. However, it is critical that all properties work in accord to ensure the successful implementation of the EPEP.

Chief Safety and Emergency Director (Director) – Appointed by the Master Developer. In addition to the responsibilities identified in Chapter 4, it is the responsibility of the Director to work in coordination with the local fire authority and/or law enforcement to make conservative decisions regarding necessary relocations (local or out-of-valley evacuations) and communicate real-time monitoring of potential hazardous events and any necessary evacuation orders to all Safety Coordinators. Additionally, the Director shall work with individual property Safety Coordinators to achieve successful implementation of the EPEP amongst all properties within the plan area. It will be the responsibility of the Director, or the Director's appointee(s), to implement the EPEP at all Squaw Valley owned and operated properties including the Mountain Adventure Camp.

Safety Coordinator (Coordinator) – each property not owned or operated by Squaw Valley will appoint a Safety Coordinator. It is the responsibility of the Coordinator to implement the VSVSP

EPEP, inclusive of all educational programs, communication strategies between other Coordinators and the Director, as well as manage and direct the safe relocation of guests and staff of their property in accordance with the EPEP in the event of an emergency relocation situation.

Staff - VSV staff shall be trained in emergency procedures and response. Certain staff may receive specialized training for specific procedures, such as traffic control within the parking garages.

Sheriff's Department and/or Incident Command – the decision to initiate an evacuation order will be made by the Incident Commander and will be implemented by the Sheriff's Department or other emergency response agency, as determined by the Incident Commander. Upon this determination, the Sheriff's Department or local emergency authority shall manage public notification within the valley, inclusive of VSV guests and staff. The Director shall coordinate with Incident Command as needed during an evacuation and/or if people are sheltering in place within the VSVSP plan area. .

5.3 Communication Protocols

Employee/Guest Communication Protocols – there are a number of ways to educate, inform, and warn employees and guests regarding emergency preparedness practices and regional and local hazardous events.

- ▲ All property owners, including second home owners and fractional unit owners will be encouraged to subscribe to Nixle or Everbridge.
- ▲ **"Ready, Set, Go"** – upon check in at any of the VSV lodging properties, guest will receive a copy of The Village's "Ready, Set, Go" Emergency Preparedness Plan. The "Ready, Set, Go" plan identifies directions for all guests to follow in the event of an emergency. It identifies steps and locations for sheltering in place and also provides steps to prepare for a local or out-of-valley evacuation, tips for determining when to voluntarily evacuate and how to successfully evacuate once a warning or order has been initiated. The Chief Safety and Emergency Director will develop the "Ready, Set, Go" Emergency Preparedness Plan and provide it to all property Safety Coordinators to integrate into their guest check-in material. Additionally, a copy will be posted in various locations within each property, including employee housing and separate commercial properties, for both guests and employees.
- ▲ **Relocation Readiness Plan and Checklist** – a plan developed in preparation of a localized emergency that requires relocation of guests to a safe location within the plan area or other part of the valley. A minimum of three pre-identified locations will be included to reduce the time immediately following an unexpected event to determine a proper location.
- ▲ **Lighted Changeable Message Signs** – when a regional or local hazard is being monitored by the Chief Safety and Emergency Director, event information and real-time updates shall be displayed on lighted changeable message signs which will be placed at strategic locations within the Village as well as at the intersection of Squaw

Valley Road and Far East Road. Message information pertaining to evacuation orders shall be coordinated with the Incident Commander.

- ▲ **Emergency Notification Calls** – if an emergency has occurred and directly affects guests, the Chief Safety and Emergency Director and affected property Safety Coordinators will work with their staff to notify guests of the incident. If an official evacuation order has been issued by the Sheriff's Department, the Sheriff's Department will take over and will manage the notification process.
- ▲ **Trail Head Signage** – when either an alert has been issued for a wildland fire or a wildfire is located within a 20 mile radius of the project area, informational signage will be placed at Shirley Canyon and Granite Chief trailheads.
- ▲ **Social Media Notifications** – the Squaw Valley/Alpine Meadows website, Twitter feed, and other social media outlets may be utilized to provide Resort and Village status notifications when wildfire or other emergency situations arise. This may include a link to the Placer County Office of Emergency Services website.

Incident Communication Protocols - are dependent on who initially detects the hazardous event (i.e. fire ignition, fire in process, avalanche, flood, etc.) or if an evacuation notification or order has been initiated by the Placer County Sheriff's Office.

There are three communication strategies as defined by (a) initial detection by guest, (b) initial detection by VSV staff, and c) notification or order by Placer County Sheriff's Office. Protocols appropriate for each strategy are presented below:

Detection by Guest – if a guest reports a hazardous event, these protocols shall be implemented:

1. Identify type and location of event and confirm reliability of report
2. Determine if there is immediate injury or danger
3. ***If immediate injury or danger call 911***, then contact Director
4. or; If no immediate injury or danger contact Director
5. Director: Work with Fire Department or applicable agency or resort department to determine if threat or incident requires shelter-in-place or relocation of guests and staff
6. Director: Contact safety coordinators
7. Director and Coordinators: Initiate guest/employee communication protocols and commence shelter-in-place or relocation
8. Director: Maintain communications with emergency response personnel to maintain situational awareness
9. Director: Coordinate with emergency response personnel on when it is considered safe to stand-down the shelter-in-place or relocation

Detection by Staff – if an employee of VSV detects a hazardous event, these protocols shall be implemented:

1. Determine if there is immediate injury or danger
2. ***If immediate injury or danger call 911***; then contact Director
3. or; If no immediate injury or danger contact Director

4. Director: Work with Fire Department or applicable agency or resort department to determine if threat or incident requires shelter-in-place or relocation of guests and staff
5. Director: Contact safety coordinators
6. Director and Coordinators: Initiate guest/employee communication protocols and/or commence shelter-in-place or relocation procedures
7. Director: Maintain communications with emergency response personnel to maintain situational awareness
8. Director: Coordinate with emergency response personnel on when it is considered safe to stand-down the shelter-in-place or relocation

Notification or Order by Placer County Sheriff's Office – if VSV is notified of an event by Placer County Sheriff's Office or by Nixle or Everbridge systems, the following protocols shall be implemented:

1. Director: If an alert or warning has been issued by Placer Alert system, place all Safety Coordinators on stand-by for further information and initiate Relocation Readiness Plan and Checklist. Commence guest and staff notification strategies.
2. Director: If an order has been issued, the Sheriff's Department will issue the evacuation notifications and management of evacuation.

5.4 Mass Notification Procedures

Upon an alert being issued by Placer County Alert system, early mass communications to guests will begin. Guests will be notified via front desk attendants and management, Squaw TV, and changeable message signs. Guests will be given details of the event and will be referred to the "Ready, Set, Go" guidelines. Personal discretion will be advised.

All contracts between VSV and event organizers shall include a provision that allows VSV to cancel the event in the case of an emergency that could require evacuation from the Village and/or valley. If VSV decides to cancel an event under this determining factor, event facilities shall be cleared of all guests and staff. The intent of this action is to have event participants exit the valley well in advance of an evacuation order.

If an order has been issued, the Sheriff's Department or emergency evacuation authority will conduct public notifications to evacuate and manage the evacuation process.

All appropriate measures for notifying staff and guests will be used by VSV, such as social media, Nixle or Everbridge, room calls and message boards. Communication protocols will be updated as new methods become available.

5.5 Shelter-in-Place Plan

If exiting the valley is not necessary or physically possible (for example, there is a fire originating at Squaw Valley Park or a wildland fire moving toward the VSV from the east that blocks egress from the Valley), then guests and employees will be instructed to proceed to the designated shelter-in-place locations. The Director and Coordinators will coordinate the dissemination of emergency supplies as needed and trained staff will help facilitate the gathering of guests to and within the shelter in place location.

5.6 Avalanche Protection Measures

Squaw Valley Resort (SVR) is responsible for managing avalanche risks. When conditions within the ski resort are conducive to avalanche formation, such as after heavy snowfall, the SVR determines where avalanche risks are present, and undertakes avalanche management activities, typically using ordinance to trigger a relatively small avalanche before significant snow accumulation. Typically, the ski lifts do not open until the avalanche risk has abated.

As discussed in Section 4, the Avalanche Mitigation Plan (Appendix D) and VSVSP EIR Mitigation Measure 12-3 identify steps that must be taken during conditions that could pose a substantial risk to occupants of VSVSP buildings affected by Potential Avalanche Hazard Areas (PAHA), including outdoor public gathering areas. Building management must confer with the SVFD and SVR during periods of heavy snowfall to determine whether there is risk of avalanche. In such cases, outdoor areas must be secured from the public and signs posted to explain that the closure is due to avalanche. Outdoor areas must remain closed until the risk has abated.

6.0 REFERENCES

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APPENDICES

- A Squaw Valley Fire Department Wildland Fire Evacuation Plan
- B Placer Operational Area Eastside Emergency Evacuation Plan
- C Part 1: California Public Resources Code Sections 4290 and 4291
Part 2: California Board of Forestry and Fire Protection SRA Fire Safe Regulations
Part 3: Placer County Code Excerpts; Fire Code (County Code Section 15.04.700)
Part 4: Squaw Valley Public Service District Code, Chapter 6 Fire Prevention Code
- D Avalanche Mitigation Plan Components