

Partially Revised Draft Environmental Impact Report

Village at Palisades Tahoe Specific Plan (formerly, Village at Squaw Valley Specific Plan)

State Clearinghouse # 2012102023



November 2022

PREPARED FOR:
Placer County
Planning Services Division
3091 County Center Drive
Auburn, CA 95603

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ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
ALS	Advanced Life Support
BMP	best management practice
CAA	Clean Air Act
CAAA	Clean Air Act Amendments of 1990
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFD	Community Facilities District
CHP	California Highway Patrol
CO	carbon monoxide
CSA	Community Service Area
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
DHS	Department of Health Services
DPW	Placer County Department of Public Works
DWR	California Department of Water Resources
EEEP	Placer Operational Area Eastside Emergency Evacuation Plan
EIR	environmental impact report
EPA	US Environmental Protection Agency
EPEP	Squaw Valley Emergency Preparedness and Evacuation Plan
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIS	Flood Insurance Study
FTA	Federal Transit Administration
GHG	greenhouse gas

Hz	hertz
ICP	Incident Command Post
km	kilometers
lbs/day	pounds per day
LDL	Larson Davis Laboratories
L _{dn}	Day-Night Level
L _{eq}	Equivalent Continuous Sound Level
LID	Low Impact Development
L _{max}	Maximum Sound Level
L _{min}	Minimum Sound Level
LOS	level of service
LTAB	Lake Tahoe Air Basin
MAC	Mountain Adventure Camp
MCAB	Mountain Counties Air Basin
MCL	maximum contaminant levels
mg/L	milligrams per liter
Mountain System	Mountain Interception and Conveyance System
mPa	micro-Pascals
mph	miles per hour
MTC	Mountaineer Transit Company
NAAQS	National Ambient Air Quality Standards
NFIP	National Flood Insurance Program
NO	nitric oxide
NO ₂	nitrogen dioxide
NOP	notice of preparation
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
Onsite System	Onsite Collection and Treatment System
OVFD	Olympic Valley Fire Department
PCAPCD	Placer County Air Pollution Control District
PDP	Precipitation Design Program
plan area	Specific Plan area
PM ₁₀	respirable particulate matter with an aerodynamic diameter of 10 micrometers or less
PM _{2.5}	respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1970
ppb	parts per billion

ppm	parts per million
PRC	Public Resources Code
ROG	reactive organic gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SCS	Sustainable Communities Strategy
SIP	state implementation plan
SO ₂	sulfur dioxide
Specific Plan	Village at Palisades Tahoe Specific Plan
SPL	sound pressure level
SR	State Route
SRA	state responsibility areas
SVGPLUO	Squaw Valley General Plan and Land Use Ordinance
SVMWC	Squaw Valley Mutual Water Company
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TART	Tahoe Area Regional Transit
TMDL	Total Maximum Daily Load
TMP	Transportation Management Plan
TNT/TMA	Truckee North Tahoe Transportation Management Association
TROA	Truckee River Operating Agreement
TRPA	Tahoe Regional Planning Agency
TSS	total suspended solids
UPRR	Union Pacific Railroad
VMT	vehicle miles traveled
VSVSP	Village at Squaw Valley Specific Plan
WDR	waste discharge requirements
WRCC	Western Regional Climate Center

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1 INTRODUCTION

1.1 BACKGROUND AND PURPOSE OF THE DRAFT PARTIALLY REVISED ENVIRONMENTAL IMPACT REPORT

In May 2015, Placer County published the Draft Environmental Impact Report (EIR) for the Village at Squaw Valley Specific Plan Project, now named the Village at Palisades Tahoe Specific Plan Project, which assessed the potential environmental impacts of implementing the proposed Specific Plan, as required by the California Environmental Quality Act (CEQA). The project is a proposed mixed-use development that includes resort residential, commercial, and recreation uses, as well as parking and other visitor amenities, and employee housing on a total of approximately 94 acres within Olympic Valley in northeastern Placer County and within the Sierra Nevada. The Specific Plan area (plan area) is located west of State Route (SR) 89, approximately nine miles south of the Town of Truckee, and seven miles northwest of Tahoe City and Lake Tahoe.

The project includes up to 1,493 bedrooms associated with hotel and resort residential uses (condo hotel, timeshare, and fractional units) provided in up to 850 units, employee housing sufficient to accommodate up to 300 employees in a mix of dormitory and studio units, up to a maximum of approximately 297,733 square feet of commercial uses (this square footage includes hotel common areas and various “back of house” uses), a Village Core, restoration of Squaw Creek, forest recreation uses, conservation preserve uses, a Mountain Adventure Camp (indoor recreation facility), a transit center and parking facilities, and shipping and receiving facilities. The project will also involve extension of some infrastructure. The Specific Plan would be developed over an estimated 25-year buildout period.

The Draft EIR (State Clearinghouse No. 2012102023) was circulated for public review and comment for a period of 60 days that began on May 18, 2015 and ended on July 17, 2015. Additionally, a public meeting was held on June 25, 2015 to receive input from agencies and the public on the Draft EIR. During the review period, written and oral comments were received on the Draft EIR. The County reviewed those comments to identify specific environmental concerns and determine whether any additional environmental analysis would be required to respond to issues raised in the comments. Responses to all comments received on the Draft EIR were prepared and included in the Final EIR. The Final EIR was certified, and the project was approved by the Placer County Board of Supervisors on November 15, 2016.

After the project was approved in 2016, Sierra Watch challenged the County’s approvals, including the County’s certification of the EIR, asserting that the EIR analysis was inadequate for numerous reasons. The Placer County Superior Court rejected all of Sierra Watch’s arguments and upheld the adequacy of EIR. Sierra Watch appealed the decision. On August 24, 2021, the Third District Court of Appeal partially reversed the trial court’s decision. The ruling directed the trial court to enter a new judgment granting a petition for writ of mandate and specifying the actions the County must take to comply with CEQA consistent with the Court of Appeal’s ruling (Ruling). See *Sierra Watch v. Placer County et al.*, 69 Cal.App.5th 1 (2021). The Ruling is included in Appendix A of this document. Relevant text of the Ruling is also included in this Partially Revised EIR (REIR), within the analyses related to the Ruling.

In July 2022, the Placer County Superior Court entered judgment in favor of Sierra Watch and issued a peremptory writ of mandate requiring that the County vacate its 2016 project approvals and not readopt the project approvals or certify a revised EIR unless and until the County complies with CEQA by correcting the deficiencies in the EIR found by the Court of Appeal.

The County has prepared this REIR to address the CEQA adequacy issues in accordance with the direction provided by the Court, which is limited to the project’s potential impacts on the following resources: transportation and circulation, air quality, noise, hydrology and water quality, and hazardous materials and

hazards (wildfire). Within each of these resource areas, the Court identified specific issues or impacts that that the County needed to address before recertifying the EIR. This REIR specifically addresses the impacts and issues identified in the Ruling and provides supplemental information and new analysis as needed to comply with CEQA and address the Ruling. Impacts that were found by the Court to be adequately addressed, and/or that were not subject to the lawsuit, are not included. For example, Chapter 13, “Hydrology and Water Quality,” only addresses impacts on the Lake Tahoe basin because the Court did not overturn the analyses of hydrological and water quality impacts in Olympic Valley or other areas outside of the Tahoe basin. The analysis provides sufficient detail and clarity such that the revised analysis is disclosed to the public, and decision makers can make an informed decision regarding the adequacy of the REIR analysis.

As discussed below, the County will consider comments received on the contents of this REIR within the public comment period and prepare written responses as required by CEQA. Based on CEQA and legal requirements, including *res judicata*, the County need not address comments on issues that were covered in the 2016 Final EIR and that were not overturned by the court. The Final EIR will consist of the 2016 EIR, REIR, the existing written responses to comments on the 2016 EIR, comments and written responses to comments on the REIR, and any text changes to the REIR. The County will then consider whether to certify the EIR, as revised by the REIR, and whether to reapprove the project.

1.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The full project description of the Village at Squaw Valley Specific Plan is provided in the 2016 EIR, which is available online at <https://www.placer.ca.gov/DocumentCenter/View/8180/Chapter-3--Project-Description-PDF> and is also provided in Appendix B of this document.

No changes to the project description have occurred since the project was approved in November 2016 other than the change of the project name to the Village at Palisades Tahoe Specific Plan. Therefore, a full project description chapter is not provided in this REIR. See Appendix B of this document for a copy of the full project description as it appeared in the 2016 Draft EIR as well as the revisions made as part of the 2016 Final EIR. The following provides a summary of the proposed project.

Squaw Valley Real Estate, LLC, now named Palisades Tahoe Development Company, (project applicant) is requesting approval of various discretionary entitlements in support of a mixed-use development, located in Olympic Valley, that includes resort residential, commercial, and recreation uses, as well as parking and other visitor amenities, and employee housing. The project applicant has requested the County concurrently process and approve the employee housing proposed on the East Parcel site under the Specific Plan.

1.2.1 Change from Squaw Valley to Olympic Valley

In recent years, there has been increased awareness that the term “squaw” has been used as a sexist and racist reference to Native American people, including in its use as a geographic name place. Table 1-1 identifies some of the name changes that have occurred since certification of the EIR in 2016. In general, “Squaw Valley” is now known as “Olympic Valley,” a term that was already in use. Not all local and regional names have changed (e.g., Squaw Valley General Plan and Land Use Ordinance and Squaw Creek), but some or all of these may change in the future. For example, the County recently voted to rename three county-maintained roads that contained the word “Squaw” to alternative names (see Table 1-1); however, there are some private roads that contain the word “Squaw” that could be renamed in the future (these include Squaw Creek Road, Squaw Loop, and Squaw Summit Road). In September 2021, the Squaw Valley Alpine Meadows resort changed its name to Palisades Tahoe. Accordingly, the “Village at Squaw Valley” and “Village at Squaw Valley Specific Plan” are now known as the “Village at Palisades Tahoe” and “Village at Palisades Tahoe Specific Plan,” respectively. This REIR attempts to use updated names wherever possible. Any errors are unintentional, and the term “Squaw” is only used when necessary to reference a current place name or document title.

Table 1-1 Recent Name Changes	
Former Name	New Name
Local and Regional	
Squaw Valley	Olympic Valley
Squaw Valley Public Service District	Olympic Valley Public Service District
Squaw Valley Fire Department	Olympic Valley Fire Department
Squaw Valley Road	Olympic Valley Road
Squaw Peak Road	Shirley Canyon Road
Squaw Peak Way	Marmot Way
Squaw Valley Academy	Lake Tahoe Preparatory School
Resort	
Squaw Valley Alpine Meadows resort	Palisades Tahoe
Village at Squaw Valley	Village at Palisades Tahoe
Village at Squaw Valley Specific Plan	Village at Palisades Tahoe Specific Plan
Source: Compiled by Ascent Environmental in 2022.	

1.2.2 Background

The proposed Village at Palisades Tahoe Specific Plan (Specific Plan) is the first specific plan proposed under the *Squaw Valley General Plan and Land Use Ordinance* (SVGPLUO), which was adopted by Placer County in 1983. The proposed Specific Plan project would amend the permissible land uses previously approved for the plan area in the SVGPLUO.

The proposed Specific Plan was first submitted to Placer County in December 2011. It was subsequently revised several times to address County and public concerns and was last revised in April 2016. It was approved by the County in November 2016 (see Section 1.1). The November 2016 approval was set aside as a result of the Court Ruling.

Other than its name, the Specific Plan has not changed, and it includes an 85-acre Village area and the separate 8.8-acre East Parcel site described in the 2016 EIR and summarized below.

1.2.3 Project Location

The plan area is located within the 4,700-acre Olympic Valley in northeastern Placer County and within the Sierra Nevada.

Portions of the plan area are located in both the west and east sides of Olympic Valley. 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 and Lake Tahoe, but outside of the Lake Tahoe Basin. The plan area encompasses a total of approximately 94 acres. The approximately 85-acre main Village area is located on the west side of the valley at the base of the Palisades Tahoe Ski Resort; the approximately 8.8-acre area referred to as the East Parcel is located approximately 1.3 miles east of the main Village area and 0.3 mile west of the intersection of SR 89 and Olympic Valley Road.

1.2.4 Project Characteristics

The Specific Plan would allow for development of resort hotel, residential, commercial, retail, and recreational uses similar to uses currently allowed under the SVGPLUO, including lodging, skier services, retail shopping, restaurants and bars, entertainment, and public and private recreational facilities.

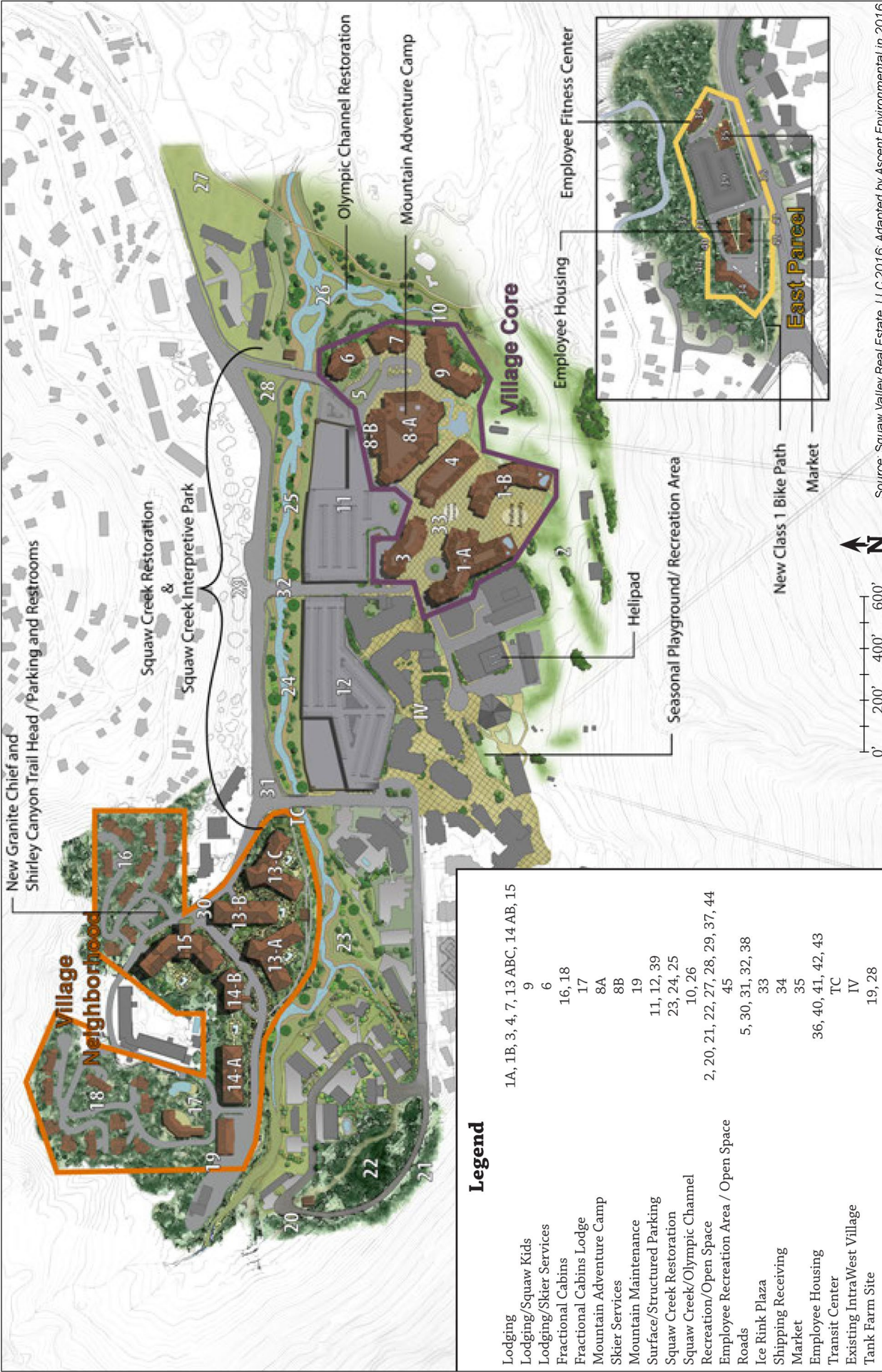
The plan area would consist of two main zones within the main Village area: the Village Core, consisting of a wide mix of uses and activities concentrated in close proximity to the ski slopes and the existing Village, with higher density lodging, the Mountain Adventure Camp (described below), and a variety of retail and restaurant spaces along with pedestrian-friendly paths and gathering spaces; and the Village Neighborhoods, consisting of medium-density resort residential neighborhoods and smaller-scale neighborhood-serving commercial uses. In addition, the plan area would include the approximately 8.8-acre East Parcel, which is planned for employee housing, off-site parking, shipping and receiving, and a small retail market.

Exhibit 1-1 presents the proposed land use plan. Table 1-2 identifies the development types that would be permitted in the plan area by land use designation.

The following project components are proposed:

Main Village Area

- ▲ **Resort Residential:** Up to 1,493 bedrooms provided in up to 850 units, including a mixture of hotel, condo hotel, fractional ownership, and timeshare units.
- ▲ **Commercial:** Approximately 297,733 square feet of tourist-serving commercial space, including hotel common areas, conference rooms, retail, restaurant, and similar commercial uses, all of which are included in this square footage total.
- ▲ **Commercial (Removed):** Approximately 91,522 square feet of existing commercial space would be removed.
- ▲ **Employee Housing (Removed):** Two existing structures (Courtside and Hostel) that currently provide seasonal employee housing for up to 99 staff would be removed.
- ▲ **Mountain Adventure Camp:** The 90,000-square-foot Mountain Adventure Camp would offer an extensive indoor pool system including water slides and other water-based recreation. The facility would provide additional entertainment options that could include indoor rock climbing, a movie theater (maximum 300 seats), a bowling alley (maximum 30 lanes), and a multi-generational arcade.
- ▲ **Parking:** 3,297 parking spaces would be provided in separate parking structures at full project buildout. Up to approximately 1,800 additional spaces would be provided in podium parking under new buildings in the plan area.
- ▲ **Restoration of Squaw Creek:** A 150- to 200-foot-wide conservation corridor would be provided for the length of the creek through the plan area. The creek restoration program would support improvement of terrestrial and aquatic habitat conditions, improved water quality and sediment management, and increased flood conveyance capacity.



Legend

Lodging	1A, 1B, 3, 4, 7, 13 ABC, 14 AB, 15
Lodging/Squaw Kids	9
Lodging/Skier Services	6
Fractional Cabins	16, 18
Fractional Cabins Lodge	17
Mountain Adventure Camp	8A
Skier Services	8B
Mountain Maintenance	19
Surface/Structured Parking	11, 12, 39
Squaw Creek Restoration	23, 24, 25
Squaw Creek/Olympic Channel	10, 26
Recreation/Open Space	2, 20, 21, 22, 27, 28, 29, 37, 44
Employee Recreation Area / Open Space	45
Roads	5, 30, 31, 32, 38
Ice Rink Plaza	33
Shipping Receiving	34
Market	35
Employee Housing	36, 40, 41, 42, 43
Transit Center	TC
Existing IntraWest Village	IV
Tank Farm Site	19, 28

Note: The Illustrative Concept Plan depicts a representative site plan to show the development that could occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Illustrative Concept Plan is subject to change.



Exhibit 1-1

Illustrative Concept Plan



Source: Squaw Valley Real Estate, LLC 2016; Adapted by Ascent Environmental in 2016

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Table 1-2 Proposed Land Uses

Land Use	Area (acres)	Maximum Units	Maximum Bedrooms	Maximum Density (br/acre)	Average Density (br/acre)	Maximum Commercial (sf) ^a	Existing Commercial to be Removed (sf)	Percent of Plan Area
Main Village Area								
Village Commercial - Core (VC-C)	13.66	517	883	125	85	223,369	54,937	14.6%
Village Commercial - Neighborhood (VC-N)	18.47	333	610	71	39	40,364	36,585	19.8%
Village - Parking (V-P)	8.79	-	-	-	-	-	-	9.4%
Village - Heavy Commercial (V-HC)	2.85	-	-	-	-	10,000	-	3.1%
Developed Area Subtotal	43.77	850	1,493	-	-	273,733	91,522	46.9%
Village - Forest Recreation (V-FR)	15.40	-	-	-	-	-	-	16.5%
Village - Conservation Preserve (V-CP)	17.78	-	-	-	-	-	-	19.1%
Undeveloped Area Subtotal	33.18	-	-	-	-	-	-	35.6%
Roads	7.58	-	-	-	-	-	-	8.1%
Total Main Village Area	84.53	-	-	-	-	273,733	91,522	90.5%
East Parcel								
Max. Employees								
Entrance Commercial (EC) ^b	7.01	50 ^b	150 ^b	300 ^b	-	20,000 ^c	-	7.5%
Village - Conservation Preserve (V-CP)	1.03	-	-	-	-	-	-	1.1%
Roads	0.76	-	-	-	-	-	-	0.8%
Total East Parcel	8.8	50	150	-	-	20,000	-	9.4%
Total	93.33	900^d	1,643	-	-	297,733^b	91,522	100.0%

Notes: br/acre = bedroom per acre; sf = square feet.

^a Includes replacement of existing commercial uses and maintenance facilities. The square footage includes hotel common areas, conference rooms, and similar uses beyond the traditional retail, restaurant, and similar commercial uses.

^b Employee housing is included in the Entrance Commercial land use area in the East Parcel. The maximum number of employees that would be housed on the East Parcel would be 300. The actual number of bedrooms may be much smaller than 150, because the housing or "beds" could ultimately be provided in a variety of private room, shared room, and dormitory configurations. These beds could also be contained in a variety of different building or "unit" configurations. Given these conditions, it is not appropriate to convey employee housing capacity in the same unit and bedroom metrics used to describe other housing in the plan area.

^c Includes 15,000 sf of shipping/receiving and 5,000 sf of market.

^d Total development within the plan area shall not exceed the maximum units and commercial square footage shown.

Source: Squaw Valley Real Estate, LLC 2015.

East Parcel

- ▲ Up to 50 employee housing units (dormitory and studio units), accommodating a maximum of 300 employees;
- ▲ Employee recreational facilities (e.g., barbeque areas, picnic tables, a passive park setting, and/or horseshoe pits);
- ▲ Employee parking; and
- ▲ Approximately 20,000 square feet of commercial space, including a 15,000-square-foot shipping and receiving facility and a 5,000-square-foot market.

Other related improvements are proposed and include circulation improvements, emergency vehicle access routes, bicycle facilities, a transit center, new/extended utility infrastructure, new/improvements to existing recreational facilities and amenities, and a Village open space network. These improvements are described in Chapter 3, “Project Description,” of the 2016 EIR, which is included in Appendix B of this document.

The Specific Plan would be developed over an estimated 25-year buildout period.

1.3 CONTENT AND SUMMARY OF THE REIR

CEQA consists of a legislatively created statute, embodied in Public Resources Code (PRC) Sections 21000-21189, and guidelines, which are created by the California Natural Resources Agency as a means to interpret and provide guidance on implementation of the PRC. The State CEQA Guidelines are included in the California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, Sections 15000-15387. While the CCR addresses the vast majority of circumstances outlined in the PRC, some procedures are not specified. This is the case in which a lead agency is required to address a court ruling, and in this instance a degree of interpretation is required.

Consistent with the requirements of PRC Section 21168.9(b), which address court rulings, revised EIRs need only address those issues specified in the Ruling. Where a court finds that CEQA violations have occurred, judicial remedies must be fashioned so as to include only the mandates needed to comply with CEQA. (Public Resources Code Section 21168.9[b].) This focus is consistent with the principle that CEQA’s litigation provisions should be interpreted in light of legislative policies favoring the prompt resolution of CEQA litigation. (*Board of Supervisors v. Superior Court* (1994) 23 Cal.App.4th 830, 836.) Where a project requiring an EIR is approved and no CEQA litigation is filed, the law gives rise to a presumption that the EIR is legally adequate. As the California Supreme Court has explained, Public Resources Code section 21167.2 (from CEQA) “mandates that the EIR be conclusively presumed valid unless a lawsuit has been timely brought to contest the validity of the EIR. This presumption acts to preclude reopening of the CEQA process even if the initial EIR is discovered to have been fundamentally inaccurate and misleading in the description of a significant effect or the severity of its consequences. After certification, the interests of finality are favored over the policy of encouraging public comment.” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1130.)

Another relevant and related legal concept is *res judicata*, which “prevents relitigation of the same cause of action in a second suit between the same parties or parties in privity with them” (California Supreme Court in *Mycogen v. Monsanto Company* (2002) 28 Cal.4th 888, 896; see also *Ione Valley Land, Air, & Water Defense Alliance, LLC v. County of Amador* (2019) 33 Cal.App.5th 165, 170-173). As the Court of Appeal explained in *Sierra Club v. County of Fresno* (2020) 57 Cal.App.5th 979 (*Friant Ranch II*), “[b]ased on the principle set forth in *Ione Valley*, new challenges to the parts of the EIR that have been upheld are not allowed in proceedings on remand.” (57 Cal.App.5th at p. 990.)

Further, consistent with the requirements of PRC (Section 21166) and CCR (Section 15162), a lead agency shall not address any other issues (outside those specified in the Ruling) considered in a certified EIR unless substantial evidence demonstrates that (1) substantial changes would occur to the proposed project leading to new or substantially more severe significant effects; (2) substantial changes with respect to the circumstances under which a project is undertaken would result in new or substantially more severe significant effects; or (3) new information which was not or could not have been known with the exercise of reasonable diligence at the time the EIR was certified shows that new or substantially more severe significant impacts would occur.

There have been no changes to the project (other than the name) since certification of the EIR in 2016. Further, there are no known substantial changes with regard to the circumstances under which the project would be undertaken that would lead to new or substantially more severe environmental impacts. Finally, there is no known new information that would result in new or substantially more severe environmental impacts since certification of the EIR 6 years ago. Therefore, this REIR addresses only those issues raised in the Ruling. No other chapters or portions of the 2016 EIR are addressed in this REIR as no new information or new circumstances exist that would warrant revision of these other chapters or portions.

This document consists of the following chapters. All chapter numbering is consistent with the chapter and section numbering outline in the Draft EIR (released May 2015).

Chapter 1, “Introduction.” This chapter describes the purpose and organization of the REIR. A brief summary of the project description is also provided. No changes to the project description have occurred since the project was approved in November 2016.

Chapter 2, “Executive Summary.” This chapter introduces the project and lists significant environmental impacts and mitigation measures—addressed in this REIR—to reduce significant impacts to a less-than-significant level. Finally, areas of controversy as well as issues to be resolved are described.

Chapter 9, “Transportation and Circulation.” This chapter includes an expanded analysis of the project’s mitigation measures to reduce impacts related to transit. Additionally, this chapter includes updated information regarding available transit services and capacity as well as an updated discussion of the project’s potential impacts to transit. This chapter is not a complete reprinting of the 2016 EIR chapter with modifications, but instead provides sufficient information to address the issues identified in the Ruling and sufficient background information and context for the lay reader to understand the analysis.

Chapter 10, “Air Quality.” This chapter includes a new discussion of Lake Tahoe in the environmental setting and impact analysis. Revisions to the 2016 EIR focus on the potential effects of increased vehicle miles traveled (VMT) on the Lake Tahoe Basin’s air quality. Additionally, this chapter includes an expanded discussion of Tahoe Regional Planning Agency (TRPA) thresholds for assessing air quality impacts. This chapter is not a complete reprinting of the 2016 EIR chapter with modifications, but instead provides sufficient information to address the issues identified in the Ruling and sufficient background information and context for the lay reader to understand the analysis.

Chapter 11, “Noise.” This chapter includes an expanded discussion of the thresholds of significance used for assessing noise impacts (i.e., sensitive receptors affected by construction activities). An expanded discussion of potential construction noise impacts is also provided, more clearly showing the totality of sensitive receptors that may be affected by construction activities in order to address the Ruling in relation to the concern that only sensitive receptors within 50 feet of construction activities were considered. Additionally, construction noise mitigation measures are revised and/or clarified consistent with direction in the Ruling. This chapter is not a complete reprinting of the 2016 EIR chapter with modifications, but instead provides sufficient information to address the issues identified in the Ruling and sufficient background information and context for the lay reader to understand the analysis.

Chapter 13, “Hydrology and Water Quality.” This chapter includes a new discussion of Lake Tahoe in the environmental setting and impact analysis. Revisions to the 2016 EIR focus on the potential effects of

increased VMT on lake clarity because increased VMT could result in an increase in the amount of pollutants entering Lake Tahoe. This chapter is not a complete reprinting of the 2016 EIR chapter with modifications, but instead provides sufficient information to address the issues identified in the Ruling and sufficient background information and context for the lay reader to understand the analysis.

Chapter 15, “Hazardous Materials and Hazards (Wildfire).” This chapter includes an expanded analysis of the project’s potential impacts related to emergency evacuation (Impact 15-4), including estimated evacuation times and availability of emergency responders to provide traffic control at key intersections. This chapter is not a complete reprinting of the 2016 chapter with modifications, but instead provides sufficient information to address the emergency evacuation issue identified in the Ruling and sufficient background information and context for the lay reader to understand the analysis.

Chapter 19, “Report Preparers.” This chapter identifies the REIR authors and consultants that contributed to preparation of the REIR.

Chapter 20, “References and Persons Consulted.” This chapter identifies documents referenced in this REIR as well as the organizations and persons consulted during preparation of this REIR.

Appendices. Appendices contain additional materials used during preparation of the REIR or that support the analysis provided in this REIR.

1.4 ENVIRONMENTAL REVIEW PROCESS

The following provides a summary of the environmental review process conducted to date and then describes the environmental review process for the REIR. The 2012 notice of preparation (NOP) and 2014 revised NOP are available online at <https://www.placer.ca.gov/DocumentCenter/View/7905/Notice-of-Preparation-PDF> and <https://www.placer.ca.gov/DocumentCenter/View/7906/Revised-Notice-of-Preparation-PDF>, respectively.

1.4.1 Environmental Review Process Conducted to Date

The County used several methods to solicit input on the Draft EIR, including distribution of a notice of preparation (NOP) on October 10, 2012 to inform agencies and the general public that an EIR was being prepared and to invite comments on the scope and content of the document. A scoping meeting for the EIR occurred on November 1, 2012 at The Resort at Squaw Creek. In response to public and agency comments received during the scoping process as well as changing market conditions and other factors, the project was subsequently revised by the applicant and the County distributed a revised NOP on February 21, 2014.

On May 18, 2015, the Draft EIR was released for a 60-day public review and comment period that ended on July 17, 2015. The Draft EIR was submitted to the State Clearinghouse; posted on the County’s website; and was made available at the Tahoe City and Truckee libraries as well as the Olympic Valley Public Service District. In addition, the Draft EIR was distributed directly to public agencies (including potential responsible and trustee agencies), interested parties, and organizations.

A public hearing was held on June 25, 2015 to receive input from agencies and the public on the Draft EIR.

The Final EIR was circulated for a 10-day public agency review period from April 7, 2016 to April 18, 2016.

The County received several comment letters about the project after release of the Final EIR but prior to project approval. Although the CEQA regulations do not require response to comments received following the release of the Final EIR, the County prepared responses to a subset of the comment letters to add clarification to the analysis and information presented in the EIR and to provide context for the Board of

Supervisors as they considered EIR certification. The responses were provided as Attachment B to the Staff Report for the November 15, 2016 Board of Supervisors meeting (available online at: <https://www.placer.ca.gov/DocumentCenter/View/27740/bosa161115-HTML>).

The following public hearings were conducted to receive input from agencies and the public on the Final EIR:

- ▲ August 11, 2016 as part of the Placer County Planning Commission meeting. At the conclusion of the public hearing, the Planning Commission recommended certification of the EIR and approval of the project.
- ▲ November 15, 2016 as part of the Board of Supervisors meeting. At the conclusion of the public hearing, the Final EIR was certified and the project was approved.

1.4.2 Environmental Review Process for the REIR

Consistent with the requirements of Sections 15087 and 15088.5(d) of the State CEQA Guidelines, this REIR is being made available on November 30, 2022, for public review for a period of 60 days. The public review period will end on January 30, 2023. During this period, the general public, agencies, and organizations may submit written comments on the content of the REIR to the County. Pursuant to procedures set forth in Section 15088.5(f)(2) of the State CEQA Guidelines, reviewers are directed to limit their comments to the information contained in the REIR. Specifically, comments should be limited to the revised discussion of the project's potential impacts related to transportation and circulation (Chapter 9), air quality (Chapter 10), noise (Chapter 11), hydrology and water quality (Chapter 13), and hazardous materials and hazards (wildfire) (Chapter 15).

Written comments on this REIR should be provided no later than 5:00 p.m. on January 30, 2023 and should be addressed to:

Placer County, Environmental Coordination Services
 3091 County Center Drive
 Auburn, CA 95603
 Attention: Shirlee Herrington, Environmental Coordination Services
 Email: cdraecs@placer.ca.gov

Copies of the REIR are available for public review during normal business hours at the following locations:

Community Development
 Resource Agency - Tahoe
 775 North Lake Boulevard
 Tahoe City, CA 96145

Community Development
 Resource Agency - Auburn
 3091 County Center Drive
 Auburn, CA 95603

Tahoe City Library
 740 N. Lake Blvd
 Tahoe City, CA 96145

Truckee Library
 10031 Levon Avenue
 Truckee, CA 96161

Olympic Valley Public Service District
 305 Olympic Valley Road
 Olympic Valley, CA 96146

The REIR is also available for public review online at: <https://www.placer.ca.gov/8213/Village-at-Palisades-Tahoe-Specific-Plan>.

A public hearing will be held on the REIR on January 19, 2023.

After the close of the comment period, the County will consider comments received on this REIR within the comment period and prepare written responses as required. The Final EIR will consist of the 2016 EIR, REIR, existing comments and written responses to comments on the 2016 EIR, comments and written responses

to comments on the REIR, and any text changes to the REIR. The Final EIR will be considered anew by the County for certification. If it is certified, the County will then consider the proposed project for approval.

Before considering approval of the project, the lead agency, the Placer County Board of Supervisors, is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the lead agency.

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2 EXECUTIVE SUMMARY

This summary is provided in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15123. As stated in the State CEQA Guidelines Section 15123(a), “[a]n environmental impact report (EIR) shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical.” State CEQA Guidelines Section 15123(b) states, “[t]he summary shall identify: (1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and (3) issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.” Accordingly, this chapter includes a brief synopsis of the proposed project and lists the significant environmental impacts and mitigation measures—addressed in this Partially Revised Draft EIR (REIR)—to reduce significant impacts to a less-than-significant level. Finally, areas of controversy as well as issues to be resolved are described.

2.1 BACKGROUND AND PURPOSE OF THE PARTIALLY REVISED DRAFT ENVIRONMENTAL IMPACT REPORT

In May 2015, Placer County published the Draft EIR for the Village at Squaw Valley Specific Plan Project, now named the Village at Palisades Tahoe Specific Plan Project, which assessed the potential environmental impacts of implementing the proposed Specific Plan. During the review period for the Draft EIR, written and oral comments were received on the Draft EIR. Responses to all comments received on the Draft EIR were prepared and included in the Final EIR. The Final EIR was certified, and the project was approved on November 15, 2016.

After the project was approved in 2016, Sierra Watch challenged the County’s approvals, including the County’s certification of the EIR, asserting that the EIR analysis was inadequate for numerous reasons. The Placer County Superior Court rejected all of Sierra Watch’s arguments and upheld the adequacy of EIR. Sierra Watch appealed the decision. On August 24, 2021, the Third District Court of Appeal partially reversed the trial court’s decision. The ruling directed the trial court to enter a new judgment granting a petition for writ of mandate and specifying the actions the County must take to comply with CEQA consistent with the Court of Appeal’s ruling (Ruling). See *Sierra Watch v. Placer County et al.*, 69 Cal.App.5th 1 (2021). The Ruling is included in Appendix A of this document.

In July 2022, the Placer County Superior Court entered judgment in favor of Sierra Watch and issued a peremptory writ of mandate requiring that the County vacate its 2016 project approvals and not readopt the project approvals or certify a revised EIR unless and until the County complies with CEQA by correcting the deficiencies in the EIR found by the Court of Appeal.

The County has prepared this REIR to address the CEQA adequacy issues in accordance with the direction provided by the Court, which is limited to the project’s potential impacts on the following resources: transportation and circulation, air quality, noise, hydrology and water quality, and hazardous materials and hazards (wildfire). Within each of these resource areas, the Court identified specific issues or impacts that the County needed to address before recertifying the EIR. This REIR specifically addresses the impacts and issues identified in the Ruling and provides supplemental information and new analysis as needed to comply with CEQA and address the Ruling. Impacts that were found by the Court to be adequately addressed, and/or that were not subject to the lawsuit, are not included. For example, Chapter 13, “Hydrology and Water Quality,” only addresses impacts on the Lake Tahoe basin only because the Court did not overturn the analyses of hydrological and water quality impacts in Olympic Valley or other areas outside of the Tahoe basin. The analysis provides sufficient detail and clarity such that the revised analysis is disclosed to the public, and decision makers can make an informed decision regarding the adequacy of the revised EIR analysis.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The full project description of the Village at Squaw Valley Specific Plan is provided in the 2016 EIR, which is available online at <https://www.placer.ca.gov/DocumentCenter/View/8180/Chapter-3--Project-Description-PDF>, and is also provided in Appendix B of this document.

No changes to the project description have occurred since the project was approved in November 2016 other than the change of the project name to the Village at Palisades Tahoe Specific Plan. The following provides a summary of the proposed project.

Squaw Valley Real Estate, LLC, now named Palisades Tahoe Development Company (project applicant), is requesting approval of various discretionary entitlements in support of a mixed-use development, located in Olympic Valley, that includes resort residential, commercial, and recreation uses, as well as parking and other visitor amenities, and employee housing.

The proposed Specific Plan is the first specific plan proposed under the *Squaw Valley General Plan and Land Use Ordinance* (SVGPLUO), which was adopted by Placer County in 1983. The Specific Plan would allow for development of resort hotel, residential, commercial, retail, and recreational uses similar to uses currently allowed under the SVGPLUO, including lodging, skier services, retail shopping, restaurants and bars, entertainment, and public and private recreational facilities.

The plan area would consist of two main zones within the main Village area: the Village Core, consisting of a wide mix of uses and activities concentrated in close proximity to the ski slopes and the existing Village, with higher density lodging, the Mountain Adventure Camp, and a variety of retail and restaurant spaces along with pedestrian-friendly paths and gathering spaces; and the Village Neighborhoods, consisting of medium-density resort residential neighborhoods and smaller-scale neighborhood-serving commercial uses. In addition, the plan area would include the approximately 8.8-acre East Parcel, which is planned for employee housing, off-site parking, shipping and receiving, and a small retail market. The project applicant has requested the County concurrently process and approve the employee housing proposed on the East Parcel site under the Specific Plan.

Other related improvements are proposed and include circulation improvements, emergency vehicle access routes, bicycle facilities, a transit center, new/extended utility infrastructure, new/improvements to existing recreational facilities and amenities, and a Village open space network.

The Specific Plan would be developed over an estimated 25-year buildout period.

2.3 ENVIRONMENTAL IMPACTS AND PROPOSED AND RECOMMENDED MITIGATION

Table 2-2 in Chapter 2, "Executive Summary," of the 2016 Draft EIR, provides a full listing of the environmental impacts of the proposed project, the level of significance of the impact before mitigation, recommended mitigation measures, and the level of significance of the impact after the implementation of the mitigation measures. This table is available online at <https://www.placer.ca.gov/DocumentCenter/View/8174/Chapter-2--Executive-Summary-PDF>.

As described above and in Chapter 1, "Introduction," the County has prepared this REIR to address the CEQA adequacy issues provided in the Ruling, which include the project's potential impacts on the following resources: transportation and circulation, air quality, noise, hydrology and water quality, and hazardous materials and hazards (wildfire). Therefore, a full impact summary table is not provided in this REIR. Table 2-1, at the end of this chapter, identifies only those new or modified environmental impacts and mitigation measures included in this REIR.

Consistent with the Ruling, this REIR addresses the following environmental impacts:

Transportation and Circulation

- ▲ Impact 9-7: Impacts to transit

Air Quality

- ▲ Impact 10-6: Project generated VMT effects on air quality in the Lake Tahoe Basin

Noise

- ▲ Impact 11-1: Construction noise impacts

Hydrology and Water Quality

- ▲ Impact 13-9: Project generated VMT effects on Lake Tahoe water quality and lake clarity

Hazardous Materials and Hazards

- ▲ Impact 15-4: Interference with an adopted emergency evacuation plan

2.4 AREAS OF CONTROVERSY

Chapter 2, “Executive Summary,” of the Draft EIR, describes the areas of controversy associated with the project at the time the Draft EIR was released in May 2015. See Section 2.4, “Areas of Controversy,” in the Draft EIR, which is available online at <https://www.placer.ca.gov/DocumentCenter/View/8174/Chapter-2--Executive-Summary-PDF>.

As described above and in Chapter 1, “Introduction,” the County has prepared this REIR to address the CEQA adequacy issues provided in the Ruling, which include the project’s potential impacts on the following resources:

- ▲ transportation and circulation,
- ▲ air quality,
- ▲ noise,
- ▲ hydrology and water quality, and
- ▲ hazardous materials and hazards (wildfire).

These could be considered the major areas of controversy associated with the project since certification of the EIR in 2016. The County and the project applicant have and will continue to respond to these issues, including most recently in this REIR.

2.5 ISSUES TO BE RESOLVED

The County will consider whether or not to certify the REIR and approve the project. Other actions and planning entitlements requested by the project applicant from the County are listed in Section 3.5.1, “Planning Entitlements and Approvals from Placer County,” in the 2016 EIR, which is available online at <https://www.placer.ca.gov/DocumentCenter/View/8180/Chapter-3--Project-Description-PDF>, and is also provided in Appendix B of this document.

The US Army Corp of Engineers (USACE) will consider verification of the project wetland delineations. Other federal, state, and local agencies may also need to grant permits or approvals for the project; these are listed in Section 3.5.2, “Other Agencies Using the EIR and Consultation Requirements,” in the 2016 EIR, which is available online at <https://www.placer.ca.gov/DocumentCenter/View/8180/Chapter-3--Project-Description-PDF>, and is also provided in Appendix B of this document.

Table 2-1 Summary of Impacts and Mitigation Measures Addressed in the Partially Revised Draft EIR				
Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation	
<p>9 Transportation and Circulation</p> <p>Impact 9-7: Impacts to transit. The 2016 EIR evaluated the project's potential impacts related to transit and concluded that while the proposed Specific Plan described several planned transit infrastructure expansions, and the project would not disrupt or interfere with existing or planned transit services or facilities, the project applicant was not explicitly required to ensure that an adequate supply of public transit service be available to meet the anticipated demand. The potential for transit supply generated by the project to exceed demand resulted in a significant impact. Since certification of the 2016 EIR, the availability of transit services has increased in the project area and the 2020 RTP has been adopted and includes the expansion of TART service capacity in the project area. This expansion in TART service capacity would result in adequate bus capacity to absorb the project's increase in transit riders. However, the expansion in TART service capacity could result in increased ridership from other sources as more frequent and convenient transit service attracts more riders. The combined increased ridership from the proposed project and increased ridership from other sources could create demand for public transit service above that which is provided or planned. Although the increased transit ridership in this scenario is not attributable exclusively to the proposed project, a conservative approach is taken here and this is considered a significant impact.</p>	S	<p>Revised Mitigation Measure 9-7: Establish a Community Service Area (CSA) Zone of Benefit (ZOB) or Community Facilities District (CFD), or annex into an existing CSA ZOB to fund expansion of transit capacity. Prior to recordation of the Initial Small Lot Final Map, the project applicant shall either establish a Community Service Area (CSA) Zone of Benefit (ZOB) or Community Facilities District (CFD), or the project applicant shall annex into an existing CSA ZOB or CFD. The CSA ZOB or CFD shall provide funding for capital costs and ongoing operation of transit services. Ongoing annual fees will be identified and paid by the applicant to fund expansion of transit capacity as necessary to expand seating capacity to accommodate typical peak-period passenger loads on bus routes serving the project site. Fees would be assessed on all VPTSP future land uses that generate an increased demand for transit services, including residential, lodging, commercial, civic, and recreation land uses.</p> <p>Prior to establishing, or annexing into, the ZOB or CFD, the applicant shall submit to the County for review and approval a complete and adequate report supporting the level of assessments/fees necessary for the establishment and continuation of the ZOB or CFD. The report shall be prepared by a registered engineer, in consultation with a qualified financial consultant, if a ZOB is formed or annexed into and shall establish the basis for the special benefit appurtenant to the project. A qualified financial consultant shall prepare the report if a CFD is formed. The report shall identify the transit services intended to be funded by the ZOB or CFD, the cost to establish and operate these services, the portion of the overall costs to be funded by the applicant, and the assessment/fees to obtain the necessary funding, including a methodology for calculating fee increases over time. A transit service to be explicitly funded by the ZOB or CFD and included in the report will be the establishment of 30 minute headways during peak periods on the TART Highway 89 route between Tahoe City and Truckee as well as ongoing availability of a "second bus" during peak period (as currently implemented) if needed.</p> <p>The engineers report for A Special Zone of Benefit for The Palisades at Squaw: Zone of Benefit 223 Eastern Placer County Transit Program; County Service Area No. 28 (LSC 2017) is available as an example report for another project in Olympic Valley. This report supports the establishment of a ZOB encompassing a 63 lot development on the east side of Olympic Valley and contains all the components identified above. The report identifies the transit services that would benefit the proposed development, and therefore the services the ZOB annual assessments would help fund. These transit</p>	LTS	

BI = Beneficial Impact LTS = Less than Significant NI = No Impact PS = Potentially Significant PSU = Potentially Significant and Unavoidable S = Significant SU = Significant and Unavoidable

Table 2-1 Summary of Impacts and Mitigation Measures Addressed in the Partially Revised Draft EIR			
Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		<p>services include establishment of 30 minute headways during peak periods on the TART Highway 89 route between Tahoe City and Truckee identified above, indicating the multiple sources of funding that may be applied to a single transit service improvement. The transit services to be funded by the ZOB are included in an adopted plan, the Systems Plans Update for the Tahoe Truckee Area Regional Transit in Eastern Placer County (LSC 2016). The report calculates both the annual operating and annual capital costs of providing identified services (\$1,704,200), funding from sources other than the development that would be applied to these costs (\$1,441,900), the remaining annual cost to be funded by development inside the ZOB (\$312,738), and the total development units anticipated to be encompassed by the ZOB (4,630). The development funded annual cost is divided by the total number of development units that would fund this cost, resulting in an annual assessment of \$67.55 for each development unit in the ZOB. Increases in the assessment fee are identified as being based on the Consumer Price Index prepared by the San Francisco/Oakland/San Jose Consumer Price Index for all Urban Consumers. Although the exact methodology used for this ZOB 223 engineering report would not necessarily be applied to the VPTSP, especially given differences in scale of the project and mix of uses, the ZOB 223 report is illustrative of the key process components and outcomes in using such a report to calculate ZOB or CFD fees to provide transit improvement funding.</p> <p>As identified above, TART service is funded from a number of sources. TART may also direct funding to a variety of planned service improvements. For these reasons, although unlikely, it cannot be assured that TART would fund and continuously implement 30 minute headways during peak periods on the TART SR 89 route between Tahoe City and Truckee, or fund and continuously operate a "second bus" during peak period, prior to the time that the ZOB/CFD is formed. Therefore, to ensure the project generated employee transit riders do not result in an exceedance of transit system capacity before the ZOB is formed, and in order to ensure that sufficient capacity exists during peak periods, prior to the recordation of the first final map, the project applicant shall commence fare-free employee shuttle service during those periods when the transit capacity analysis shows that demand from the project, plus existing demand, will exceed TART capacity (Sunday 7:30 a.m. northbound from TCTC; Sunday 5:05 p.m. southbound from Palisades Tahoe). The project applicant may adjust the arrival and departure times in response to peak TART ridership demand, or peak employee demand, in order achieve the objective of TART buses not exceeding capacity due to project employee ridership. The project applicant shall notify Placer</p>	

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Table 2-1 Summary of Impacts and Mitigation Measures Addressed in the Partially Revised Draft EIR

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
10 Air Quality			
Impact 10-6: Project-generated VMT effects on air quality in the Lake Tahoe Basin. The 2016 EIR evaluated the generation of long-term regional emissions of criteria air pollutants and ozone precursors and determined that emissions of ROG and NOX in Placer County and the MCAB would exceed the PCAPCD's thresholds of significance. The 2016 EIR did not specifically evaluate the potential impacts of the project's CAP emissions, and in particular, vehicle tailpipe emissions attributable to VMT on Lake Tahoe and the basin's air quality. As described below, current evidence indicates that (a) atmospheric nitrogen deposition resulting from vehicle exhaust is not a substantial contributor to losses in lake clarity, and (b) the implementation of stricter vehicle emissions standards at the State and federal levels are sufficient on their own to exceed TRPA's atmospheric nitrogen deposition objectives. In addition, emissions of PM ₁₀ , PM _{2.5} , ROG, and NOX attributable to project-generated VMT in the Lake Tahoe Basin would be well below the PCAPCD's threshold of 55 lbs/day for ROG and NOx and 82 lbs/day for PM ₁₀ and PM _{2.5} . Therefore, vehicle exhaust attributable to vehicles associated with the Palisades Specific Plan would not have a significant adverse effect on Lake Tahoe Basin air quality, or on Lake Tahoe water quality or lake clarity via changes in the basin's air quality. This impact would be a less than significant.	LTS	No mitigation is required.	
Cumulative Air Quality Impacts. Total operational emissions from the proposed project would exceed the PCAPCD cumulative emissions thresholds for ROG and NOx of 55 lb/day. These emissions levels would make a substantial contribution to an adverse cumulative air quality impact.	S	Revised Mitigation Measure 10-2: Implement an ongoing ROG and NOX emissions review and reduction program. Mitigation measures for reducing operational emissions of ozone precursors were developed using PCAPCD guidance (PCAPCD 2012: C-1 through C-2) and mitigation guidance published by the California Air Pollution Control Officers Association (CAPCOA 2010) and the California Attorney General's Office	LTS
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Table 2-1 Summary of Impacts and Mitigation Measures Addressed in the Partially Revised Draft EIR			
Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		<p>(2010). The Lake Tahoe Sustainability Collaborative's Sustainability Action Plan was also reviewed for mitigation options as it includes multiple emission reduction measures that are well-suited to the climate and development patterns in the Sierra Nevada (Lake Tahoe Sustainability Collaborative 2013: 4-1 through 4-37).</p> <p>Prior to recordation of each Small Lot Final Map, the project applicant shall prepare, to the satisfaction of Placer County Planning Services Division and PCAPCD, a chart or table with supporting analysis, which demonstrates that construction and operation of the proposed phase, combined with emissions from all past approved phases, will not result in ROG or NO_x emissions in excess of 82 55 lbs/day. Compliance with this threshold may be achieved through project design and/or other "on-site" measures, which may include any of the project-level reduction measures listed below.</p> <p>Alternatively, the project applicant may demonstrate compliance with this mitigation measure, partially or wholly, through off-site measures (i.e., emission reductions not directly associated with the proposed project but funded/implemented by the applicant, such as reducing emissions associated with ski operations) and/or purchase of offset credits identified below.</p> <p>Placer County Planning Services Division shall maintain a file for the charts to provide future applicants with the historical emissions record and approved tracking methodology.</p> <p>The project applicant shall be responsible for the funding and implementation of all identified reduction measures. The ROG and NO_x reduction benefits achieved by all measures must occur during the ozone season (May through October). The method used to quantify the reduction or offset amount achieved by each measure must be approved by the County and PCAPCD.</p> <p>Subsequent to the implementation of all selected reduction measures, the project applicant shall evaluate and report the effectiveness of the measures annually to the County and PCAPCD to verify that the suite of measures will result in the combined reduction in ROG and NO_x that was expected. This annual reporting shall be completed and submitted to the County and PCAPCD within 30 days of the end of each ozone season. If it is determined that the effectiveness of reduction measures has been overestimated, then additional reduction measures must be implemented. Similarly, if it can be verified that reduction measures achieve better than anticipated results, or previous emission estimates were above actual emission levels, the overall emission</p>	

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Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		<p>reduction approach can be adjusted accordingly.</p> <p>Types of reduction and offset measures implemented by the project applicant may include, but are not limited to, the measures listed below, so long as the combination of selected measures results in calculated emissions below the target threshold. Note that not all of these measures need to be implemented; rather, the project applicant will be required to implement a combination of those measures needed to reduce ROG and NO_x emissions below the 82 55 lbs/day threshold:</p> <p>TRIP EMISSION REDUCTION MEASURES</p> <ul style="list-style-type: none"> ▲ Provide free or discounted transportation service between the Village and the Amtrak station in Truckee to all overnight visitors who arrive by train. This may be implemented in coordination with a local taxi service, the North Tahoe-Truckee Free Ski Shuttle, or other public or private shuttle service. ▲ Offer discounted overnight accommodations, meals, activities, or other incentives to visitors who arrive by train to the Amtrak station in Truckee and/or to groups who arrive by bus or some other emissions-efficient vehicle type. ▲ Provide preferential parking to alternatively-powered vehicles, including electric cars, natural gas vehicles, and hydrogen fuel cell vehicles. ▲ Provide charging stations for electric vehicles. ▲ Designate a location for the future installation of a hydrogen fueling station in the event that hydrogen fuel vehicles become readily available and widely used. ▲ Offer free, shared, or discount rental bicycles to all visitors staying in the hotel or resort residential units. ▲ Provide shuttle service to other key destinations in the region (e.g., North/West Shore of Lake Tahoe, casinos, Truckee) to serve guests who want to tour regional offerings. ▲ Provide a covered bicycle parking area near entrance of all commercial establishments. ▲ Provide parking for, and subsidize a car-sharing service for resort employees and/or patrons. ▲ Provide “end-of-trip” facilities for employees who bike to their work sites from outside of Olympic Valley including showers, secure weather-protected bicycle lockers, storage lockers for other gear, and changing spaces. This 	

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Table 2-1 Summary of Impacts and Mitigation Measures Addressed in the Partially Revised Draft EIR			
Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		<p>measure is consistent with measure TRT-5 in guidance published by the California Air Pollution Control Officers Association (CAPCOA 2010:234-236).</p> <ul style="list-style-type: none"> ▲ Provide free transit passes or reimburse the transit costs of employees who commute from outside Olympic Valley using Tahoe Area Regional Transit or another transit service. This measure is consistent with measure TRT-4 in CAPCOA's guidance (CAPCOA 2010:230-233). ▲ Provide adequate secure weather-protected bicycle lockers or storage area for employees living at the East Parcel. The number of lockers or size of the storage area shall be adequate to meet the demand of employee residents. ▲ Provide virtual and/or real bulletin boards in common areas of employee housing units and other areas where employees congregate to foster the development of carpools and other ride sharing opportunities. <p>AREA-SOURCE MEASURES</p> <ul style="list-style-type: none"> ▲ Prohibit diesel trucks from idling more than 5 minutes at all loading docks, including those at the East Parcel. Prior to the issuance of an Improvement/Grading Plan, the project applicant shall show on the submitted building elevations that all truck loading and unloading docks will be equipped with one 110/208 volt power outlet for every two dock doors. Diesel trucks idling for more than 5 minutes shall be required to connect to the 110/208 volt power to run any auxiliary equipment. A requirement for minimum 2 foot by 3 foot signage at loading docks that indicates "Diesel engine idling limited to a maximum of 5 minutes" shall be included with the submittal of building plans. This measure is recommended in PCAPCD's CEQA Handbook (PCAPCD 2012: C-1) and is also consistent with measure VT-1 in the CAPCOA guide (CAPCOA 2010: 300-303). ▲ On- and off-road service and maintenance vehicles used by the operators of land uses developed under the Specific Plan, including landscape maintenance vehicles, housekeeping vehicles, and maintenance vehicles, shall be electric, electric-hybrids, or alternatively fueled. ▲ Electrify new and existing well pumps. ▲ Design and engineer new and remodeled resort-residential, commercial, institutional, and civic construction to exceed 20194 Title 24 State energy-efficiency requirements by a designated percentage. This measure is consistent with Specific Plan Policy CC-1, which encourages that 20194 Title 24 standards be exceeded by 15 percent. ▲ Design all new resort-residential buildings and major renovations to meet or 	

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Table 2-1 Summary of Impacts and Mitigation Measures Addressed in the Partially Revised Draft EIR			
Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		<p>exceed the guidelines for the California Energy Star Certified Homes Program or similar accreditation. The Energy Star Certified Homes Program is a joint program of EPA and the Department of Energy. The program establishes criteria for energy efficiency for household products and labels energy efficient products with the Energy Star seal. Homes and residential buildings can be qualified as Energy Star homes as well if they meet efficiency standards. In California, Energy Star homes must use at least 15 percent less energy than Title 24 regulations, pass the California Energy Star Homes Quality Insulation Installation Thermal Bypass Checklist Procedures, have Energy Star windows, and have minimal duct leakage. This measure is consistent with Specific Plan Policy CC-2, which encourages this performance standard.</p> <ul style="list-style-type: none"> ▲ Only include outdoor cooking grills or outdoor cooking appliances that are fueled by propane or natural gas, or are electrified. No charcoal grills shall be allowed. This measure is recommended in PCAPCD's CEQA Handbook (PCAPCD 2012: C-1 and C-2). ▲ Install all pools with integrated insulation that has a verified insulation R-value that exceeds what is required by the building code at the time of construction, or insulate walls and floor of swimming pools with insulation that has a verified insulation R-value that exceeds what is required by the building code at the time of construction. ▲ Incorporate solar heating into pool heating systems. ▲ Cover outdoor pools with a cover designed to absorb heat from the sun when pools are not open (i.e., a transparent or bubble cover). ▲ Equip all heated swimming pools with energy efficient pumps and automatic covers for maintaining water temperature when not in use. This measure is recommended by the California Attorney General's Office (2010). ▲ Install into each dwelling unit Energy Star-rated programmable thermostats that can be controlled remotely (e.g., via internet and/or phone) by property owners/overnight patrons and building management/maintenance staff. The system should allow property management staff to monitor and adjust the thermostats when the dwelling units are unoccupied. Develop a system of default interior temperatures when dwelling units are unoccupied in order to prevent freezing water pipes and maximize heating and cooling efficiently throughout the occupied portions of the multi-story, multi-unit buildings. ▲ Install an occupancy-sensing energy management system into residential 	

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		<p>units. This occupancy sensing system may consist of a master keycard unit that relies on a key card's presence in an electronic sensor, or a Passive Infra-Red System to positively determine room occupancy status, or <u>equally effective technology</u>. The system must prevent the use of all light fixtures, exhaust fans, ceiling fans, and televisions when the unit is unoccupied.</p> <ul style="list-style-type: none"> ▲ Install Energy Star-rated ceiling fans in residential units. ▲ Install on-demand (tankless or instantaneous) hot water heaters in residential units and commercial areas that are not served by a central water boiler in the building. Install systems that recirculate hot water. ▲ Renovate off-site buildings to make them more energy efficient, particularly regarding their levels of propane consumption for space and water heating. ▲ Prohibit the application of ROG-emitting paint or other architectural coatings as part of regular ongoing maintenance during peak activity periods when ROG emissions from other sources are the highest. <p>OFFSET MEASURES</p> <ul style="list-style-type: none"> ▲ Establish mitigation off-site within the portion of Placer County that is within the MCAB by participating in an off-site mitigation program, coordinated through PCAPCD. Examples include, but are not limited to retrofitting, repowering, or replacing heavy duty engines from mobile sources (e.g., busses, construction equipment, on-road haulers, boilers, ski lift equipment, grooming equipment); or other programs that the project proponent may propose to reduce emissions. ▲ Participate in PCAPCD's Off-site Mitigation Program by paying the equivalent amount of fees for the project's contribution of ROG and NOx that exceeds the \$2 55 lbs/day. The applicable fee rates changes over time is adjusted annually to account for Consumer Price Index (CPI) rates. At the time of writing this EIR, the fee rate is \$17,720 20,873 per ton emitted during the ozone season. The actual amount to be paid shall be determined, and satisfied per PCAPCD and current California Air Resource Board guidelines, at the time of recordation of the Final Map (residential projects), or issuance of a Building Permit (non-residential projects). <p>CONSTRUCTION MEASURES</p> <ul style="list-style-type: none"> ▲ Cease or substantially limit ROG- and NOx-generating construction activity during peak operations (i.e., peak occupancy periods) of buildings and facilities that are already built and operational under the Specific Plan. 	
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		<ul style="list-style-type: none"> ▲ The prime contractor shall provide a plan for approval by PCAPCD demonstrating that the heavy-duty (50 horsepower [hp] or more) land-based, off-road vehicles to be used for project-related demolition and construction activity, including owned, leased, and subcontractor equipment, shall achieve a project wide fleet-average percent reduction in ROG and/or NO_x compared to the most current ARB fleet average that exists at the time of construction. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels (such as LNG/CNG/biodiesel), engine retrofit technology, after-treatment products, and/or other options as they become available. The prime contract shall use SMAQMD's Construction Mitigation Calculator (SMAQMD 2012), which is approved by PCAPCD <u>or the approved calculator in effect at the time of construction</u>, to demonstrate that its selected equipment fleet achieves these reductions. ▲ During construction the contractors shall utilize existing power sources (e.g., power poles) or natural gas- or propane-fueled generators that emit less ROG and NO_x rather than temporary diesel power generators. ▲ Signs shall be posted in the designated queuing areas of the construction site to remind off-road equipment operators that idling shall be limited to a maximum of 5 minutes. 	
11 Noise			
<p>Impact 11-1: Construction noise impacts. Existing noise-sensitive receptors are located in close proximity to proposed construction areas and, as the Specific Plan is developed, newly constructed sensitive receptors may be located adjacent to, or in close proximity to, ongoing construction. Most construction activities are proposed during the daytime hours, when construction noise is exempted by the Placer County Municipal Code. Although construction noise occurring during the exempted hours of the day would comply with the Placer County noise ordinance, the relatively large scale of construction occurring over a long period of time, and in close proximity to existing and future sensitive receptors, may result in excessive noise levels that disturb nearby sensitive receptors. Further, construction activity may be required during the night for actions such as large continuous concrete pours and to protect the construction site and buildings from anticipated storms. Proposed nighttime construction activities would exceed Placer County nighttime standards for sensitive receptors and could result in a substantial temporary increase in ambient noise levels. This impact would</p>	S	<p>Revised Mitigation Measure 11-1a: Implement construction-noise reduction measures. To minimize noise levels during construction activities, construction contractors shall comply with the following measures during all proposed construction work:</p> <p>Equipment Restrictions</p> <ul style="list-style-type: none"> ▲ For individual construction projects, the construction equipment staging area shall be located on the opposite side from sensitive receptors, unless site specific conditions preclude that, in which case the staging area shall be located as far away as possible from the nearest sensitive land use. All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation. ▲ All construction equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an 	SU

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Table 2-1 Summary of Impacts and Mitigation Measures Addressed in the Partially Revised Draft EIR			
Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
<p>be significant.</p>		<p>object is detected. The self-adjusting backup alarms shall automatically adjust to 5 dBA over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels. In addition to the use of backup alarms, the construction contractor shall implement the use of observers and the scheduling of construction activities such that alarm noise is minimized.</p> <p>Quieter Alternative Methods and Equipment</p> <p>▲ Each construction contractor shall use noise reducing operations measures, techniques, and equipment. This requirement shall be enforced through its inclusion on all construction bid specifications for all potential construction contractors hired within the Village at Palisades Tahoe Specific Plan. The bid specifications shall require that construction contractors provide an equipment inventory list for all equipment within the fleet with greater than 50 horsepower engines, that includes (at a minimum), make, model, and horsepower of equipment; operating noise levels at 50 feet, available noise control device that are installed on each piece of equipment; and associated noise reduction from the installed technology. Control devices shall include, but are not limited to, high-efficiency mufflers, acoustic dampening and protected internal noise absorption layers to vibrating panels, enclosures, and electric motors. In addition, the contractor shall specify how proposed alternative construction procedures will be employed to reduce noise at sensitive receptors compared to other more traditional methods. Examples include, but are not limited to, welding instead of riveting, mixing concrete off-site instead of on-site, use of thermal lance instead of drive motors and bits, and hydraulic pile driving or auger piles instead of impact pile driving. In all cases, the requirement is that the best commercially available noise-reducing technology and noise-reducing alternative construction method shall be used, provided that there are no safety concerns, engineering limits, or environmental constraints preventing it from being used. If a unique circumstance does exist that prevents an alternative quieter construction method to be used, the contractor shall provide evidence to support their proposal. The noise reduction elements of construction bid submittals shall be approved by Placer County, in coordination with a qualified acoustical professional.</p> <p>▲ When existing and future noise sensitive uses are within close proximity (i.e., 4,800 feet during daytime construction and 2,667 feet during nighttime</p>	

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		<p>construction) to prolonged (i.e., construction equipment use for more than 30 days, based on FTA's use of a 30-day average noise level standard for the purpose of evaluating long-term construction noise exposure, affecting the same offsite receptor) construction noise, noise attenuating buffers such as structures, truck trailers, temporary noise curtains or sound walls, or soil piles shall be located between noise sources and the receptor to shield sensitive receptors from construction noise.</p> <p>Construction on the East Parcel shall be planned and implemented to avoid intrusive noise, defined as an interior noise level of 45 dBA $L_{eq}/65$ dBA L_{max} or greater, during the time when classroom activities take place at the Lake Tahoe Preparatory School. The applicant shall coordinate with administrators at the academy and shall achieve these performance standards either by adjusting the timing of construction, adjusting construction methods during times of classroom instruction, using temporary screening, and/or improving noise attenuation at the school by replacing windows, increasing insulation, etc., as needed. The applicant shall prepare and submit to Placer County an acoustical study that demonstrates these criteria will be met prior to approval of each Small Lot Tentative Map for all construction on the East Parcel.</p> <p>The project applicant shall sponsor and create a website that includes information on construction activities and includes when, where, and for how long noise generating construction activities would occur. In addition, prior to the beginning of each construction season written notification of construction activities shall be provided to all noise-sensitive receptors located within 4,800 feet of proposed daytime construction activities and 2,667 feet of proposed nighttime construction activities. Additional notifications shall be provided if there are substantive changes in construction operations or noise generating activities (e.g., need for nighttime construction, special notice for blasting). Notification shall include anticipated dates and hours during which construction activities are anticipated to occur and contact information, including a daytime telephone number, for the project representative to be contacted in the event that noise levels are deemed excessive.</p> <p>Adopted Mitigation Measure 11-1b: Implement construction-noise reduction measures during noise-sensitive time periods. For all construction activity that is to take place outside of the Placer County construction noise exception timeframes (i.e., 6:00 a.m. and 8:00 p.m., Monday through Friday, and between 8:00 a.m. and 8:00 p.m.</p>	

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		<p>Saturday and Sunday), and that is anticipated to generate more than 45 dBA Leq / 65 dBA Lmax at 50 feet, the construction contractor shall comply with the following measures:</p> <ul style="list-style-type: none"> ▶ Consistent with Section 9.36.080 Exceptions, of the Placer County Code, obtain an exception to Article 9.36 Noise standards for nighttime construction. Implement noticing to adjacent landowners called for in Section 9.36.080 and implement conditions included in the exception, if approved. ▶ Install temporary noise curtains that meet the following parameters: <ul style="list-style-type: none"> ▶ Install temporary noise curtains as close as possible to the boundary of the construction site within the direct line of sight path of the nearby sensitive receptor(s). ▶ Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot. ▶ Noise-reducing enclosures or acoustic barriers shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors). ▶ Operate heavy-duty construction equipment at the lowest operating power possible. <p>New Mitigation Measure 11-1c: Prepare pre-construction acoustical study. In lieu of implementing all of the measures set forth in Revised Mitigation Measure 11-1a and Adopted Mitigation Measure 11-1b, a project applicant may submit an acoustical study that demonstrates that construction noise levels would meet the adopted Placer County Code requirements set forth in Section 9.36.060, established for the protection of noise exposure at sensitive receptors. The acoustical study shall be prepared by a qualified acoustical professional and shall determine based on project-specific parameters, including construction schedule and duration, whether nighttime or daytime construction would occur, specific construction equipment that would be used and associated noise levels, and if a potential noise impact could occur at nearby sensitive receptors. The study shall be prepared and submitted for county review prior to issuance of any construction/grading permits at the time of final plot plan review.</p>	

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Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation	
<p>13 Hydrology and Water Quality</p> <p>Impact 13-9: Project generated VMT effects on Lake Tahoe water quality and lake clarity. Although there is no hydrologic connection between the Village at Palisades Tahoe Specific Plan area and Lake Tahoe, the project could have a direct physical effect on lake clarity and water quality via VMT in the Tahoe Basin generated by the project. Implementation of the proposed project would result in an estimated addition of 12,406 average daily VMT to the Lake Tahoe Basin. At one time, vehicle tailpipe emissions in the Basin were thought to have a substantial adverse effect on Lake clarity/water quality; however, due in large part to modern vehicle emission controls, VMT is no longer thought to have a substantial adverse effect on Lake Tahoe clarity or water quality through the mechanism of atmospheric nitrogen deposition. It has long been known that fine sediment entering Lake Tahoe via stormwater is a significant contributor to losses in lake clarity and roadways and paved surfaces are a significant contributor to fine sediment loads. However, recent studies performed for the TMDL and TRPA's threshold evaluation reports (TERs) have found that there is a limited correlation between VMT and roadway sediment loads. Roadway management practices (e.g., controls on use of winter roadway sand, installation of sediment capturing BMPs) have been shown to be the most effective means of limiting roadway generated sediment from entering Lake Tahoe. Consequently, VMT in the Tahoe Basin generated by the Village at Palisades Tahoe Project would have little effect on roadway sediment reaching Lake Tahoe. Consequently, VMT in the Tahoe Basin generated by the Village at Palisades Tahoe Project would not result in a substantial degradation of Lake Tahoe water quality or clarity and would not conflict with TRPA threshold standards related to Lake water quality. Therefore, this impact would be less than significant.</p>	LTS	No mitigation is required.	LTS	
<p>15 Hazardous Materials and Hazards</p> <p>Impact 15-4: Interference with an adopted emergency evacuation plan. The existing surface parking lots at the Tahoe Palisades Ski Resort are currently used as the emergency rally point during emergencies and would continue to be used as such during project construction. In the long-term, the new parking structures on Lots 11 and 12 would serve as the emergency rally point as well as potential shelter in place locations. Several project buildings would also be designed to function as rally point/shelter in place locations. The project would integrate with, and not conflict with, local and regional emergency evacuation plans. However, during project construction,</p>	S	Adopted Mitigation Measure 15-4: Implement Mitigation Measure 9-8. The project applicant shall implement Mitigation Measure 9-8 from the 2016 EIR, which requires the preparation of a Construction Traffic Management Plan to, among other objectives, require removing potential traffic obstructions during emergency evacuation events.	LTS	

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Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
temporary roadway or travel lane closures could increase traffic congestion and interfere with implementation of applicable emergency evacuation plans. Although this impact would be temporary and intermittent over the 25-year construction period, this impact would nonetheless be significant.			

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9 TRANSPORTATION AND CIRCULATION

Chapter 9 of the 2016 EIR (i.e., 2015 Draft EIR, and where relevant, additional material in the 2016 Final EIR and post Final EIR comments and responses) analyzed the potential impacts of the proposed project on the surrounding transportation system including roadways, bicycle/pedestrian facilities, and transit facilities/services. Specifically, the 2016 EIR addressed potential impacts related to Placer County roadways, Placer County intersections, California Department of Transportation (Caltrans) intersections and intersection queuing, Caltrans highway segment operations, bicycle and pedestrian facilities, transit, and construction impacts. In addition, mitigation measures were recommended as necessary to reduce significant transportation and circulation impacts. All technical calculations to support the 2016 EIR analysis, as well as the parking analysis, were included as Appendix G of the 2016 EIR.

This section of the REIR provides the additional, revised transportation and circulation analysis for the project as required by the Court of Appeal's Ruling in *Sierra Watch v. County of Placer* (Ruling). See Chapter 1, "Introduction," in this REIR for further information on the Ruling and its relationship to this REIR.

The Ruling identifies one item in Chapter 9 of the 2016 EIR as requiring discussion and analysis. This item is related to the approach to, and implementation of Mitigation Measure 9-7, "Contribute fair share or create a Community Service Area (CSA) or a Community Facilities District (CFD) to cover increased transit service."

As identified in the Ruling, commenters on the Draft EIR faulted the document because the "EIR improperly relie[d] on deferred mitigation to address transit impacts." This became a specific issue in the lawsuit filed by Sierra Watch (plaintiffs) against the 2016 EIR and the resulting Ruling. As stated on pages 48 through 51 of the Ruling:

B. Mitigation for Transit Impacts

Lastly, we consider Sierra Watch's contention that the EIR improperly relied on deferred mitigation to address transit impacts.

The draft EIR said the project would increase demand on the existing public transit system (known as Tahoe Truckee Area Regional Transit or TART) and would, as a result, have a potentially significant impact on transit. But it said Squaw's commitment either to provide "fair share funding" to TART or to form a "Community Service Area (CSA) or a Community Facilities District (CFD) to fund the costs of increased transit services" would mitigate this impact to a less-than-significant level. It then noted how transit services could potentially be increased, stating that "[i]ncreased service may consist of more frequent headways, longer hours of operations, and/or different routes." The final EIR added little new, though it did include some detail on how the "fair share funding" would be calculated: "The fair share would be based on an engineer's report and would establish the project's financial contribution to additional transit services."

We agree this measure wrongly defers the details of mitigation. Agencies, in general, should not defer the specific details of a mitigation measure until after project approval. But they may do so "when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will [be] considered, analyzed, and potentially incorporated in the mitigation measure." (CEQA Guidelines, § 15126.4, subd. (a)(1)(B).)

But as Sierra Watch notes, the EIR's mitigation measure for transit impacts includes no performance standard at all. Nor does it provide any analysis supporting its conclusion that the project's impacts on transit would be rendered less than significant. Rather than supply this analysis, the EIR simply requires Squaw to provide an unspecified amount of funding to increase transit service by an

unspecified amount in the future, and then, without any analysis, says this vague offer to increase transit service would reduce impacts to a less-than-significant level. That, however, is not good enough to satisfy CEQA. (See *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 855, 857-858 [finding inadequate a mitigation measure that required the project applicant to “increase” the use of “produced water” and “reduce” the use of “municipal and industrial quality” water “to the extent feasible”; the terms “increase” and “reduce,” even when modified by the phrase “to the extent feasible,” are not specific performance standards]; *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 79-80 [finding inadequate a mitigation measure that required a project applicant to expand a city’s busing “capacity by paying an unspecified amount of money at an unspecified time in compliance with an as yet unenforced or unspecified transit funding mechanism”].)

Respondents counter that “the only open issue is the final funding amount” and that agreeing to pay fees to increase transit service “is appropriate mitigation.” We find both contentions unpersuasive. First, beyond leaving the funding amount unresolved, the EIR also never clearly explained how that funding would be used — something respondents acknowledged at trial, stating “[t]he EIR declined to speculate on how TART will expand service.”

Second, although “[m]itigation fee programs may constitute adequate mitigation to address the adverse effects of a project,” we find the fee program here falls short. (*California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 199.) To be adequate, fair-share mitigation fees must be “part of a reasonable, enforceable plan or program that is sufficiently tied to the actual mitigation of the traffic impacts at issue.” (*Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1189, italics added.) But here, we cannot say the required fair-share fee satisfies those conditions. The EIR neither estimates the amount of the fair-share contribution, nor specifies how this contribution will be used, nor reasonably explains why this undefined contribution can be expected to reduce expected impacts to a less-than-significant level. Instead, it does little more than note that the required fees would “increase[] transit service.” But a vague offer to increase transit service in the future is not a specific performance standard. (See CEQA Guidelines, § 15126.4, subd. (a)(1)(B); *King & Gardiner Farms, LLC v. County of Kern*, *supra*, 45 Cal.App.5th at p. 858 [“[t]he term[] ‘increase’ . . . — even though preceded by the mandatory term ‘shall’ . . . — [is] not [a] specific performance standard[]”].) It is instead “the sort[] of speculative mitigation measure[] that do[es] not comply with CEQA.” (*California Clean Energy Committee*, *supra*, 225 Cal.App.4th at p. 198 [finding inadequate fair-share mitigation requirements that “d[id] not estimate how much the mitigation measures . . . w[ould] cost or how they might be implemented”]; see also *Gray v. County of Madera*, *supra*, 167 Cal.App.4th at p. 1122 [finding inadequate a mitigation measure that required the applicant “to [c]ontribute an equitable share of the cost of construction of future [highway] improvements’ ” but included no definite commitment to make improvements that would mitigate the project’s impacts].)

As indicated in this excerpt from the Ruling, the core issue is that the EIR needed to include further information in Mitigation Measure 9-7, including explaining in more detail how the mitigation would result in increased transit service, and therefore reduce transit impacts to a less-than-significant level. While this topic was addressed by the County in response to post-EIR comments, the Ruling found that “beyond leaving the funding amount unresolved, the EIR also never clearly explained how that funding would be used.” Further, the Ruling found that fair-share mitigation fees required as part of Mitigation Measure 9-7 were not adequate to address the project’s transit impacts because they were not “part of a reasonable, enforceable plan or program that is sufficiently tied to the actual mitigation of the traffic impacts at issue.”

This REIR chapter retains the same chapter numbering (i.e., Chapter 9), title, and general organization as 2016 EIR to simplify comparisons across the two documents if desired. However, this chapter only addresses the issues necessary to rectify any inadequacies identified in the Ruling. Therefore, Section 9.3, “Impacts,” only includes a discussion of Impact 9-7, “Impacts to transit,” and Mitigation Measure 9-7 as this was the only part of Chapter 9 addressed by the Ruling. Section 9.1, “Environmental Setting,” only provides information relevant to the discussion of Impact 9-7, “Impacts to transit,” and the need for Mitigation

Measure 9-7. Where the 2016 EIR included environmental setting information related to study area roadways and intersections, study periods, process used to select winter season, traffic data collection, parking, traffic management, and levels of service (LOS); that information is not repeated here because it is not relevant to addressing the content of the Ruling. Similarly, Section 9.2, “Regulatory Setting,” in this REIR only provides information relevant to the discussion of Impact 9-7, “Impacts to transit,” and the need for Mitigation Measure 9-7, with the full discussion of regulatory setting available in the 2016 EIR (all 2016 EIR documents are available at: <https://www.placer.ca.gov/2747/Village-at-Squaw-Valley-Specific-Plan>).

In addition to adding information to this chapter in response to the Ruling, this chapter also provides updated information since completion of the 2016 EIR, where relevant. This chapter also incorporates text that was added in the 2016 Final EIR that supplemented the Draft EIR prepared at that time; that is, revisions to Chapter 9 of the Draft EIR identified in 2016 Final EIR Section 2.3.10, “Revisions to Chapter 9, ‘Transportation and Circulation’” (available at <https://www.placer.ca.gov/DocumentCenter/View/45765/Chapter-2--Revisions-to-Draft-EIR>) are reflected in this chapter.

9.1 ENVIRONMENTAL SETTING

As stated above, this section only provides environmental setting information relevant to the discussion of Impact 9-7, “Impacts to transit,” and Mitigation Measure 9-7 because this is the only portion of this chapter addressed in the Ruling. The full environmental setting information supporting the transportation and circulation analysis from the 2016 EIR is available at:

<https://www.placer.ca.gov/DocumentCenter/View/8185/Chapter-9--Transportation-and-Circulation-PDF>.

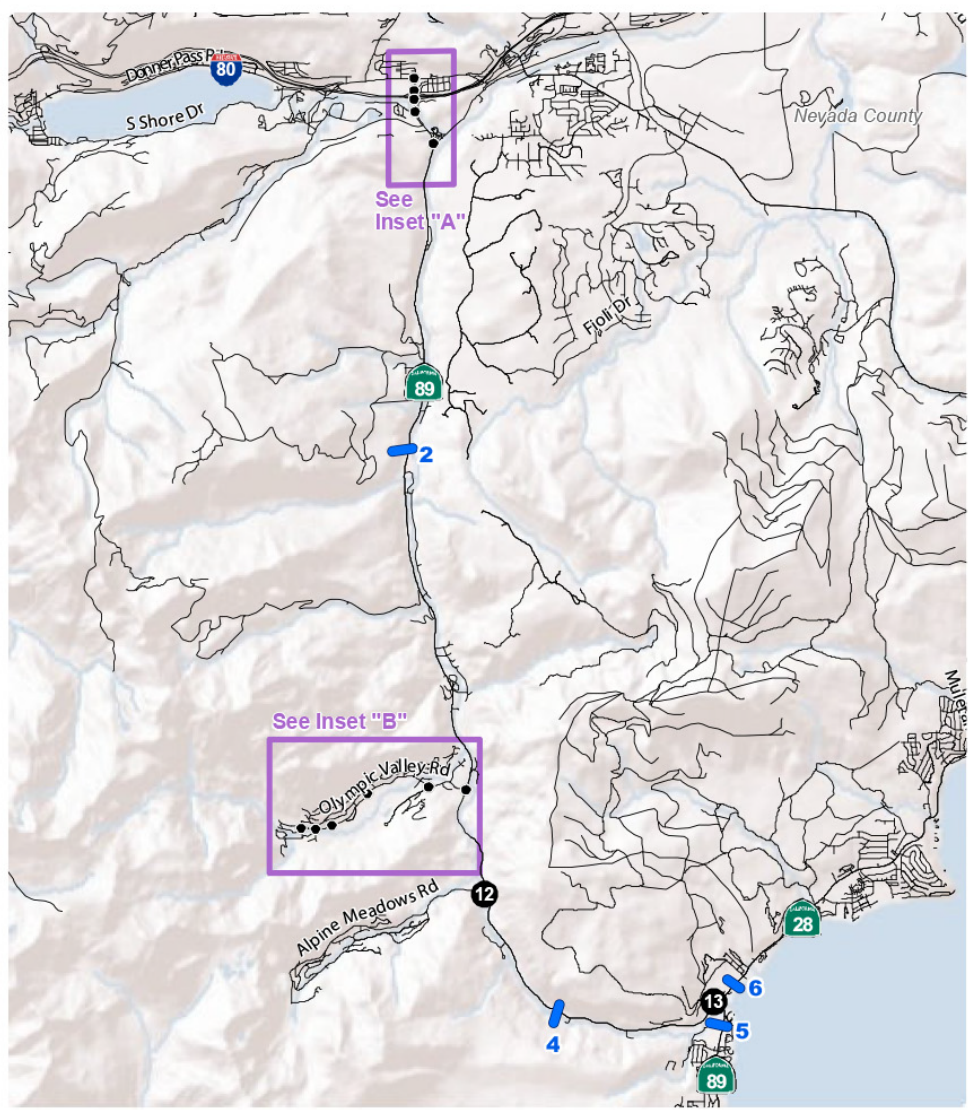
Where any relevant setting information from the 2016 EIR has been updated since that time, the updated information is provided here. Also, new or additional information that assists in addressing the Ruling may also be included.

9.1.1 Study Area

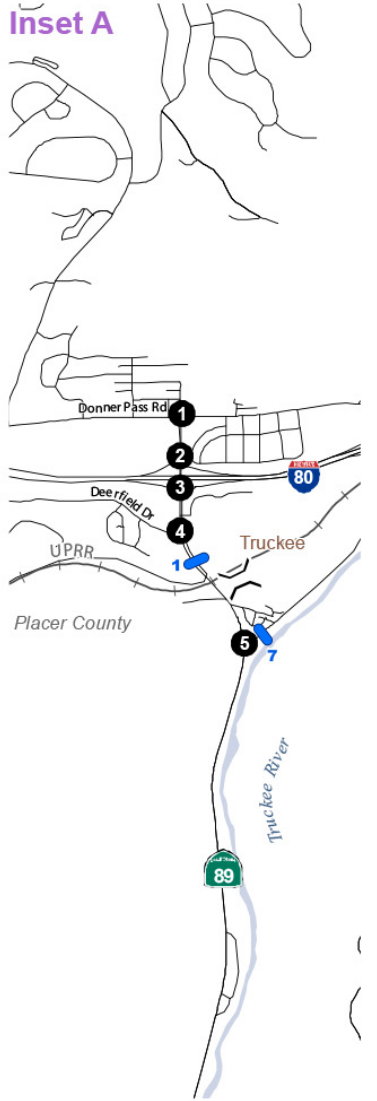
The following summarizes the discussion from the 2016 EIR, which is relevant to the transit analysis because it identifies and describes the roadways in the area that are used by transit services.

Exhibit 9-1 displays the study intersections included in the transportation analysis, which encompass the “study area” for the project’s transportation and circulation analysis. All study intersections are located along either State Route (SR) 89 or Olympic Valley Road, which provide regional and local access to the project site.

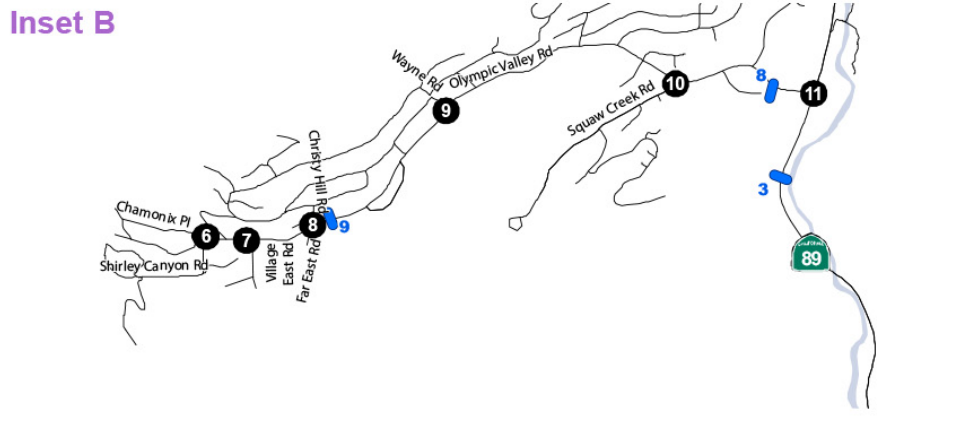
State Route 89 is a north-south state highway that extends throughout the study area from the Town of Truckee to Tahoe City and beyond. SR 89 has two lanes in each direction between Donner Pass Road and I-80. It continues south of I-80 as a four-lane highway, narrowing to a two-lane undivided highway south of Deerfield Drive. It continues as a two-lane highway to its junction with SR 28 in Tahoe City. Traffic signals exist on SR 89 at Donner Pass Road, Deerfield Drive, West River Street, Olympic Valley Road, and Alpine Meadows Road. Since the 2016 EIR was published, a new traffic signal was installed at the SR 89/Alpine Meadows Road intersection and the Truckee River Bridge was constructed. SR 89 is now routed over the Truckee River Bridge through two single-lane roundabouts, before continuing south to Homewood and beyond. The I-80/SR 89 interchange has multi-lane (i.e., two circulating lanes) roundabouts at each ramp terminal intersection. SR 89 has a posted speed limit of 40 miles per hour (mph) south of I-80, increasing to 45 mph south of the Union Pacific Railroad (UPRR) tunnel (i.e., “Mousehole”), and 55 mph south of West River Street. South of Olympic Valley Road, it has a posted speed limit of 45 mph, decreasing to 35 mph approaching Tahoe City. Seven distinct passing zones are provided on SR 89 between West River Street and Olympic Valley Road. Passing is not permitted south of Olympic Valley Road.



Inset A



Inset B



- LEGEND**
- Study Intersection
 - Study Segment*

Source: Image prepared and provided by Fehr & Peers in 2022

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Olympic Valley Road extends westerly from SR 89 through Olympic Valley, terminating at the Palisades Tahoe Ski Resort (i.e., the existing Village area). Between Squaw Creek Road and SR 89, Olympic Valley Road widens into two lanes in each direction separated by a two-way left-turn lane. Eastbound drivers have the option to turn right toward Tahoe City via one right-turn lane, which merges onto SR 89. From Squaw Creek Road to Christy Hill Road, it is a two-lane undivided roadway. This section includes shoulders on both sides of the road that enable the roadway to be operated as a three-lane roadway (via cones and traffic control personnel) during peak ski days. Between Christy Hill Road and Village East Road, it has one lane in each direction separated by a two-way left-turn lane or dedicated turn pocket. It continues westerly to Chamonix Place as a two-lane undivided road. All intersections along Olympic Valley Road feature minor street stop-control (stop sign). Olympic Valley Road has a posted speed limit of 35 mph and passing is not permitted.

9.1.2 Existing Transit Service

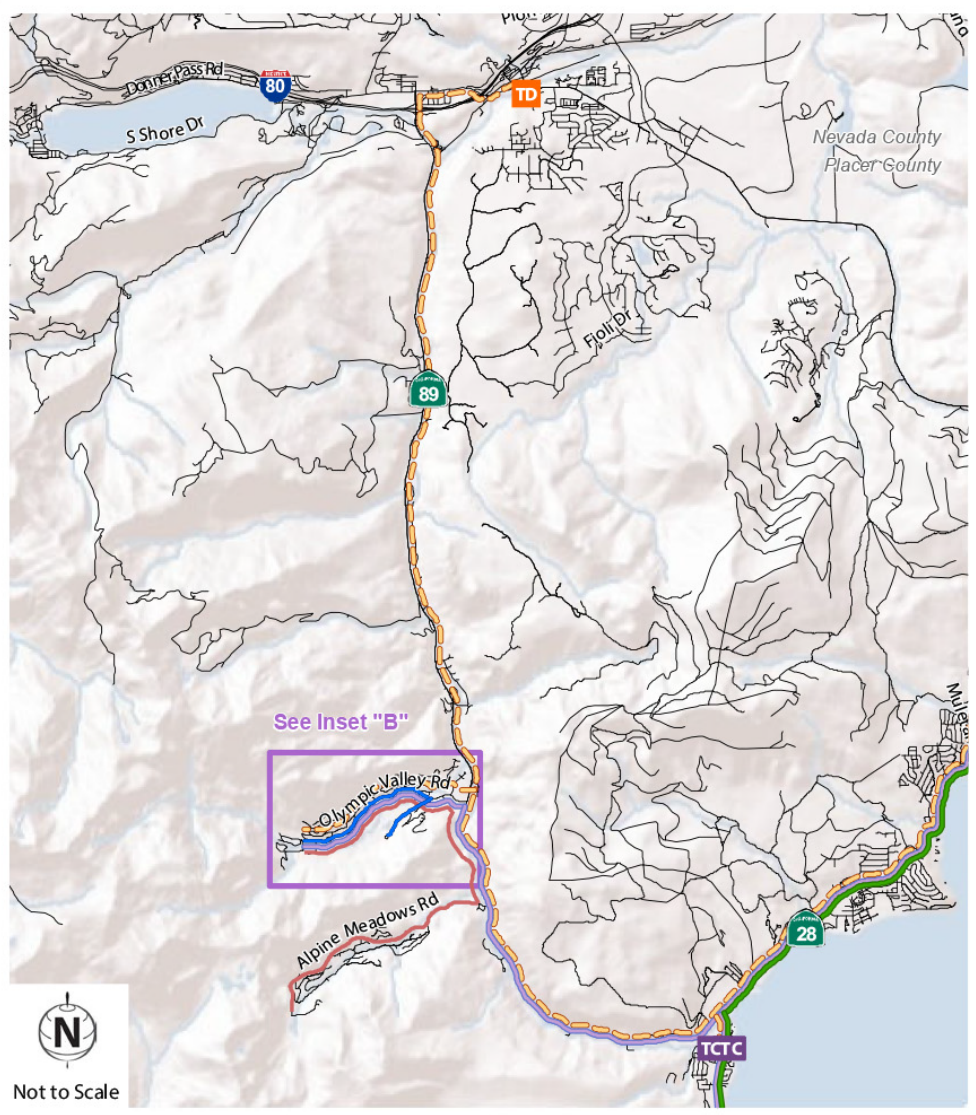
The following repeats the discussion from the 2016 EIR with updated naming for some sites and facilities as well as providing updated information on new transit services and Tahoe Truckee Area Regional Transit (TART) transit ridership data. An updated transit analysis has been conducted by Fehr & Peers (Fehr & Peers 2022), a transportation planning and engineering firm, and is provided in a memo reproduced in Appendix C of this REIR. Planned transit improvements are described below as part of the regulatory setting, in Section 9.2.3, “Regional and Local.”

A variety of transit service options are available within the study area. This section describes those services including operating hours, stop locations, and costs. Refer to Exhibit 9-2 for a map of transit routes and services.

Tahoe Truckee Area Regional Transit (TART) – TART is the name of the public transit service provided by Placer County. Since 2014 the name TART has also been used by the Town of Truckee as part of a co-branding effort to make the service more seamless to the public. Unless otherwise noted in this document, the TART service described is that provided by Placer County. This service, which is operated by Placer County, connects Palisades Tahoe with Truckee and Tahoe City (TART 2014). The Highway 89 route operates on a daily basis, year-round from approximately 6 a.m. to 6 p.m. The northbound route begins at the Tahoe City Transit Center (TCTC) and terminates at the Truckee Train Depot about 40 minutes later. The southbound route begins at the Truckee Train Depot and terminates at the TCTC about 45 minutes later. The route has bus shelters within Olympic Valley at the SR 89/Olympic Valley Road intersection, Resort at Squaw Creek, Village at Palisades Tahoe, and Palisades Tahoe Clock Tower. Several other stops (but not shelters) are also present along Olympic Valley Road. The route operates on one-hour headways and when the 2016 EIR was prepared cost \$1.75 for a single ride, with discounts available for seniors, youth, disabled, and multi-ride passes. Since publication of the 2016 EIR, TART has established free ridership on the Highway 89 route for all passengers as part of a pilot program (described below).

TART also provides other transit routes/services in the study area 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 TCTC. An additional bus is typically provided on the peak a.m. commute run on busy winter days to expand capacity.

Additionally, TART provides a microtransit, app-based, on-demand free rideshare program in North Lake Tahoe, including Washoe County, called TART Connect. This pilot program has operated continuously since June of 2021. TART Connect operates a higher level of service in the winter and summer. In the fall and spring, TART Connect operates only in evening hours. In summer 2022, TART Connect operated between June 30 and September 5. Information regarding hours of operations and an interactive map can be found at <https://tahoetruckeetransit.com/tart-connect-2/>. Also, in summer 2022, the Town of Truckee operated a microtransit service and branded it TART Connect. The Truckee service operated only in the summer and is being evaluated for potential operation in winter 2022-2023.

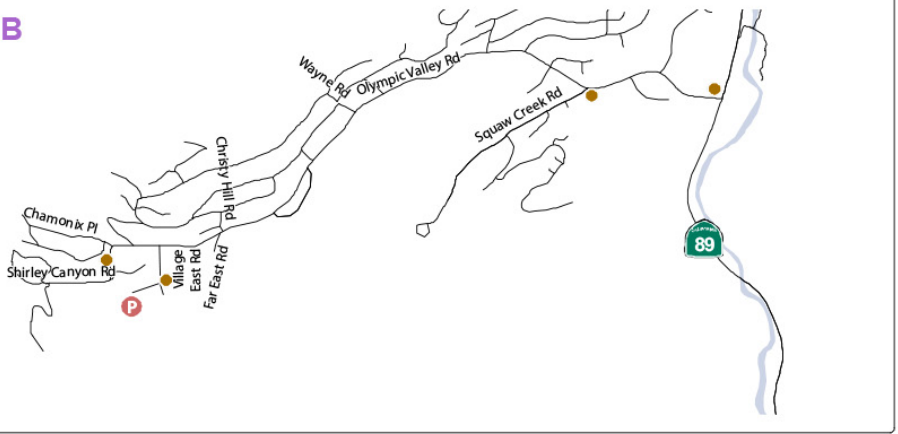


LEGEND

- TCTC Tahoe City Transit Center
- TD Truckee Depot
- Bus Shelter within Olympic Valley *
- P Palisades Tahoe Shuttle Pickup Location
- Highway 89 Route - Tahoe City Transit Center to Truckee Depot
- Palisades Tahoe Shuttle
- TNT-TMA Night Rider (Both Directions)
- TART Mainline
- Village at Squaw Creek Resort Shuttle

* Bus stops without shelters are also present along portions of Olympic Valley Road.

Inset B



Source: Image prepared and provided by Fehr & Peers in 2022

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Night Rider – The service previously branded as the Night Rider was operated through a private provider under contract by the Truckee North Tahoe Transportation Management Association (TNT/TMA). In 2016, this service was moved to part of Placer County’s public transit service. The TART night service (sometimes still referred to as Night Rider by members of the community) provides evening service connecting Olympic Valley with the North Shore of Lake Tahoe in both summer and winter. The Night Rider operates daily from 7 p.m. to 2 a.m., connecting Olympic Valley, Tahoe City, Homewood, Kings Beach, Northstar, and Crystal Bay along SR 89, SR 28, and SR 267. It is free to riders and runs on one-hour headways. In 2017, night service was added to the fall and spring seasons by TART from 7 p.m. to 10 p.m.

Palisades Tahoe Express Shuttle – This shuttle operates daily between the Village at Palisades Tahoe and the Alpine Lodge during the ski season. A lift ticket purchased at one side of the resort is also valid at the other side of the resort and includes use of the shuttle. It operates every 20 minutes from 8:30 a.m. to 4:45 p.m. and picks up at the Village at Palisades Tahoe near the terminus of Village East Road (near the Palisades Tahoe Members Locker Room).

Mountaineer – The Mountaineer is an on-demand shuttle service operated by the Mountaineer Transit Company (MTC) (2022a). For the 2021-2022 winter season, it operated from December 10, 2021, through April 10, 2022. It operates daily within Olympic Valley from 7:30 a.m. to 10:30 p.m. It also includes service via partnership with TART Connect between Olympic Valley and Tahoe City on Fridays and Saturdays from 5:30 p.m. to 10:30 p.m. This service is free to all passengers.

The Mountaineer is funded through the nonprofit MTC using a combination of a 1 percent assessment on Olympic Valley and Alpine Meadows lodging and short-term rental gross revenue, along with a 1 percent assessment on Palisades Tahoe on-site lift ticket gross revenue. Palisades Tahoe also provides a volunteer contribution of a 1 percent assessment on its daily lift ticket frequency product gross revenues to assist in funding Mountaineer services (MTC 2022b).

Village Resort at Squaw Creek Shuttle – Complimentary shuttle service between the Resort at Squaw Creek and Palisades Tahoe is provided to guests of both resorts. The shuttle drop-off location is at the terminus of Village East Road (near the Palisades Tahoe Members Locker Room). Shuttle times and frequency depend on weather, traffic, and resort occupancy.

Other forms of transportation available to those desiring to travel to the project site without relying on their own private vehicle include:

- ▲ North Lake Tahoe Express – The Red Route operates between Reno/Tahoe International Airport and destinations along SR 89 and Tahoe City (North Lake Tahoe Express 2022). Five trips per day depart the airport and five trips per day return to the airport. The cost is \$100 per person in each direction, with per-person prices decreasing with greater numbers of persons in the party. Advanced reservations are required.
- ▲ Amtrak – Train service operates between the Bay Area and Reno with a stop at the Truckee Depot. A one-way train ride between the Sacramento Valley Station and Truckee takes three to four hours. Cost per person depends on booking date, seat availability, and seat type. A round trip coach seat booked several weeks in advance could cost in the range of \$70 per person. From the Truckee Depot, riders could transfer to the TART Highway 89 a.m./p.m. route to reach the project site.

TART Highway 89 Route Ridership - Placer County staff provided ridership data for the TART Highway 89 route for the following time periods:

- ▲ January/February 2020
- ▲ January/February 2022

The ridership data are described further in an updated transit analysis included in Appendix C. The full ridership dataset provided by Placer County staff includes:

- ▲ Time stamp of each person boarding the bus (collected by the bus driver)
- ▲ Bus number and bus driver number
- ▲ Direction of travel
- ▲ Day of week

While the data does not indicate the specific stop from which each rider was picked up, it is possible to determine boarding locations by comparing the time stamp with route timetable data. However, delays can occur along Highway 89, causing late arrivals, making this process less accurate. Data regarding passenger alightings (i.e., exiting the bus) is not recorded on this route.

The January/February 2020 data represents conditions prior to the beginning of the COVID-19 pandemic and after TART had established free ridership on the Highway 89 route. The January/February 2022 data represents conditions during COVID-19. A comparison of total riders between the two periods revealed a 38 percent decrease in the number of riders in January/February 2022 compared to January/February 2020. Therefore, a conservative approach was taken, and the January/February 2020 dataset is used to reflect a higher level of existing ridership. Average winter weekend bus boarding data for the January/February 2020 period is provided in Table 9-1. The updated transit analysis also describes the methods used to interpret the current ridership data as extent and type of data available changed with the shift from fee-based use to free ridership on the Highway 89 route. The analysis focuses on weekend transit use as the heaviest transit use during peak commute periods (i.e., mornings and afternoons) on the Highway 89 route occurs on Saturdays and Sundays.

As noted in note 2 in Table 9-1, during extreme demand conditions, a second capacity bus (often referred to as a “tripper”) is deployed (if a driver is available) during morning peak periods to provide additional capacity for the trip that leaves Crystal Bay at 6 a.m. and 7 a.m. and then enters the TCTC to act as the 6:30 a.m. and 7:30 a.m. departing buses from the TCTC. These two buses enter the TCTC with riders already on board, pick up additional riders at the TCTC, then depart the TCTC on the Highway 89 Route to Truckee.

Table 9-1 Highway 89 TART Bus Route – 2020 Average Winter Ridership Levels			
Day	Travel Direction	Scheduled Departure Time	Average Jan/Feb 2020 Boarding ¹
Saturday	Northbound	6:30 a.m. from TCTC	66 at TCTC (two buses) ²
		7:30 a.m. from TCTC	98 at TCTC (two buses) ²
		8:30 a.m. from TCTC	24 at TCTC (one bus)
Sunday	Northbound	6:30 a.m. from TCTC	94 at TCTC (two buses) ²
		7:30 a.m. from TCTC	119 at TCTC (two buses) ²
		8:30 a.m. from TCTC	27 at TCTC (one bus)
Saturday	Southbound	3:30 p.m. from Truckee Depot	31
		4:30 p.m. from Truckee Depot	54
		5:30 p.m. from Truckee Depot	21
Sunday	Southbound	3:30 p.m. from Truckee Depot	42
		4:30 p.m. from Truckee Depot	53
		5:30 p.m. from Truckee Depot	14

Notes: TCTC = Tahoe City Transit Center.

¹ For northbound buses, these values represent the number of persons on the bus as it left the TCTC. For southbound buses, this represents the total number of boardings along the route (and not the number of persons on the bus at a certain location along the route).

² During peak conditions, a second bus may operate along this route (if a driver is available) to pick-up any passengers who are denied entry to the first bus due to that bus being at-capacity. The second bus travels the same westbound SR 28 to northbound Highway 89 route as the first bus.

Source: TART Highway 89 route ridership data provided by Placer County staff.

Placer County staff (Garner, pers. comm., 2022) indicated that current TART buses serving the Highway 89 route have the following “planning” capacities:

- ▲ Seated Bus Capacity = 33 persons
- ▲ Maximum Seated Plus Standing Capacity = 45 persons

The seated bus capacity value above is generally consistent with Table 4.1 of the *Tahoe Transportation District Short Range Transit Plan* (TTD 2017), which indicates that the heavy-duty large buses utilized by TART have capacities of 27 or 38 seats plus two wheelchair stations. The seated plus standing capacity is best described as an upper limit planning value, and not an absolute maximum capacity of persons that can fit on a bus (as will be evidenced in the data that follows). Although system operations are planned to maintain a maximum of 45 riders on each bus, more than 45 people can, and often do ride on a single bus during peak periods.

The ridership data indicates the following regarding weekend morning busses leaving from the TCTC:

- ▲ Ridership levels are greater on Sundays than Saturdays.
- ▲ Due to high ridership demands, the 6:30 a.m. and 7:30 a.m. trips operated with two buses on each route (on all days sampled).
- ▲ The 7:30 a.m. bus departing TCTC has the largest average ridership, followed by the 6:30 a.m. departing bus.
- ▲ The number of passenger boardings for the 7:30 a.m. trip from TCTC averaged 49 persons per bus on Saturdays and 60 persons per bus on Sundays. This exceeds the planning value seated plus standing capacity of 45 persons.
- ▲ The number of passenger boardings for the Sunday 6:30 a.m. trip from TCTC averaged 47 persons per bus, which is also a slight exceedance of the seated plus standing capacity of 45 persons.

The ridership data indicates the following regarding weekend afternoon busses leaving from the Truckee Depot:

- ▲ There is not a clear trend regarding Saturday or Sunday having greater ridership.
- ▲ On average, the 4:30 p.m. bus departing Truckee Depot has the greatest ridership, followed by the 3:30 p.m. departing bus.

More detailed analysis of passenger boarding data was performed for the southbound routes to estimate the number of passengers on the three southbound buses on the route segment between the Olympic Valley and the TCTC. This analysis was performed by reviewing boarding time stamps and route timetables. Based on this analysis, it was estimated that about 75 percent of all passengers boarded from a bus stop within Olympic Valley with another 21 percent boarding prior to Olympic Valley (i.e., upstream, closer to, or within Truckee) and 4 percent boarded after the bus left Olympic Valley. Approximately half of the passengers that boarded the bus prior to Olympic Valley exited the bus within Olympic Valley. This is reasonable given the variety of recreational, social, and other amenities present in Olympic Valley. Based on this approach, the following average number of riders would be present on TART SR 89 southbound buses between Olympic Valley and the TCTC:

- ▲ 3:30 p.m. bus from Truckee Depot: 28 persons on Saturday and 38 persons on Sunday
- ▲ 4:30 p.m. bus from Truckee Depot: 48 persons on both Saturday and Sunday
- ▲ 5:30 p.m. bus from Truckee Depot: 19 persons on Saturday and 13 persons on Sunday

The conclusion is that the 4:30 p.m. bus slightly exceeds its maximum seated plus standing capacity of 45 persons. This finding is aligned with observations from Placer County staff indicating particularly crowded conditions in the southbound direction during the peak of the afternoon commute period (Garner, pers. comm., 2022).

9.2 REGULATORY SETTING

As stated above, this section only provides regulatory setting information relevant to the discussion of Impact 9-7, “Impacts to transit,” and Mitigation Measure 9-7 because this is the only portion of this chapter addressed in the Ruling. The full regulatory setting information supporting the transportation and circulation analysis from the 2016 EIR is available at: <https://www.placer.ca.gov/DocumentCenter/View/8185/Chapter-9--Transportation-and-Circulation-PDF>. Where any regulatory setting information from the 2016 EIR has been updated since that time, the updated information is provided here. Also, new or additional information that assists in addressing the Ruling may also be included.

9.2.1 Federal

There are no federal laws or regulations that pertain to the issues addressed in this chapter.

9.2.2 State

There are no state laws or regulations that pertain to the issues addressed in this chapter.

9.2.3 Regional and Local

The proposed project is located in unincorporated Placer County. However, the study area roadways and transit systems serving the project site extend into the jurisdiction of the Tahoe Regional Planning Agency (TRPA). Specific regulatory conditions from TRPA that would be relevant to the discussion of Impact 9-7, “Impacts to transit,” and the need for Mitigation Measure 9-7 are described below.

The following information provides an update of information from the 2016 EIR and reflects the current regulatory setting.

TAHOE REGIONAL PLANNING AGENCY

Among its other roles as a regional planning agency, TRPA develops the Regional Transportation Plan (RTP) and establishes thresholds to meet a set of environmental goals and standards within the Tahoe Basin. While the RTP acts as a roadmap for achieving the thresholds, TRPA also holds authority over the Code of Ordinances which are designed to protect and attain the thresholds. TRPA continues to possess a unique governance structure in the United States through the California and Nevada bi-state compact. TRPA’s jurisdictional boundary is the Tahoe Basin, which does not include the project site. TRPA’s regulations do not apply to the proposed project; however, its vision for the transportation network within the Tahoe Basin is applicable, as described below.

Regional Transportation Plan

TRPA developed the 2020 RTP as Lake Tahoe’s blueprint for a regional transportation system that enhances the quality of life in the Tahoe region, promotes sustainability, and offers improved mobility options for people and goods (TRPA 2021). The 2020 RTP includes a Sustainable Communities Strategy (SCS), in accordance with California SB 375, statutes of 2008 (Sustainable Communities and Climate Protection Act). The SCS demonstrates the region’s efforts in meeting per capita greenhouse gas emission reduction targets set by the California Air Resources Board (CARB). The 2020 RTP is centered around six goals for the region’s transportation system, which are included below:

- ▲ Protect and enhance the environment, promote energy conservation, and reduce greenhouse gas (GHG) emissions.
- ▲ Enhance and sustain the connectivity and accessibility of the Tahoe transportation system, across and between modes, communities, and neighboring regions, for people and goods.
- ▲ Increase safety and security for all users of Tahoe’s transportation system.
- ▲ Support the economic vitality of the Tahoe Region to enable a diverse workforce, sustainable environment, and quality experience for both residents and visitors.
- ▲ Provide an efficient transportation network through coordinated operations, system management, technology, monitoring, and targeted investments.
- ▲ Provide for the preservation of the existing transportation system through maintenance activities that support climate resiliency, water quality, and safety.

Strategies detailed within the 2020 RTP focus on projects and programs that dynamically meet the needs of all roadway users by:

- ▲ offering better travel mode options;
- ▲ creating incentives that spread out the times, places, and ways people travel to improve traffic flow;
- ▲ providing environmentally innovative infrastructure;
- ▲ improving safe and equitable access to the places people want to go; and
- ▲ prioritizing funding for projects that fulfill TRPA objectives in transit, active transportation, transportation demand management, and other programs and directly support identified TRPA transportation performance outcomes.

RTP Planned Transit Improvements

RTP goals and strategies are achieved, in part, by funding and implementing various transportation projects, both inside the Tahoe Basin and outside the basin in the larger region. Appendix B of the 2020 RTP lists a series of financially constrained transportation projects included in the plan. Financially constrained projects are those that can be expected to be implemented within the next 25 years based on the amount of funding that is forecasted to be reasonably available. In other words, such projects are not a “wish list” of potential projects, but are those for which funding is, or is reasonably expected to become, available based on existing plans and funding sources. According to the 2020 RTP, the funding forecast reflects historically available funding levels, a reasonable expectation of success with discretionary grants, and a new regional revenue estimate being actively pursued as part of the Sustainable Funding Initiative. According to page 161 of the 2020 RTP, funding is expected to be available for the next 25 years for about 71 percent of the plan’s total \$3.4 billion set of transportation investments, that is, approximately 71 percent of the total planned expenditures are in the financially constrained category. Notably, 77 percent of funds needed for planned transit projects are expected to be available over the next 25 years, indicating an emphasis towards allocating funding for transit projects.

In the nearer term, Appendix B of the 2020 RTP shows plan expenditures by 2025, categorized either as financially “constrained” or “unconstrained.” As stated above, projects on the financially constrained list are those that can be expected to be implemented within the specified time period (in this case, by 2025) based on the amount of funding that is forecasted to be reasonably available; that is, they represent projects that can be expected to be implemented even in a real-world setting in which funding limits are taken into account. The Constrained Funding list includes \$136.3 million in Transit Projects to be delivered by 2025, with no unconstrained projects (i.e., unfunded) within this timeframe. Increasing bus frequency along the State Route 89 route from the current 1-hour headways to 30-minute headways by 2025 is part of this 2025 Constrained Funding list. This increase in bus frequency is part of Project # 03.02.03.003 in Appendix B of the 2020 RTP,

titled “Funds for TART’s transit planning, operations, maintenance, and administration.” This offers clear evidence that the TART Highway 89 enhanced bus service expansion is funded and expected to be operational by 2025. To further reiterate this conclusion, TRPA staff stated that “All transit projects in the north Tahoe area are on the constrained list” (Glickert, pers. comm., 2021).

According to the 2020 RTP, transit service improvements will build off existing routes by improving service frequency, service duration of service, and geographic coverage (TRPA 2021: 52). Use of these bus routes will continue to be free of charge through 2045. As noted above, free-fare service already exists along the SR 89 corridor. Free-fare service is being implemented because it has been shown to encourage the use of transit and increase ridership. The following describes specific transit improvements along the SR 89 corridor (by year) that are on the constrained (i.e., funded) projects list (TRPA 2021: 164):

- ▲ By 2025 (i.e., part of the 2025 Constrained Funding list mentioned above), TART will reduce headways (i.e., the elapsed time between successive arriving buses) from 60 to 30 minutes on the Highway 89 a.m./p.m. (Peak) route (2020 RTP Appendix B, Page 154). This is effectively a doubling of service.
- ▲ By 2045 (i.e., a part of the projects mentioned above that are expected to be implemented within the next 25-year), headways on the Highway 89 a.m./p.m. (Peak) route will be further reduced to 15 minutes (Glickert, pers. comm., 2021).

TAHOE TRUCKEE AREA REGIONAL TRANSIT SYSTEMS PLAN

In April 2016, the Placer County Board of Supervisors adopted a resolution approving the *Systems Plan Update for Tahoe Truckee Area Regional Transit in Eastern Placer County* (LSC Transportation Consultants, 2016). The document represents a focused systems plan that includes a five year service, capital, management, and financial plan for the Placer County TART program. This plan includes the same reduction of TART bus headways from one hour to 30 minutes on the TART Highway 89 route between Tahoe City and Truckee included in the 2020 RTP described above. The Systems Plan identifies funding sources for this service improvement and a funding shortfall is not identified for operating and administrative costs. See Appendix B to the VMT and transit analysis provided as Appendix C to this REIR for more information on the *Systems Plan Update for Tahoe Truckee Area Regional Transit in Eastern Placer County* and funding for SR 89 transit service improvements.

RESORT TRIANGLE TRANSPORTATION PLAN

In October 2020, the Placer County Board of Supervisors approved the Resort Triangle Transportation Plan (Placer County 2020). The Resort Triangle is generally defined as the area shaped by SR 89, SR 267, and SR 28 in eastern Placer County. The overall objective is to improve the experience of recreating, shopping, dining, working, and living in North Lake Tahoe. The County is committed to preserving the environment and characteristics of the Resort Triangle that make it the home that year-round residents cherish and a significant destination for outdoor recreation for everyone. Improving the transportation system so that it is adaptable and more resilient in serving the influx of visitors throughout the year is critical for preserving the area’s unique characteristics. This can only be achieved through multimodal strategies that make the most of what currently exists, while strategically investing in improvements that enable reliable, efficient travel options that broaden the travel choices beyond personal vehicles. Therefore, the plan describes recommendations to:

- ▲ enhance transit operations on SR 89 and SR 267 corridors by providing a transit-only lane and/or high-occupancy vehicle (HOV) lane;
- ▲ enhance overall operations of steep grades on SR 267 by providing a climbing lane specifically for trucks and transit vehicles;
- ▲ encourage people to take transit, carpool, walk, bike, and/or park one time by implementing a paid parking program in the commercial town centers and recreational destinations and use that revenue to invest in further improvements for walking, biking and transit;

- ▲ enable people to leave their car behind (at their place of lodging) and take transit by implementing an on-demand microtransit program; and
- ▲ equip employers with resources and support to provide their employees vehicle commute reduction options.

Many of the above recommendations are intended to be seasonal in operation to address the unique challenges and needs that arise from the heavy visitor seasons. Following the Board of Supervisors approval of the plan (in October 2020), the County will identify and begin implementing the Plan through actions laid out in a supporting Action Plan.

9.3 IMPACTS

9.3.1 Significance Criteria

As stated above, this chapter only updates the discussion of Impact 9-7, “Impacts to transit,” and Mitigation Measure 9-7 because this is the only portion of this chapter addressed in the Ruling. Where the 2016 EIR included significance criteria relevant to a comprehensive CEQA analysis of transportation and circulation, only significance criteria relevant to the analysis of transit impacts is provided here. Based on the Placer County CEQA checklist in effect when the 2016 EIR was prepared, Appendix G of the State CEQA Guidelines at the time the 2016 EIR was prepared, and the specific focus of this REIR, the proposed project would result in a potentially significant impact related to transit if it would:

Transit System

- 1) Create demand for public transit service above that which is provided, or planned.
- 2) Disrupt existing public transit services or facilities.
- 3) Interfere with planned public transit services or facilities.

Although new or updated thresholds related to effects on transit service may be available, the thresholds used in the 2016 EIR are retained to remain directly responsive to the material referenced in the Court Ruling. In addition, the thresholds used in the 2016 EIR remain an appropriate tool for evaluating the core issue of sufficiency of transit service.

9.3.2 Methods and Assumptions

This section begins by describing the policies of the proposed project that are relevant to the analysis of Impact 9-7 and the need for Mitigation Measure 9-7. It presents information related to identifying project generated transit demand and the provision of transit on the project site.

POLICIES PROPOSED IN THE SPECIFIC PLAN THAT COULD AFFECT PROJECT TRANSIT IMPACTS

The following policies from *The Village at Squaw Valley Specific Plan* (Squaw Valley Real Estate, LLC 2015) are applicable to the evaluation of transit effects:

Circulation and Parking

- ▲ **Policy CP-2:** Enhance and supplement public transit systems and alternative means of mass transportation within the Village and Olympic Valley to reduce vehicle trips and emissions.
- ▲ **Policy CP-3:** Accommodate regional transit access at a Village Transit Center that encourages mass transit use by providing convenient and efficient transit routing, minimizes congestion between mass

transit vehicles and other traffic, provides convenient walking access to ski portals, and enhances the environment for passengers waiting at the Transit Center.

- ▲ **Policy CP-4:** Encourage use of regional transit services (including services from commercial airports) and participate as appropriate in expansion of regional transit services through financial support, such as subsidies and/or funding programs.

PROPOSED CIRCULATION IMPROVEMENTS

According to the *Village at Palisades Tahoe Specific Plan*, the proposed project would enhance support of transit within the Village Area with implementation of the following improvements:

- ▲ A transit center would be constructed within the Village Area to provide a convenient transit hub for both public and private transit services traveling within, to, and from the Village Area. It would be designed as a drop-off/pick-up facility with the capacity to accommodate two buses at a time. It would be centrally located within the Village Core, and accessed from the most westerly bridge across Squaw Creek.

PROPOSED TRANSPORTATION MANAGEMENT PLAN

The proposed project would implement a Transportation Management Plan (TMP), which would contain the following elements directly related to public transit:

- ▲ **Transit Center and Services** – The Transit Center would be centrally located to provide a convenient transit hub for both public and private transit services traveling within, to, and from the Village Area. Low-emission vehicle shuttle service would be provided within the Village, as warranted, to provide mobility for visitors, guests, and employees. Transit service would be operated between the Village Area and the other key lodging and residential areas within the Olympic Valley (e.g., Resort at Squaw Creek). The goal of this service is to provide a viable alternative to the private automobile for residents and guests in the Olympic Valley traveling to and from the Village Area. As demand dictates during the peak ski season, transit service provided by TART and other providers to the Truckee/North Tahoe region would also be provided, promoted, and/or supported.
- ▲ **Establish a Transportation Coordinator Position** – A Squaw Valley Resort employee would be designated as Transportation Coordinator, with responsibility to provide employees (in particular newly-hired employees) with information on the various commute options. The Transportation Coordinator would also cooperate/coordinate with TART and the Truckee/North Tahoe Transportation Management Association.

EMPLOYEE TRIP GENERATION (WINTER CONDITIONS)

Based on the project description, the following distinct land uses are considered “employee trip generators.”

- ▲ **Hotel/Condo and Fractional Cabin Employees** – trip generation was estimated based on: anticipated number of employees and shift times and winter employee surveys regarding travel patterns, mode split (i.e., how many employees used public transit, personal vehicles, and other travel modes), vehicle occupancy, etc.
- ▲ **Restaurant/Retail Employees** – trip generation was estimated based on: anticipated number of employees and shift times and winter employee surveys regarding travel patterns, mode split, vehicle occupancy, etc.
- ▲ **Mountain Adventure Camp (MAC)** – trip generation was estimated based on: anticipated number of guests and employees, expected shift times, and winter overnight guest and employee surveys regarding travel patterns, mode split, vehicle occupancy, internal trips, etc.

The majority of new employees (both residing on the East Parcel and outside of Olympic Valley) would be transported between the East Parcel and the Village Area by shuttle during peak winter conditions. However, some employees (estimated at 10 percent of hospitality staff) are expected to drive to the project site due to the need to have a car during their work shift.

As identified on page 9-65 of the 2016 DEIR:

- ▲ Up to 550 project-related employees may be expected to work in the Village Area and reside outside of Olympic Valley.
- ▲ About two-thirds of these employees are expected to work the day shift (i.e., 8 a.m. to 5 p.m.).
- ▲ 8 percent of employees would use TART to travel to and from work.

By multiplying the number of employees that would reside outside Olympic Valley (550) who work the day shift (66.67 percent) and take TART (8 percent), 29.3 riders, or a rounded-up value of 30 project-generated riders would be expected. This is precisely how the value of “30 inbound riders on the morning TART service” cited on page 9-65 of the 2016 EIR was derived. Also see the transit analysis provided in Appendix C.

9.3.3 Issues or Potential Impacts Not Discussed Further

The 2016 EIR identified that issues related to parking did not warrant further discussion because effects associated with parking are not considered a significant criterion under CEQA and because the project would provide a supply of parking that accommodates overnight guests and day-user skier parking demand for all but the busiest four ski days of the year, which are atypical. Additionally, emergency vehicle access was addressed in Chapter 15, “Hazardous Materials and Hazards,” of the 2016 EIR. All other issues and potential impacts relevant to a comprehensive CEQA analysis of transportation and circulation were evaluated (e.g., potential impacts related to Placer County roadways, Placer County intersections, Caltrans intersections, vehicular queuing at Caltrans intersections, Caltrans highways, bicycle and pedestrian facilities, transit, and construction impacts). As stated in the introduction to this chapter, this chapter only updates the discussion of Impact 9-7, “Impacts to transit,” and Mitigation Measure 9-7 because this is the only portion of this chapter addressed in the Ruling. Therefore, all other issues and potential impacts considered in the 2016 EIR are not discussed further in this REIR.

9.3.4 Impact Analysis

Impact 9-7: Impacts to transit.

The 2016 EIR evaluated the project’s potential impacts related to transit and concluded that while the proposed Specific Plan described several planned transit infrastructure expansions, and the project would not disrupt or interfere with existing or planned transit services or facilities, the project applicant was not explicitly required to ensure that an adequate supply of public transit service be available to meet the anticipated demand. The potential for transit supply generated by the project to exceed demand resulted in a significant impact. Since certification of the 2016 EIR, the availability of transit services has increased in the project area and the 2020 RTP has been adopted and includes the expansion of TART service capacity in the project area. This expansion in TART service capacity would result in adequate bus capacity to absorb the project’s increase in transit riders. However, the expansion in TART service capacity could result in increased ridership from other sources as more frequent and convenient transit service attracts more riders. The combined increased ridership from the proposed project and increased ridership from other sources could create demand for public transit service above that which is provided or planned. Although the increased transit ridership in this scenario is not attributable exclusively to the proposed project, a conservative approach is taken here and this is considered a **significant** impact.

The 2016 EIR stated that the project would not add structures, roadways, or other elements that would disrupt or interfere with any existing or planned transit services or facilities. As the project facilities evaluated in this REIR are the same as those considered in the 2016 EIR, this conclusion does not change. The proposed project would include a transit center constructed within the Village Area to provide a convenient transit hub for both public and private transit services traveling within, to, and from the Village Area. The project will also include low-emission vehicle shuttle service within the Village, as warranted, to provide mobility for visitors, guests, and employees. Policy CP-4 of the Specific Plan states the following: Encourage use of regional transit services (including services from commercial airports) and participate as appropriate in expansion of regional transit services through financial support, such as subsidies and/or funding programs.

As stated above in Section 9.3.2, "Methods and Assumptions," the 2016 EIR estimated that during peak winter conditions, up to 550 project-related employees may be expected to work in the Village Area and reside outside of Olympic Valley. About two-thirds of these employees are expected to work the day shift (i.e., 8 a.m. to 5 p.m.). Based on surveys of existing employees (surveys provided with 2016 EIR), during the winter season, about 8 percent of existing Palisades Tahoe employees use TART to commute to work. This suggests that the project could add approximately 30 riders to the morning inbound TART service to Olympic Valley. Table 9-17 in the 2016 EIR indicates that weekend morning TART buses between Tahoe City and Olympic Valley were approaching capacity during peak winter conditions in 2011 (the most recent year information was available when the 2016 EIR was prepared). Accordingly, the 2016 EIR determined that the project could cause a demand for public transit that exceeds supply unless expanded service is implemented, resulting in a significant impact. During all other daily and seasonal periods there is sufficient existing transit service to accommodate project generated demand.

Since the 2016 EIR was published, an updated analysis of anticipated transit ridership by project employees has been completed as well as a more detailed evaluation of existing transit ridership and future planned transit capacity. The full transit analysis, prepared by Fehr & Peers (Fehr & Peers 2022), a transportation planning and engineering firm, is provided in Appendix C of this REIR. Key elements of that analysis are provided below.

- ▲ As stated previously, project employee numbers and estimated numbers of employees using transit have not changed from those calculated in the 2016 EIR (30 transit riders).
- ▲ According to the Palisades Tahoe winter employee survey contained in the 2016 EIR, 64 percent of project employee TART riders (or about 20 persons) would travel northbound on the TART Highway 89 route from TCTC to the project site for the morning commute and ride southbound on the TART route in the afternoon. Therefore, although the 30 project generated transit riders could be split between northbound and southbound buses as they travel to and from the project site, the transit analysis assumes all 30 riders travel in the same direction (on the busier route to/from the TCTC) to ensure that project effects on transit ridership are not underestimated.
- ▲ Many of the project's employees would be associated with hospitality, food & beverage, management, and related services. Exact start/end times for these types of positions are not known, though it is expected that most would work an 8 a.m. to 5 p.m. shift. However, it is reasonable to assume that at least some of the 30 project generated employees using transit would be provided or choose shift start and end times that would cause them to use buses with different departure times. For example, in the mornings, some project employees would board the bus that leaves the TCTC at 6:30 a.m., some would use the 7:30 a.m. bus, and some would use the 8:30 a.m. bus. However, to ensure that project effects on transit ridership are not underestimated, the transit analysis assumes that all 30 riders use the bus with the greatest number of existing riders. Based on these assumptions, the Village at Palisades Tahoe Specific Plan would add 30 riders in the morning to the northbound bus leaving the TCTC at 7:30 a.m. and 30 riders in the afternoon to the southbound bus that leaves the Truckee Depot at 4:30 p.m.
- ▲ The addition of 30 project employees to the Sunday northbound bus that leaves the TCTC at 7:30 a.m., which currently has an average of 98 riders split among two busses (currently, during peak conditions, a second bus may operate along this route to pick-up any passengers that may not be able to board the

first bus because it is too full), would increase riders to 128 riders across the two busses and exceed the seated plus standing capacity of 45 persons per bus. Similarly, the 30 project riders, added to the average of 48 existing riders on the bus that leaves Palisades Tahoe at 5:05 p.m. en route to the TCTC, would result in 78 riders on the bus, which exceeds the seated plus standing capacity of 45 persons. Therefore, the updated transit ridership analysis does not change the conclusion provided in the 2016 EIR that, at this particular time, if project generated riders are added to the existing bus service, those riders would create demand for public transit service above that which is provided.

- ▲ Placer County, TART, and other transit agencies in the area have approved, and are now implementing, much more robust transit service expansions than was contemplated when the Draft EIR was published. Most notably, TART plans to double bus capacity on the SR 89 a.m./ p.m. (Peak) route by 2025, well before buildout of the Specific Plan (see the discussions of RTP Planned Transit Improvements and the Tahoe Truckee Area Regional Transit Systems Plan provided above). The doubling of capacity would reduce bus headways from 60 to 30 minutes on the route. As indicated in the transit analysis provided in Appendix C, with this doubling of capacity, the addition of project generated transit riders would no longer result in any busses exceeding the seated plus standing capacity of 45 persons. However, some busses would be very close to capacity, with the one morning bus leaving the TCTC at 99 percent capacity and one at 89 percent capacity and one afternoon bus leaving the project site at 96 percent capacity.
- ▲ There are sources of academic research that indicate more frequent and convenient transit service attracts more riders (see sources cited in Appendix C). Therefore, it is reasonable to assume that when headways on the Highway 89 route are reduced from 60 minutes to 30 minutes that ridership will increase relative to existing conditions. Given that the transit analysis concluded that even with reduced headways some buses would be operating very near the seated plus standing capacity, it would not take a large increase in ridership for the demand for transit service to exceed the service that is provided.

As concluded in the updated transit analysis, the combined increased ridership from the proposed project and increased ridership from other sources could create demand for public transit service above that which is provided or planned. Although the increased transit ridership in this scenario is not attributable exclusively to the proposed project, a conservative approach is taken here, and this is considered a **significant** impact.

The following mitigation measure replaces the version of Mitigation Measure 9-7 provided in the 2016 EIR.

Revised Mitigation Measure 9-7: Establish a Community Service Area (CSA) Zone of Benefit (ZOB) or Community Facilities District (CFD), or annex into an existing CSA ZOB to fund expansion of transit capacity.

Prior to recordation of the Initial Small Lot Final Map, the project applicant shall either establish a Community Service Area (CSA) Zone of Benefit (ZOB) or Community Facilities District (CFD), or the project applicant shall annex into an existing CSA ZOB or CFD. The CSA ZOB or CFD shall provide funding for capital costs and ongoing operation of transit services. Ongoing annual fees will be identified and paid by the applicant to fund expansion of transit capacity as necessary to expand seating capacity to accommodate typical peak-period passenger loads on bus routes serving the project site. Fees would be assessed on all VPTSP future land uses that generate an increased demand for transit services, including residential, lodging, commercial, civic, and recreation land uses.

Prior to establishing, or annexing into, the ZOB or CFD, the applicant shall submit to the County for review and approval a complete and adequate report supporting the level of assessments/fees necessary for the establishment and continuation of the ZOB or CFD. The report shall be prepared by a registered engineer, in consultation with a qualified financial consultant, if a ZOB is formed or annexed into and shall establish the basis for the special benefit appurtenant to the project. A qualified financial consultant shall prepare the report if a CFD is formed. The report shall identify the transit services intended to be funded by the ZOB or CFD, the cost to establish and operate these services, the portion of the overall costs to be funded by the applicant, and the assessment/fees to obtain the necessary funding, including a methodology for calculating

fee increases over time. A transit service to be explicitly funded by the ZOB or CFD and included in the report will be the establishment of 30 minute headways during peak periods on the TART Highway 89 route between Tahoe City and Truckee as well as ongoing availability of a “second bus” during peak period (as currently implemented) if needed.

The engineers report for *A Special Zone of Benefit for The Palisades at Squaw; Zone of Benefit 223 Eastern Placer County Transit Program; County Service Area No. 28* (LSC 2017) is available as an example report for another project in Olympic Valley. This report supports the establishment of a ZOB encompassing a 63 lot development on the east side of Olympic Valley and contains all the components identified above. The report identifies the transit services that would benefit the proposed development, and therefore the services the ZOB annual assessments would help fund. These transit services include establishment of 30 minute headways during peak periods on the TART Highway 89 route between Tahoe City and Truckee identified above, indicating the multiple sources of funding that may be applied to a single transit service improvement. The transit services to be funded by the ZOB are included in an adopted plan, the *Systems Plans Update for the Tahoe Truckee Area Regional Transit in Eastern Placer County* (LSC 2016). The report calculates both the annual operating and annual capital costs of providing identified services (\$1,704,200), funding from sources other than the development that would be applied to these costs (\$1,441,900), the remaining annual cost to be funded by development inside the ZOB (\$312,738), and the total development units anticipated to be encompassed by the ZOB (4,630). The development funded annual cost is divided by the total number of development units that would fund this cost, resulting in an annual assessment of \$67.55 for each development unit in the ZOB. Increases in the assessment fee are identified as being based on the Consumer Price Index prepared by the San Francisco/Oakland/San Jose Consumer Price Index for all Urban Consumers. Although the exact methodology used for this ZOB 223 engineering report would not necessarily be applied to the VPTSP, especially given differences in scale of the project and mix of uses, the ZOB 223 report is illustrative of the key process components and outcomes in using such a report to calculate ZOB or CFD fees to provide transit improvement funding.

As identified above, TART service is funded from a number of sources. TART may also direct funding to a variety of planned service improvements. For these reasons, although unlikely, it cannot be assured that TART would fund and continuously implement 30 minute headways during peak periods on the TART Highway 89 route between Tahoe City and Truckee, or fund and continuously operate a “second bus” during peak period, prior to the time that the ZOB/CFD is formed. Therefore, to ensure the project generated employee transit riders do not result in an exceedance of transit system capacity before the ZOB/CFD is formed, and in order to ensure that sufficient capacity exists during peak periods, prior to the recordation of the first final map, the project applicant shall commence fare-free employee shuttle service during those periods when the transit capacity analysis shows that demand from the project, plus existing demand, will exceed TART capacity (Sunday 7:30 a.m. northbound from TCTC; Sunday 5:05 p.m. southbound from Palisades Tahoe). The project applicant may adjust the arrival and departure times in response to peak TART ridership demand, or peak employee demand, in order achieve the objective of TART busses not exceeding capacity due to project employee ridership. The project applicant shall notify Placer County Department of Public Works of the arrival and departure times of such service and shall coordinate with Placer County Department of Public Works to ensure that the service does not interfere with TART operations. Every 12 months the project applicant shall report to the Placer County Department of Public Works the days that the employee shuttle operated, the times of operation, and the number of riders. The project applicant shall notify Village area employees of this service. The service shall be scaled so that it accommodates transit demand as the project builds out; at build-out, the service shall accommodate 30 passengers. The applicant may contract with the Placer County Department of Public Works to provide this service. This service shall remain in operation until such time as a ZOB/CFD, as described above, is established.

Significance after Mitigation

Implementation of Mitigation Measure 9-7 would reduce this impact to a **less-than-significant** level because employee transit demand generated by the proposed project would not exceed transit system capacity. Through creation, or annexation into, a CSA ZOB or CFD, the applicant would provide ongoing funding to implement the increased TART service along the TART Highway 89 route between Tahoe City and Truckee needed to meet peak demand, including project employees (i.e., establishment of 30 minute headways

during peak periods as well as ongoing availability of a “second bus” during peak periods if needed). As indicated in the transit demand analysis provided in Appendix C, although 30 minute headways alone may not be sufficient to meet demand if issues such as increased transit use due to increased availability are considered (i.e., demand elasticity), the use of a second bus when needed would address this potential demand. The fee is implemented as a direct charge on the annual property tax assessment; therefore, collection of the fee is enforceable by Placer County. Through completion of the report described above supporting formation of a ZOB or CFD, the specific transit improvements to be funded by the ZOB or CFD will be identified, the needed funding to provide the transit service will be identified, and the applicant’s share of the needed funding will be identified. The key component of the needed transit improvement, establishment of 30-minute headways on the Highway 89 route during peak periods, is part of the adopted *Systems Plans Update for the Tahoe Truckee Area Regional Transit in Eastern Placer County* (LSC 2016). Therefore, TART already plans to fund and implement this transit improvement. TART currently increases capacity of the Highway 89 route during peak periods on some peak days through use of a second bus. The formation of a ZOB/CFD will ensure that the project provides a funding source to support these operations and will ensure that such payments represent the project’s fair-share towards expanded transit service required in order to accommodate the project. The mitigation measure also requires that, in the event a ZOB/CFD is not formed at the time of recordation of the first final map, the project applicant must provide an employee shuttle during peak periods to minimize the numbers of project employees using TART busses. This shuttle service shall remain in operation until such time as a ZOB/CFD is established. The project applicant must report shuttle operations and ridership data to the Placer County Department of Public Works, providing the County an opportunity for monitoring and enforcement. Therefore, by both providing funding for increased transit capacity, or alternatively implementing mechanisms to reduce transit demand prior to the time when the fair-share funding mechanism is in place (should that occur), the VPTSP Project would not generate demand for transit that would exceed available service capacity. In effect, the option of providing fare-free shuttle service to employees serves as “back-up” mitigation to ensure that the impact on the transit system is addressed, even if a ZOB/CFD is not formed. The mitigation measure also provides the project applicant with the option of contracting with the Placer County Department of Public Works, which operates the TART system, to provide the shuttle service, which may be appropriate in light of its expertise with respect to such service, and the desirability of ensuring that the private shuttle service is integrated and does not interfere with TART’s operations.

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10 AIR QUALITY

Chapter 10 of the 2016 EIR (i.e., 2015 Draft EIR, and where relevant, additional material in the 2016 Final EIR and post Final EIR comments and responses) described existing air quality conditions, summarized applicable regulations, and evaluated potential short-term and long-term air quality impacts that could result from buildout of the Village at Palisades Tahoe (formerly, Squaw Valley) Specific Plan. The 2016 EIR addressed potential impacts related to construction emissions of reactive organic gases (ROG), oxides of nitrogen (NO_x), respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM₁₀), and respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less (PM_{2.5}) (all these pollutants, as a group, are labeled as criteria air pollutants or CAPs); long-term, operational-related (regional) emissions of CAPs; mobile-source carbon monoxide (CO) concentrations; and exposure of sensitive receptors to toxic air contaminants (TACs) and odors. The method of analysis for construction, long-term regional (operational), local mobile-source, and toxic air emissions was consistent with the recommendations of the Placer County Air Pollution Control District (PCAPCD), the California Air Resources Board (CARB), and the US Environmental Protection Agency (EPA). In addition, mitigation measures were recommended as necessary to reduce significant air quality impacts.

This section of the REIR provides the additional, revised air quality analysis for the project as required by the Court of Appeal's Ruling in *Sierra Watch v. County of Placer* (Ruling). See Chapter 1, "Introduction," in this REIR for further information on the Ruling and its relationship to this REIR.

The Ruling identifies two items related to air quality (i.e., Chapter 10 of the 2016 EIR) as requiring discussion and analysis. The first item is the identification of significance thresholds and impact conclusions associated with the analysis of vehicle miles travelled (VMT) impacts on air quality specifically in the Lake Tahoe Basin. The second item relates to information on VMT impacts on Lake Tahoe air quality that was provided after completion of the 2016 Final EIR and whether that information should have been provided at an earlier time in the CEQA process.

As identified in the Ruling, commenters on the Draft EIR faulted the document for failing to "meaningfully address[] the [Lake] Tahoe Basin." This became a specific issue in the lawsuit filed by Sierra Watch (plaintiffs) against the 2016 EIR and the resulting Ruling. Relevant portions of the Ruling (pages 14 through 18 of the Ruling) addressing air quality and the Lake Tahoe Basin are reproduced below. This section references both air quality and Lake Tahoe clarity and water quality because project generated VMT in the Lake Tahoe Basin is identified in the Ruling as affecting both air quality and water quality in the Basin. See Chapter 13, "Hydrology and Water Quality," of this REIR for a discussion of the Ruling concerning Lake Tahoe clarity and water quality, and further analysis in response to this portion of the Ruling..

B. Consideration of Impacts

Sierra Watch next, still on the topic of Lake Tahoe Basin, contends the EIR failed to "meaningfully assess the Project's [traffic] impacts on" Lake Tahoe and the basin's air quality. We agree.

The EIR provided mixed messages on the project's potential impacts to Lake Tahoe and the basin from increased traffic. On the one hand, it said the project would not result in an exceedance of TRPA's cumulative VMT threshold for the Lake Tahoe Basin. But on the other hand, it showed the project would likely exceed TRPA's project-level threshold of significance for traffic in the basin. The EIR noted that TRPA has not consistently applied any particular threshold when evaluating project-level impacts, but, after reviewing several EIRs from TRPA, it found two "used a daily trip generation threshold of 200 trips as a significance threshold," one "used a criterion of 1,150 VMT as a significance threshold," and another used a flexible significance criterion that considered whether an increase in VMT would be "substantial in relation to the [cumulative] VMT threshold standard." Under the first two thresholds of significance — the VMT and daily-trip thresholds — the project here would

plainly have a significant impact. It would result in daily VMT over 2,000 percent above the 1,150-VMT threshold and daily trips over 500 percent above the 200-daily-trip threshold.¹ But under the third described threshold of significance, which eschewed a numerical threshold in favor of a more flexible standard focused on “substantial” increases in VMT, the significance of the project’s impacts is less straightforward. We can note, however, that the project would increase daily VMT in the basin by about 1.2 percent and would reduce the available VMT capacity under TRPA’s cumulative threshold by about 28.7 percent.²

Rather than follow one of TRPA’s approaches, however, the EIR simply declared that TRPA’s thresholds were inapplicable because the project is not located in the basin. But if TRPA standards were inapplicable, what standards did apply? The EIR never answered the question. Nor did it supply any meaningful information to evaluate the significance of a daily addition of 23,842 VMT on Lake Tahoe’s water quality and the basin’s air quality. Nor did it even offer any clear conclusion on whether this additional traffic would significantly impact Lake Tahoe and the basin. It instead simply supplied some discussion about TRPA’s thresholds of significance and then said, “the TRPA thresholds are not used as standards of significance in this EIR.”

We find this discussion inadequate. The EIR needed to determine whether the project’s impacts on Lake Tahoe and the basin were potentially significant — not simply summarize, and then declare inapplicable, another agency’s framework for evaluating these types of issues. Even supposing the EIR actually reached a conclusion about the project’s impacts, we would still find it defective. Under CEQA, an agency’s conclusion as to whether a given impact is significant is not enough; “there must [also] be a disclosure of the ‘analytic route the...agency traveled from evidence to action’ ” — something that never occurred in the EIR here. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 404.)

Making matters worse, the EIR’s offered figures on VMT underestimated expected cumulative VMT in the basin. The final EIR, again, said that cumulative VMT in the summer of 2010 were 1,984,600 and the addition of the project’s estimated VMT would push that cumulative figure to 2,008,442 in the future. But in reaching these figures, the EIR improperly ignored the expected addition of VMT from other anticipated projects, including another large development the County was itself considering approving. (See CEQA Guidelines, § 15065, subd. (a)(3) [in determining whether a project’s impacts are “cumulatively considerable,” agencies must consider “the incremental effects of an individual project...in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects”].)

Although the County eventually, after the final EIR was prepared, recognized its failure to account for the expected addition of VMT from other projects and acknowledged the “important” connection between VMT and Lake Tahoe, its belated discussion of these issues came too late. Six days before the County’s board of supervisors certified the EIR, and several months after the preparation of the final EIR, the County provided additional information about the project’s impact on Lake Tahoe’s water quality. In these post-EIR responses, the County acknowledged for the first time that “[t]he connection between VMT and Lake clarity is important, as vehicle emissions and roadway tires are known contributors to loss of clarity.” It also acknowledged the connection between VMT and air quality, explaining that TRPA has historically “linked higher VMT to,” among other things, “increased airborne concentrations of particulate matter that could affect regional and subregional visibility and human health.” And, at least implicitly, it acknowledged too that the EIR’s calculation of expected cumulative VMT in the basin should not have ignored the expected VMT from other anticipated projects.

¹ “The EIR, at one point, said the project would generate about 1,353 daily trips into the basin. But later on, it suggested the trips into the basin would actually be somewhat lower because a measure intended to address transit impacts would expand transit services. It never, however, estimated the potential reduction in daily trips resulting from this mitigation measure.”

² “Absent the project, TRPA’s cumulative threshold allowed room for 83,000 additional VMT (2,067,600 VMT - 1,984,600 VMT = 83,000 VMT). But with the project, which would add 23,842 VMT, that capacity would fall to 59,158 VMT — or by about 28.7 percent.”

After acknowledging these issues and updating its VMT estimates, the County then explained why, in its view, the increased traffic resulting from the project would not adversely impact Lake Tahoe or the basin. To start, the County wrote, “a direct link between a specific number of VMT and attainment of Lake clarity goals has not been established,” and, as a result, even TRPA has acknowledged the need to further evaluate the relationship between the two. In addition, based on its review of an EIR prepared for a different project, the County opined that technological advances emphasize the need for further evaluation of TRPA’s standards. According to the County, improvements in technology since TRPA established its VMT thresholds — including improvements in limiting stormwater runoff into the lake and reducing tailpipe emissions — could mean that TRPA’s thresholds, which were initially developed decades ago, are now outdated. Given these considerations, the County concluded, because “the relationship between a specific VMT and lake clarity is not well understood,” and because the “addition of the project’s VMT to existing Tahoe Basin VMT would not be significant even if the [arguably outdated] TRPA VMT threshold was used as a threshold of significance for project impacts,” the final “EIR conclusion is accurate and supported by evidence in the record.”³

All this information, however, came far too late in the CEQA process. CEQA requires agencies to discuss a project’s potentially significant impacts in the draft EIR and final EIR. (CEQA Guidelines, § 15120, subd. (c); see also *id.*, §§ 15125, 15126.2.) And to the extent an agency omits an adequate discussion of a project’s potential impacts in its EIR, it cannot afterward “make up for the lack of analysis in the EIR” through post-EIR analysis. (*Save our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 130 [project information revealed in an “[e]rrata” shortly before project approval “d[id] not make up for the lack of analysis in the EIR”].) To find otherwise, after all, would deny the public “an ‘opportunity to test, assess, and evaluate the [newly revealed information] and make an informed judgment as to the validity of the conclusions to be drawn therefrom.’ [Citation.]” (*Id.* at p. 131; see also *Cleveland National Forest Foundation v. San Diego Assn. of Governments, supra*, 3 Cal.5th at p. 511 [an EIR must itself “‘include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project’ ”].)

Respondents never appear to argue otherwise on this last point. They instead contend the County’s post-EIR responses only “elaborated on and confirmed” information in the EIR. But we find differently. Again, in these post-EIR responses, the County acknowledged and analyzed, apparently for the first time, the potential impacts from the project’s generation of an additional 23,842 VMT per day in the Lake Tahoe Basin. In this way, these responses did not merely elaborate on and confirm the EIR’s conclusions; they instead supplied critical analysis and conclusions that were initially absent from the EIR.

Sierra Watch, apart from challenging the County’s ability to rely on these late responses, also contends these post-EIR responses were substantively flawed for several reasons. But the alleged inadequacy of the County’s post-EIR comments are beside the point under CEQA, as “the inadequacy of [an agency’s] responses to . . . comments [on the final EIR] is not sufficient to render approval of the CEQA Project ineffective or contrary to law.” (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1111.) And so, although we agree the EIR’s analysis was flawed, we will not separately address the alleged inadequacy of these post-EIR comments.

The inadequacies identified in the Ruling with respect to air quality are corrected below. Specifically, a new impact discussion is provided, Impact 10-6, “Project Generated VMT Effects on air quality in the Lake Tahoe Basin.” This impact discussion specifically evaluates the potential effects of project generated VMT entering

³ “On this logic, a project that added 82,999 daily VMT to the basin would have an insignificant impact because total estimated VMT (which would now be 2,067,599) would remain one VMT below the cumulative threshold of 2,067,600 VMT; yet the next project, even if it added only 10 daily VMT to the basin, would result in an exceedance of the cumulative threshold and thus have a significant impact. Perhaps that is a supportable conclusion. Perhaps not. We need not address this issue here.”

the Lake Tahoe Basin on air quality in the basin. The analysis includes use of a clear significance threshold and provides a clear impact conclusion.

This REIR chapter retains the same chapter numbering (i.e., Chapter 10), title, and general organization as 2016 EIR to simplify comparisons across the two documents if desired. However, this chapter only addresses the issues necessary to rectify any inadequacies identified in the Ruling. Therefore, Section 10.1, “Environmental Setting,” only provides information relevant to the discussion of Impact 10-6, “Project Generated VMT Effects on air quality in the Lake Tahoe Basin.” Where the 2016 EIR included environmental setting information related to TACs, sensitive land uses, and other air quality topics; that information is not repeated here because it is not relevant to addressing the content of the Ruling. Similarly, Section 10.2, “Regulatory Setting,” in this REIR only provides information relevant to the discussion of Impact 10-6. Section 10.3, “Impacts,” only includes a discussion of new Impact 10-6, “Project Generated VMT Effects on air quality in the Lake Tahoe Basin,” as this is the only air quality issue found by the Court to be inadequate. The original version of Chapter 10 from the 2016 EIR, as well as all 2016 EIR documents are available at: <https://www.placer.ca.gov/2747/Village-at-Squaw-Valley-Specific-Plan>.

In addition to adding information to this chapter in response to the Ruling, this chapter provides updated information since completion of the 2016 EIR, where relevant to the impact on air quality in the Lake Tahoe Basin. This chapter also incorporates text that was added in the 2016 Final EIR that supplemented the Draft EIR prepared at that time; that is, revisions to Chapter 10 of the Draft EIR identified in 2016 Final EIR Section 2.3.10, “Revisions to Chapter 10, ‘Air Quality’” (available at <https://www.placer.ca.gov/DocumentCenter/View/45765/Chapter-2--Revisions-to-Draft-EIR>) are reflected in this chapter, where applicable.

10.1 ENVIRONMENTAL SETTING

As stated above, this section only provides environmental setting information relevant to the discussion of Impact 10-6, “Project Generated VMT Effects on air quality in the Lake Tahoe Basin,” as this is the only element of this chapter addressed in the Ruling. The full environmental setting information supporting the air quality analysis from the 2016 EIR is available at: <https://www.placer.ca.gov/DocumentCenter/View/8184/Chapter-10--Air-Quality-PDF>. Also, new or additional information that assists in addressing the Ruling may also be included.

The project site is located in a portion of eastern Placer County that is also part of the Mountain Counties Air Basin (MCAB). The MCAB comprises portions of eastern Placer County, portions of El Dorado County, and all of Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne, and Mariposa counties. Some vehicle activity, particularly visitor trips and employee commute trips, associated with operation of the proposed project would also occur in the Lake Tahoe Air Basin (LTAB), other portions of Placer and El Dorado Counties, as well as parts of California and Nevada.

The ambient concentrations of air pollutant emissions in an air basin are determined by the amount of pollutants emitted and the atmosphere’s ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as climate, meteorology, and topography, in addition to the level of emissions by existing air pollutant sources. These factors are discussed separately below.

10.1.1 Climate, Meteorology, and Topography

MOUNTAIN COUNTIES AIR BASIN

The following repeats the discussion from the 2016 EIR as well as providing updated environmental setting information where relevant to the impact on air quality in the Lake Tahoe Basin.

The MCAB includes the central and northern Sierra Nevada Mountains. Elevations range from several hundred feet in the foothills to over 10,000 feet above mean sea level along the Sierra crest.

The MCAB generally experiences warm, dry summers and wet winters. During the summer, in the western portion of the MCAB where the project site is located, temperatures often exceed 85 degrees Fahrenheit (°F) coupled with clear sky conditions, which is favorable for ozone formation. Local climatology of the project site is best represented by ambient temperature measurements at the Squaw Valley Lodge and wind measurements at Truckee Airport by the Western Regional Climate Center (WRCC). Maximum temperatures occur during July and reach 80.9°F on average. Minimum temperatures can be as low at 13.3°F during winter months (WRCC 2000). Average annual precipitation of approximately 59 inches (247 inches of snowfall) occurs primarily during the months of November through March (WRCC 2000). Average annual wind speed is approximately four miles per hour (mph) from the south (WRCC 2002, 2006).

LAKE TAHOE AIR BASIN

The LTAB comprises portions of Placer and El Dorado Counties in California and Washoe and Douglas Counties and the Carson City Rural District in Nevada. Lake Tahoe lies in a depression between the crests of the Sierra Nevada and Carson Range at a surface elevation of 6,260 feet above sea level. The mountains surrounding Lake Tahoe are approximately 8,000–9,000 feet high, with some reaching beyond 10,000 feet. The bowl shape of the LTAB has significant air quality implications. There are two meteorological regimes that affect air quality in the basin.

First, thermal inversions occur when a warm layer of air traps a cold layer of air at the surface of the land and lake. Locally generated air pollutants are often trapped in the “bowl” by frequent inversions that limit the amount of air mixing, which allows pollutants to accumulate. Inversions most frequently occur during winter in the LTAB; however, they are common throughout the year. Often, wintertime inversions result in a layer of wood smoke, mostly from residential heating, which can be seen over the lake.

The second meteorological regime affecting air quality in the LTAB is the atmospheric transportation of pollutants from the Sacramento Valley and San Francisco Bay Area. Lake Tahoe’s location directly east of the crest of the Sierra Nevada allows prevailing easterly winds, combined with local mountain upslope winds, to bring air from populated regions west of the Sierra to the LTAB. The strength of this pattern depends on the amount of heat, usually strongest in summer beginning in April and ending in late October.

10.1.2 Air Quality Standards and Existing Concentrations

The following both repeats information from the 2016 EIR as well as providing updated environmental setting information where relevant.

CRITERIA AIR POLLUTANTS

Concentrations of ozone, CO, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), PM₁₀, PM_{2.5}, and lead are used as indicators of ambient air quality conditions and are referred to as CAPs. CAPs are air pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set by EPA and CARB.

A brief description of each CAP's source types and health effects is provided below in Table 10-1. Additional information, including future trends and monitoring data at those monitoring stations located closest to the project site, is provided for ozone, NO₂, and PM, the key CAPs associated with the project analysis.

Table 10-1 Sources and Health Effects of Criteria Air Pollutants			
Pollutant	Sources	Acute¹ Health Effects	Chronic² Health Effects
Ozone	Secondary pollutant resulting from reaction of ROG and NO _x in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO _x results from the combustion of fuels	increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	permeability of respiratory epithelia, possibility of permanent lung impairment
Carbon monoxide (CO)	Incomplete combustion of fuels; motor vehicle exhaust	headache, dizziness, fatigue, nausea, vomiting, death	permanent heart and brain damage
Nitrogen dioxide (NO ₂)	combustion devices; e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines	coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, death	chronic bronchitis, decreased lung function
Sulfur dioxide (SO ₂)	coal and oil combustion, steel mills, refineries, and pulp and paper mills	Irritation of upper respiratory tract, increased asthma symptoms	insufficient evidence linking SO ₂ exposure to chronic health impacts
Respirable particulate matter (PM ₁₀), Fine particulate matter (PM _{2.5})	fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO ₂ and ROG	breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, premature death	alterations to the immune system, carcinogenesis
Lead	metal processing	reproductive/developmental effects (fetuses and children)	numerous effects including neurological, endocrine, and cardiovascular effects

Notes: NO_x = oxides of nitrogen; ROG = reactive organic gases

¹ "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.

² "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.

Source: EPA 2012a.

Ozone

Ozone is a photochemical oxidant (a substance whose oxygen combines chemically with another substance in the presence of sunlight) and the primary component of smog. Ozone is not directly emitted into the air in large amounts, but is formed through complex chemical reactions between precursor emissions of reactive organic gases (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight (EPA 2012). ROG are volatile organic compounds that are photochemically reactive. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO_x are a group of gaseous compounds of nitrogen and oxygen that result from the combustion of fuels. Emissions of the ozone precursors ROG and NO_x have decreased over the past two decades because of more stringent motor vehicle standards and cleaner burning fuels (CARB 2014: 3-4 and 4-46).

Nitrogen Dioxide

NO₂ is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO₂ are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO₂. The combined emissions of NO and NO₂ are referred to as NO_x and are reported as equivalent NO₂. Because NO₂ is formed and depleted by reactions associated with

photochemical smog (ozone), the NO₂ concentration in a particular geographical area may not be representative of the local sources of NO_x emissions (EPA 2012).

Particulate Matter

PM₁₀ consists of particulate matter emitted directly into the air, such as fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires and natural windblown dust, and particulate matter formed in the atmosphere by reaction of gaseous precursors (CARB 2014: 1-13 and 3-6; EPA 2012). PM_{2.5} includes a subgroup of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less. PM₁₀ emissions are dominated by emissions from area sources, primarily fugitive dust from vehicle travel on unpaved and paved roads, farming operations, construction and demolition, and particles from residential fuel combustion. Direct emissions of PM₁₀ have increased slightly over the last 20 years, and are projected to continue to increase slightly through 2035 (CARB 2014: 3-7). PM_{2.5} emissions have remained relatively steady over the last 20 years and are projected to decrease slightly through 2035 (CARB 2014: 3-6).

CRITERIA AIR POLLUTANT AND PRECURSOR MONITORING STATION DATA AND ATTAINMENT AREA DESIGNATIONS

Concentrations of CAPs are measured at several monitoring stations in and near the MCAB. The measurements at the Tahoe City Fire Station and the South Lake Tahoe-Sandy Way Station are presented here and are generally representative of ambient air quality in the vicinity of the project area as well as within the LTAB. Table 10-2 summarizes the air quality data from these stations for 2018-2020.

Table 10-2 Summary of Annual Air Quality Data (2018-2020)¹			
Ozone²	2018	2019	2020
Maximum concentration (1-hour/8-hour, ppm)	*/*	0.072/0.066	0.098/0.083
Number of days state standard exceeded (1-hour/8-hour)	*/*	0/0	1/7
Number of days national standard exceeded (1-hour/8-hour)	*/*	0/0	0/7
Respirable Particulate Matter (PM₁₀)³	2018	2019	2020
Maximum Concentration (µg/m ³) (California)	116.7	41.0	168.0
Number of days state standard exceeded (measured ⁵)	8	0	13
Number of days national standard exceeded (measured ⁵)	*	0	3
Fine Particulate Matter (PM_{2.5})⁴	2018	2019	2020
Maximum Concentration (µg/m ³) (California)	72.2	44.4	124.7
Annual Average (µg/m ³) (California)	*	*	7.8
Number of days national standard exceeded (measured ⁵)	*	*	*

Notes: µg/m³ = micrograms per cubic meter; NA = data not available; ppm = parts per million; * = Insufficient data to determine the value

¹ The ambient air quality standards and attainment status for these pollutants are presented in Table 10-3.

² Ozone data is from the Tahoe City monitoring station. No data for 2018 was available at any station in the MCAB.

³ PM₁₀ data is from the monitoring station in South Lake Tahoe-Sandy Way monitoring station.

⁴ PM_{2.5} data is from the Tahoe City monitoring station.

⁵ Measured days are those days that an actual measurement was greater than the level of the state daily standard or the national daily standard.

Source: CARB 2022.

10.2 REGULATORY SETTING

As stated above, this section only provides regulatory setting information relevant to the discussion of Impact 10-6, “Project Generated VMT Effects on air quality in the Lake Tahoe Basin,” as this is the only element of this chapter addressed in the Ruling. The full regulatory setting information supporting the air quality analysis from the 2016 EIR is available at:

<https://www.placer.ca.gov/DocumentCenter/View/8184/Chapter-10--Air-Quality-PDF>. Also, new or additional information that assists in addressing the Ruling may also be included.

Air quality in the project area is regulated by EPA, CARB, and PCAPCD. Each of these agencies develops rules, regulations, policies, and/or goals to comply with applicable legislation. Although EPA regulations may not be superseded, state and local regulations may be more stringent.

10.2.1 Federal

EPA has been charged with implementing national air quality programs. EPA air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments made by Congress were in 1990.

CRITERIA AIR POLLUTANTS

The CAA required EPA to establish National Ambient Air Quality Standards (NAAQS). As shown in Table 10-3, EPA has established primary and secondary NAAQS for the following CAPs: ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead. The primary standards protect the public health and the secondary standards protect public welfare. The CAA also required each state to prepare an air quality control plan, referred to as a state implementation plan (SIP), for areas that do not attain the NAAQS. The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with areas that are not in attainment of all NAAQSs to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and whether implementation will achieve air quality goals. If EPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and permitting of stationary air pollution sources in the nonattainment air basin.

Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan

Under the CAA requirements, each nonattainment area throughout the state is required to develop a regional air quality management plan. Collectively, all regional air quality management plans throughout the state constitute the SIP. With jurisdiction over part of the Sacramento Federal Ozone Nonattainment Area (the portion of the Mountain Counties Air Basin in Placer County is part of the Sacramento Federal Ozone Nonattainment Area), PCAPCD worked with the other local air districts within the Sacramento area to develop a regional air quality management plan to describe and demonstrate how Placer County, as well as the Sacramento federal nonattainment area, would attain the required federal 8-hour ozone standard by the proposed attainment deadline. In accordance with the requirements of the CAA, PCAPCD, along with the other air districts around the state, along with CARB, prepared the *2018 Updates to the California State Implementation Plan (2018 California SIP)*. As detailed in the 2018 California SIP, the air districts that manage air quality in the Sacramento Metropolitan Area (Sacramento Metropolitan Air Quality Management District [AQMD], El Dorado AQMD, Feather River AQMD, Yolo-Solano AQMD, and Placer County APCD) adopted the *2017 Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Sacramento Ozone Plan)* and submitted the plan to CARB on September 18, 2017. Following the subsequent adoption by CARB in 2018, the plan was submitted to the EPA as a revision to the California

SIP and is currently awaiting federal approval. Accordingly, the *2017 Sacramento Regional 2008 8-Hour Ozone Attainment and Further Reasonable Progress Plan* is the applicable air quality plan for the region.

The 2017 Ozone Attainment Plan shows that the region continues to meet federal progress requirements and demonstrates that the Sacramento Region will meet the 2008 NAAQS between 2022 and 2026 (SMAQMD 2017). The 2017 Ozone Attainment Plan updates the emissions inventory, provides a review of photochemical modeling results based on changes in the emissions inventories, updates the reasonable further progress and attainment demonstrations, revises adoption dates for control measures, and establishes new motor vehicle emissions budgets for transportation conformity purposes. The 2017 Ozone Attainment Plan also includes a vehicle mile traveled (VMT) offset demonstration that showed the emissions reduction from transportation control measures and strategies are sufficient to offset the emissions increase due to VMT growth.

The 2017 Ozone Attainment Plan contains regional and local control measures that address both ROG and NO_x. A single NO_x pollutant strategy is not appropriate because, even though ROG (and volatile organic compound) measures are not as effective as NO_x control measures, ROG-reducing measures still provide needed reductions in ozone formation (CARB 2018).

10.2.2 State

CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). California law authorizes CARB to set ambient (outdoor) air pollution standards (California Health and Safety Code Section 39606) in consideration of public health, safety, and welfare.

Criteria Air Pollutants

CARB has established California Ambient Air Quality Standards (CAAQS) for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned CAPs. In most cases the CAAQS are more stringent than the NAAQS. Differences in the standards are generally explained by the health effects studies considered during the standard-setting process and the interpretation of the studies. In addition, the CAAQS incorporate a margin of safety to protect sensitive individuals. CAAQS are shown in Table 10-3.

The CCAA requires that all local air districts in the state endeavor to achieve and maintain the CAAQS by the earliest date practical. The act specifies that local air districts should focus particular attention on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources.

Among CARB's other responsibilities are overseeing local air district compliance with federal and state laws, approving local air quality plans, submitting SIPs to EPA, monitoring air quality, determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

Table 10-3 Ambient Air Quality Standards and Attainment Status in Placer County and the LTAB							
Pollutant	Averaging Time	California Attainment Status	California ^{a,b}	National Attainment Status	National ^c		
					Primary ^{b,d}	Secondary ^{b,e}	
Ozone	1-hour	N in Placer County A in LTAB	0.09 ppm (180 µg/m ³)	-	- ^e	Same as primary standard	
	8-hour		0.070 ppm (137 µg/m ³)	N ⁶ in Placer County Unclassified/ Attainment in LTAB	0.070 ppm (137 µg/m ³)		
Carbon monoxide (CO)	1-hour	U in Placer County A in LTAB	20 ppm (23 mg/m ³)	U in Placer County Unclassified/ Attainment in LTAB	35 ppm (40 mg/m ³)	Same as primary standard	
	8-hour		9.0 ppm (10 mg/m ³)	U in Placer County Unclassified/ Attainment in LTAB	9 ppm (10 mg/m ³)		
	8-hour (LTAB ¹)		6 ppm (7 mg/m ³)	Unclassified/ Attainment	-		
Nitrogen dioxide (NO ₂) ⁶	Annual arithmetic mean	A in Placer County and LTAB	0.030 ppm (57 µg/m ³)	U in Placer County Unclassified/ Attainment in LTAB	53 ppb (100 µg/m ³)	Same as primary standard	
	1-hour		0.18 ppm (339 µg/m ³)	U in Placer County Unclassified/ Attainment in LTAB	100 ppb (188 µg/m ³)		
Sulfur dioxide (SO ₂)	Annual arithmetic mean	A in Placer County and LTAB	-	U in Placer County Unclassified/ Attainment in LTAB	0.030 ppm	Same as primary standard	
	24-hour		0.04 ppm (105 µg/m ³)	U in Placer County Unclassified/ Attainment in LTAB	0.14 ppm		
	3-hour		-	U in Placer County Unclassified/ Attainment in LTAB	-		0.5 ppm (1300 µg/m ³)
	1-hour		0.25 ppm (655 µg/m ³)	U in Placer County Unclassified/ Attainment in LTAB	75 ppb (196 µg/m ³)		-
Respirable particulate matter (PM ₁₀)	Annual arithmetic mean	N in Placer County and LTAB	20 µg/m ³	U in Placer County Unclassified/ Attainment in LTAB	-	Same as primary standard	
	24-hour		50 µg/m ³	U in Placer County Unclassified/ Attainment in LTAB	150 µg/m ³		
Fine particulate matter (PM _{2.5})	Annual arithmetic mean	N in Placer County A in LTAB	12 µg/m ³	U in Placer County Unclassified/ Attainment in LTAB	12.0 µg/m ³	15.0 µg/m ³	
	24-hour		-	U in Placer County Unclassified/ Attainment in LTAB	35 µg/m ³		

Table 10-3 Ambient Air Quality Standards and Attainment Status in Placer County and the LTAB

Pollutant	Averaging Time	California Attainment Status	California ^{a,b}	National Attainment Status	National ^c	
					Primary ^{b,d}	Secondary ^{b,e}
Lead ^f	Calendar quarter	A in Placer County and LTAB	-	U in Placer County Unclassified/Attainment in LTAB	1.5 µg/m ³	Same as primary standard
	30-Day average		1.5 µg/m ³			
	Rolling 3-Month Average		-			
Hydrogen sulfide	1-hour	U in Placer County and LTAB	0.03 ppm (42 µg/m ³)	No national standards	0.15 µg/m ³	Same as primary standard
Sulfates	24-hour	A in Placer County and LTAB	25 µg/m ³			
	24-hour	-	0.01 ppm (26 µg/m ³)			
Visibility-reducing particulate matter	8-hour	U in Placer County and LTAB	Extinction of 0.23 per km			

Notes: µg/m³ = micrograms per cubic meter; km = kilometers; ppb = parts per billion; ppm = parts per million

Unclassified (U): a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.

Attainment (A): a pollutant is designated attainment if the standard for that pollutant was not violated at any site in the area during a 3-year period.

Nonattainment (N): a pollutant is designated nonattainment if there was a least one violation of a standard for that pollutant in the area.

^a California standards for ozone, SO₂ (1- and 24-hour), NO₂, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards (CAAQS) are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

^b Concentration expressed first in units in which it was issued. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

^c National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. The PM₁₀ 24-hour standard is attained when 99% of the daily concentrations, averaged over 3 years, are equal to or less than the standard. The PM_{2.5} 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

^d National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

^e National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

^f The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

^g The portion of the Mountain Counties Air Basin in Placer County is part of the Sacramento Federal Ozone Nonattainment Area and is designated as severe nonattainment with respect to the national ambient air quality standard for ozone (Chang, pers. comm., 2013).

^h A criteria specific to the LTAB that differs from the overall Placer County standard.

Sources: CARB 2016; CARB 2021; EPA 2022.

10.2.3 Local

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

Criteria Air Pollutants

PCAPCD attains and maintains air quality conditions in Placer County, through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. PCAPCD manages those portions of three air basins that fall within the county: Sacramento Valley Air Basin (SVAB), Mountain Counties Air Basin (MCAB), and Lake Tahoe Air Basin (LTAB). PCAPCD's clean air strategy includes preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, and issuing permits for stationary sources of air pollution. PCAPCD also inspects stationary sources of air pollution and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the CAA, CAAA, and CCAA.

All projects in the Placer County (including in the Lake Tahoe Basin) are subject to adopted PCAPCD rules and regulations in effect at the time of construction. Specific rules applicable to the construction of the proposed project may include but are not limited to the following:

- ▲ PCAPCD Rule 202—Visible Emissions,
- ▲ PCAPCD Rule 217—Cutback and Emulsified Asphalt Paving Materials,
- ▲ PCAPCD Rule 218—Application of Architectural Coatings,
- ▲ PCAPCD Rule 228—Fugitive Dust, and
- ▲ PCAPCD Rule 501—Permit Requirements.

TAHOE REGIONAL PLANNING AGENCY

TRPA Threshold Standards and Regional Plan

The Tahoe Regional Planning Agency (TRPA) provides planning and guidance for Lake Tahoe. As stated in the TRPA Threshold Standards and Regional Plan (amended April 28, 2021):

The Tahoe Regional Planning Compact (Bi-State Compact) (P.L. 96-551, 94 Stat. 3233(1980), amended P.L. 106-3506, 114 Stat. 2351 (2016)) provides the framework for the development and implementation of the Environmental Threshold Carrying Capacities (threshold standards) and the Regional Plan. The Bi-State Compact defines threshold standards as “an environmental standard necessary to maintain a significant scenic, recreational, educational, scientific or natural value of the region or to maintain public health and safety within the region.” The threshold standards establish the shared goals for restoration and environmental quality in the Region. The Regional Plan with all of its elements, as implemented through TRPA ordinances and rules and regulations, will achieve and maintain the adopted threshold standards while providing opportunities for orderly growth and development. (Page iv)

TRPA has developed a number of threshold standards for air quality; generally, the standards are linked to attainment of specified pollutant concentrations in the Basin. Since the thresholds standards are applied to a large area (i.e., the Lake Tahoe Basin, which equates to the LTAB) rather than individual emission sources, they are similar to the NAAQS and CAAQS. For example, threshold standard AQ1 states “Maintain carbon monoxide concentrations at or below 6 parts per million (7 mg/m³) averaged over 8 hours..” This aligns with the NAAQS and CAAQS format for the 8-hour CO target of 9.0 ppm (10 mg/m³) shown in Table 10-3. In this case the TRPA threshold standard is more stringent than the NAAQS and CAAQS in Placer County, but as shown in Table 10-3, it is the same as the LTAB specific CAAQS. In some cases the TRPA threshold standards are more stringent than the NAAQS and or CAAQS but in many cases they are the same. For

example, both the TRPA threshold standards and the CAAQS have a PM 24-hour standard of 50 µg/m³. (TRPA 2012, 2021). As discussed further below in Section 10.3.1, “Significance Criteria,” the TRPA threshold standards, as targets for overall regional air quality conditions in the Lake Tahoe Basin, are not designed for or effective for assessing air quality impacts from individual projects.

10.3 IMPACTS

10.3.1 Significance Criteria

As stated above, this section only provides information supporting the discussion of Impact 10-6, “Project Generated VMT Effects on air quality in the Lake Tahoe Basin,” as this impact discussion encompasses the topics identified in the Ruling. Where the 2016 EIR included significance criteria relevant to a comprehensive CEQA analysis of air quality, only significance criteria relevant to the analysis of Impact 10-6 is provided here. Based on the Placer County CEQA checklist, Appendix G of the State CEQA Guidelines, and the specific focus of this REIR, the proposed project would result in a potentially significant impact related to air quality in the Lake Tahoe Basin if it would:

- ▲ conflict with or obstruct implementation of the applicable air quality plan;
- ▲ violate any air quality standard or contribute substantially to an existing or projected air quality violation; or
- ▲ result in a cumulatively considerable net increase of any CAP for which the project region is in nonattainment under any applicable National or State ambient air quality standards (including releasing emissions that exceed quantitative standards for ozone precursors).

As stated in Appendix G of the State CEQA Guidelines, the significance criteria established by the applicable air district may be relied on to make the above determinations. The project is located in the MCAB, and also would result in emissions associated with VMT occurring within the LTAB. PCAPCD is the air district that manages the Placer County area of the MCAB and LTAB. Although TRPA has its own threshold standards, these standards establish overall air quality attainment targets for the entire LTAB. As regional air quality targets, they are not effective for assessing air quality impacts from individual projects. TRPA has not developed quantitative thresholds by which the significance of an individual project’s effects on air quality via criteria pollutant emissions can be determined. However, PCAPCD has developed thresholds suitable for this purpose (Nielsen, pers. comm., 2022). PCAPCD has developed a CEQA Handbook for use in evaluating the impacts of projects in Placer County, including both the MCAB and LTAB. This specific situation was addressed in *League to Save Tahoe v. County of Placer* (C087102, 2022), which was published after the Ruling:

In its reply brief, Sierra Watch argues ... that the County abused its discretion by relying on the Air Pollution Control District’s standards. It asserts the EIR’s analysis “masked the impacts to the Tahoe Air Basin, as Placer District’s standards were not designed to protect the Basin’s unique resources.” ... The portions of the Lake Tahoe Air Basin that are within Placer County are within the Air Pollution Control District. (Health & Safety Code, § 40002.) The District is responsible for adopting and enforcing rules and regulations to achieve and maintain state and national air quality standards in areas under its jurisdiction, including the Tahoe Basin. (Health & Saf. Code, § 40001, subd. (a).)

We recognize that TRPA has its own air quality thresholds. Some are more strict than state or federal standards, others less strict. In some instances, TRPA has no standard where the state does, and vice versa. For example, TRPA has no standard for measuring particulate matter. The Air Pollution Control District, however, has standards for PM₁₀, and the EIR determined the project did not violate that standard. Both TRPA and the Air District have standards for oxides of nitrogen (NO_x). TRPA’s standard, a cumulative standard, is maintaining Basin emissions at or below 9.4 tons per day. As stated above, the District’s individual project standard is 82 pounds per day, and its cumulative project standard is

10 pounds per day per source. Nothing in the record indicates the relation between these standards nor establishes that the Air District's standard does not protect Basin resources.

Certainly, the Air Pollution Control District does not have a VMT standard. However, the EIR applied the Air District's threshold of significance in a regional context to all project emissions, including vehicular emissions. Under these circumstances, the County did not abuse its discretion in utilizing the Air District's thresholds of significance instead of TRPA's VMT threshold to address emission impacts to the Tahoe Basin's air quality and the lake's water quality, and substantial evidence supports the EIR's analysis and conclusions on those impacts.

Given this more recent decision and its direct applicability to the circumstance at hand, as well as the assessment provided above comparing the regional air quality targets expressed in the TRPA threshold standards versus the project specific emissions thresholds provided by PCAPCD, this document will utilize thresholds developed by the PCAPCD. Pursuant to the PCAPCD, an air quality impact is considered significant if implementation of the proposed project would result in:

- ▲ a net increase in long-term operation-related (regional) emissions of ROG and NO_x that exceed *the project-level threshold* of 55 lbs/day and emissions of PM₁₀ that exceed *the project-level threshold* of 82 lbs/day (PCAPCD 2017a: 2-2). The thresholds of 55 lbs/day for ROG and NO_x and 82 lbs/day for PM₁₀ are based on the limit of 10 tons per year for ROG and NO_x and 15 tons per year for PM₁₀ that is mandated for permitting of individual stationary sources of emissions (e.g., factories, industrial facilities, gasoline stations) by the New Source Review program (PCAPCD Rule 502). One objective of the New Source Review program is to ensure that air quality is not significantly degraded from the addition of new and modified industrial sources (PCAPCD 2017a: 2-2 and 2-3).

Note that these PCAPCD project level thresholds were updated and made more stringent since completion of the 2016 EIR. When the 2016 EIR was certified, PCAPCD guidance established a threshold of 82 lbs/day for ROG and NO_x. As noted above, PCAPCD issued updated guidance in 2017, and this new, more stringent guidance is being followed here although not required under the Ruling. Therefore, not only is this analysis conservative, it requires the applicant to mitigate to a higher standard than required in the 2016 EIR as addressed below.

10.3.2 Methods and Assumptions

Calculations of Project generated average annual daily VMT provided in the 2016 Final EIR continue to be used here as the basis for calculations of vehicle generated emissions in the Tahoe Basin. The same methodology used to calculate average annual daily VMT in the Tahoe Basin was also used to calculate average annual daily VMT in Placer County as a whole. Both summaries of VMT generation calculations from the 2016 EIR and updated information on project generated VMT have been compiled by Fehr & Peers (Fehr & Peers 2022), a transportation planning and engineering firm, and are provided in a memo reproduced as Appendix C of this REIR.

The analysis of mobile source emissions of CAPs in the Lake Tahoe Basin uses emissions data from an EMFAC model run using the average annual daily project generated VMT calculated by Fehr & Peers. The results of the criteria pollutant emissions modelling are provided in Appendix D. EMFAC2021 v1.0.2, was used and the model run was conducted in June 2022. The model run therefore uses updated emission factors based on the approved EMFAC model, rather than relying on emission factors that existed in 2015 when the original analysis was performed. Emissions were calculated for project generated VMT within the Tahoe Basin and project generated VMT throughout Placer County. The use of average annual daily VMT in the EMFAC model is consistent with PCAPCD project emissions thresholds as the 55 lb/day and 82 lb/day thresholds are based on compliance with tons per year thresholds as identified above in Section 10.3.1, "Significance Thresholds." Converting total annual VMT (i.e., the source of total yearly mobile source emissions) into a daily average, and comparing that daily average against the PCAPCD lb/day thresholds is an appropriate approach to assessing mobile source emissions (Hobbs, pers. comm., 2022).

This analysis of vehicle emissions of CAPs and precursors is conservative because it assumes all VMT emissions from the project are new to the LTAB. The analysis could consider whether some VMT emissions are instead redirected from other uses, in which case there would be a plausible basis to focus solely on the net change in emissions. The analysis, however, has not taken that approach. Instead, all emissions associated with VMT are considered “new” to the LTAB. In fact, it is likely that a significant portion of project-related vehicle trips would replace similar activities that would have already occurred in the Tahoe Basin and Placer County. For instance, patrons who use the accommodations that would be developed under the Specific Plan may choose to use those accommodations in lieu of accommodations they may have used within the Tahoe Basin or elsewhere in Placer County. Because it is difficult to quantify the portion of trips that are redirected, rather than “new,” the analysis does not net out existing, redirected trips. As noted above, this approach is conservative, and results in over-estimating the actual trip-related emissions that the project will cause.

10.3.3 Issues or Potential Impacts Not Discussed Further

The 2016 EIR identified issues and evaluated potential impacts relevant to a comprehensive CEQA analysis of air quality (e.g., construction emissions of ROG, NO_x, PM₁₀, and PM_{2.5}; long-term, operational-related [regional] emissions of CAPs; mobile-source CO concentrations; and exposure of sensitive receptors to TACs and odors). However, as stated in the introduction to this chapter, this chapter only addresses issues related to Impact 10-6, “Project generated VMT effects on air quality in the Lake Tahoe Basin,” as this impact discussion encompasses the topics identified in the Ruling. Therefore, all other issues and potential impacts considered in the 2016 EIR are not discussed further in this REIR. Even if other issue areas were considered, construction emissions are localized to the project site and would not occur in the Lake Tahoe Basin; the evaluation of mobile-source CO concentrations considered all intersections evaluated in the traffic analysis, including those in the Lake Tahoe Basin, and found the impact to be less than significant; potential exposure of sensitive receptors to TACs would be greatest on the project site where potential TAC emitters would be concentrated and this impact was found to be less than significant at this point of greatest risk; and similarly, exposure of sensitive receptors to odors would be greatest on the project site where new receptors and new odor sources would be concentrated and this impact was found to be less than significant at this point of greatest risk.

10.3.4 Impact Analysis

Impact 10-6: Project generated VMT effects on air quality in the Lake Tahoe Basin.

The 2016 EIR evaluated the generation of long-term regional emissions of criteria air pollutants and ozone precursors and determined that emissions of ROG and NO_x in Placer County and the MCAB would exceed the PCAPCD’s thresholds of significance. The 2016 EIR did not specifically evaluate the potential impacts of the project’s CAP emissions, and in particular, vehicle tailpipe emissions attributable to VMT on Lake Tahoe and the basin’s air quality. As described below, current evidence indicates that (a) atmospheric nitrogen deposition resulting from vehicle exhaust is not a substantial contributor to losses in lake clarity, and (b) the implementation of stricter vehicle emissions standards at the State and federal levels are sufficient on their own to exceed TRPA’s atmospheric nitrogen deposition objectives. In addition, emissions of PM₁₀, PM_{2.5}, ROG, and NO_x attributable to project generated VMT in the Lake Tahoe Basin would be well below the PCAPCD’s threshold of 55 lbs/day for ROG and NO_x and 82 lbs/day for PM₁₀ and PM_{2.5}. Therefore, vehicle exhaust attributable to vehicles associated with the Palisades Specific Plan would not have a significant adverse effect on Lake Tahoe Basin air quality, or on Lake Tahoe water quality or lake clarity via changes in the basin’s air quality. This impact would be a **less than significant**.

The 2016 EIR determined that operation of the Specific Plan under full buildout would result in project-generated daily unmitigated emissions of PM₁₀ and PM_{2.5} that are less than the PCAPCD-recommended thresholds of significance that was in place at the time of 82 lb/day. However, project operations under full

buildout would result in days where the mass emissions of ROG and NO_x, ozone precursors, in Placer County and the MCAB, would exceed the PCAPCD-recommended mass emission threshold in place at the time of 82 lb/day. Thus, it was determined that the long-term operational emissions of ROG and NO_x could conflict with the air quality planning efforts and contribute substantially to the nonattainment status of Placer County with respect to the NAAQS and CAAQS for ozone, resulting in a significant impact. The 2016 EIR concluded that this impact would require mitigation. Mitigation Measure 10-2 was adopted and required a program to ensure that the net maximum daily operational levels of ROG and NO_x emissions in combination with any project-related construction emissions did not exceed PCAPCD's thresholds of 82 lbs/day. With implementation of Mitigation Measure 10-2, the project would not result in emission levels that would violate or substantially contribute to a violation of the ambient air quality standards for ozone and this impact was therefore concluded to be less than significant after mitigation.

As identified in the excerpt from the Ruling provided at the beginning of this chapter, the Ruling directs that the air quality analysis provided in the 2016 EIR, which focused on air quality impacts in the MCAB, be further focused to address the effects of project generated emissions in the Lake Tahoe Basin. The Ruling does not address overall project emissions but focusses exclusively on the fraction of overall project emissions that would occur in the Lake Tahoe Basin. The Village at Palisades project area is located several miles from Lake Tahoe and is outside the Tahoe Basin. However, VMT generated by the project would result in vehicles travelling into the basin, and these vehicles would generate emissions in the Basin. Consistent with the Ruling, this Chapter evaluates the air quality effects of this in-basin project generated VMT, above and beyond the overall air quality analysis in the 2016 EIR, which other than this Tahoe Basin emissions issue was found to be adequate. The Ruling notes evidence in the record that links the in-basin vehicle emissions to potential effects on Lake Tahoe water quality and lake clarity. Although NO_x and fine sediment are the vehicle emissions constituents of concern regarding Lake Tahoe water quality and lake clarity, in this context, there is not a direct correlation between these emissions constituents and the analysis of CAPs (i.e., ROG, NO_x, PM₁₀, and PM_{2.5}). The analysis methodology and significance thresholds for an evaluation of vehicle emissions affecting Lake Tahoe water quality and lake clarity are different from those used for an evaluation of vehicle emissions effects on air quality via emissions of CAPs. Therefore, these two issues are discussed separately below.

Effects of Project-Generated VMT in the Lake Tahoe Basin on Lake Tahoe Water Quality and Lake Clarity

This issue is evaluated in detail in Chapter 13, "Hydrology and Water Quality" of this REIR. The following is a summary of setting information and the discussion in Impact 13-9, "Project generated VMT effects on Lake Tahoe water quality and lake clarity," focusing on the elements directly related to airborne vehicle emissions resulting from project generated VMT. See Chapter 13 for the full analysis of this impact, including the identification of significance thresholds and evaluation of multiple mechanism where VMT in the Lake Tahoe Basin could adversely affect lake clarity and water quality. The analysis of Impact 13-9 concludes that, via all potential impact mechanisms, VMT in the Tahoe Basin generated by the Village at Palisades Project would not result in a substantial degradation of Lake Tahoe water quality or clarity. Therefore, Impact 13-9 is identified as less than significant.

Vehicle Emissions and Nitrogen Deposition

The TRPA Bi-State Compact, as revised in 1980, gave TRPA authority to adopt environmental quality standards, called thresholds, and to enforce ordinances designed to achieve the thresholds. In 1982, TRPA adopted various environmental threshold carrying capacities (thresholds), which set environmental standards for the Lake Tahoe basin and indirectly define the capacity of the region to accommodate additional land development (TRPA 2012).

Among the thresholds adopted in 1982 was threshold AQ14. Threshold AQ14 set a goal of reducing in-basin nitrogen emissions by 10 percent from 1981 levels and benchmarked its performance to total regional VMT. In 1981, increased algal growth because of elevated nutrient inputs (phosphorus and nitrogen) was thought to be the primary driver of Lake Tahoe's clarity loss. The intent of this air quality threshold was to preserve lake clarity by minimizing atmospheric nitrogen deposition (i.e., material landing on the lake surface from the air that contributes nitrogen to the water and therefore also contribute to algal growth). However, since 1982

a number of developments have occurred that have functionally rendered the original intent of the nitrate reduction threshold standard (AQ14) moot (TRPA 2021). First, improvements in tailpipe emissions controls have reduced nitrogen emissions by more than 66 percent, far greater than the 10 percent objective of the adopted standard, functionally accomplishing the goal of the standard. Second, scientific research conducted as part of establishing the Total Maximum Daily Load (TMDL) for Lake Tahoe (a regulatory program focused on restoring lake clarity) established that fine particles were the principal driver of clarity loss rather than nutrient inputs (although nutrient inputs from sources other than atmospheric deposition still remain important). Every four years a Threshold Evaluation Report is prepared providing information on the trends in achieving each threshold. Each of the last four Threshold Evaluation Reports (2001, 2006, 2011, and 2015) has recommended that the 1982 VMT nitrogen deposition threshold standard (AQ14) be reviewed and updated, and in 2021 threshold standard AQ14 was officially replaced with a per capita VMT standard intended to reduce reliance on the automobile, reduce GHG emissions, and promote mobility. There is no longer a VMT threshold directly tied to vehicle emissions and lake clarity.

Part of the reason for replacing threshold AQ14, is because the goals of the threshold have been met; a 10 percent reduction of mobile source nitrogen (i.e., NO_x) emissions from 1981 levels was accomplished more than 25 years ago (i.e., before 2000). Beyond that, mobile source NO_x emissions today are less than a third of what they were in 2000 and are forecast to continue to decline as a result of increasingly clean automobiles, with a projection that in 2030 emissions will be 1/10 of 2000 levels. This means that today the goal of threshold AQ14 have been exceeded by more than 3-fold, and by 2030 the goal will be exceeded by more than 10-fold.

In summary, current evidence indicates that (a) atmospheric nitrogen deposition resulting from vehicle exhaust is not a substantial contributor to losses in lake clarity, and (b) the implementation of stricter vehicle emissions standards at the State and federal levels are sufficient on their own to exceed atmospheric nitrogen deposition objectives. Therefore, vehicle exhaust attributable to vehicles associated with the Palisades Specific Plan (or vehicles from other projects for that matter) would not have a significant adverse effect on Lake Tahoe water quality or lake clarity.

Vehicle travel (i.e., VMT) can also result in atmospheric mobilization of fine sediment from paved roads (i.e., sediment or dust “kicked up” into the air by vehicle movement). When the Lake Tahoe TMDL was being prepared, an assessment of the effects of this sediment mobilization mechanism on lake clarity estimated that atmospheric deposition accounted for 16 percent of the annual average fine sediment load to the lake (Lahontan RWQCB and NDEP 2010). To restore the lake’s historic clarity the TMDL established a target of reducing atmospheric deposition of fine sediments by 55 percent over 65 years. TMDL development considered a number of management strategies for fine sediment load reduction. Such studies focused on, for example, the primary pathways by which atmospheric deposition of fine sediments to the lake occur. Studies conducted for the TMDL also explored the efficacy of VMT reduction as a strategy to reduce atmospheric fine sediment loading. The studies indicated that VMT reduction would likely not be a cost-effective strategy for fine sediment load reduction via atmospheric deposition (Lahontan RWQCB and NDEP 2008). This understanding was further supported by subsequent work that estimated that, “a 25 percent reduction in VMT would reduce fine sediment loads resulting from atmospheric mobilization by less than half of one percent (Lahontan RWQCB and NDEP 2008).” Given the extremely limited correlation between the amount of VMT and the amount of fine sediment deposition in Lake Tahoe resulting from atmospheric mobilization of fine sediment from vehicle movement, VMT attributable to vehicles associated with the Palisades Specific Plan (or vehicles from other projects for that matter) would not have a significant adverse effect on Lake Tahoe water quality or lake clarity via this sediment mobilization mechanism.

There are other mechanisms for sediment input into Lake Tahoe, other than atmospheric deposition from VMT, that are much greater contributors to sediment loads in the Lake, such that addressing those other pathways is a more efficient way of addressing Lake Tahoe water quality and lake clarity. For example, TMDLs represent a science-based way to determine how lake water quality can be most efficiently and effectively addressed. Having undertaken that analysis, agencies with responsibility for Lake clarity have

identified that regulating VMT is not the most effective way to address Lake Tahoe water quality and lake clarity. See Chapter 13, “Hydrology and Water Quality,” for further information on this topic.

Vehicle Emissions of CAPs in the Lake Tahoe Basin

EMFAC2021 v1.0.2, was used to calculate CAP emissions from project generated VMT. As identified in the VMT evaluation memo provided in Appendix C of this REIR, the project would generate annual average daily VMT of 12,406 in the Lake Tahoe Basin and 74,424 VMT in Placer County as a whole. The use of EMFAC as well as calculating mobile source emissions using annual average daily VMT are consistent with guidance provided by PCAPCD in their CEQA Handbook (PCAPCD 2017b).

As shown in Table 10-4, unmitigated emissions of ROG and NO_x in the Lake Tahoe Basin from these vehicle trips are below the current PCAPCD 55 lb/day threshold, and PM₁₀ and PM_{2.5} emissions are below the current PCAPCD threshold of 82 lbs/day. Even looking at project generated VMT in the entirety of Placer County (total project emissions, not just in the Lake Tahoe Air Basin), emissions are below the applicable PCAPCD thresholds. We note that the mobile source emissions shown in Table 10-4 for the entire project are less than the “Vehicle Trips” emissions shown in Table 10-5 of the 2016 EIR. The 2016 EIR used peak VMT data because the average daily VMT calculations included in the Final EIR were not available when the Draft EIR was prepared. However, the PCAPCD thresholds are based on average daily VMT. Average daily VMT was calculated for this revised analysis and was used to determine total project emissions. Average daily VMT is lower than peak daily VMT. That is because peak emissions occur on a limited number of peak days each year (e.g., winter weekends) whereas average daily emissions consist of total, annual emissions divided by 365 days, and there are many days when daily VMT is far less than the peak day’s VMT (e.g., days during the Spring and Fall shoulder seasons).

Table 10-4 Unmitigated Daily Vehicle Trip Emissions of Criteria Pollutants and Precursors in the Tahoe Basin and Placer County at Project Buildout

Emissions Location	ROG (lb/day)	NO _x (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
Lake Tahoe Basin	7.42	11.6	0.87	0.37
PCAPCD Thresholds of Significance	55	55	82	82

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM₁₀ = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; PM_{2.5} = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less.

Source: Data modeled by Ascent Environmental in 2022.

Because vehicle emissions of ROG and NO_x in the Lake Tahoe Basin attributable to vehicles associated with the Palisades Specific Plan would be far below the VMT source emissions applicable to PCAPCD thresholds of 55 lbs/day for ROG and NO_x and 82 lbs/day for PM₁₀ and PM_{2.5}, these emissions would not have a significant adverse effect on Lake Tahoe air quality. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Cumulative Impacts

The PCAPCD provides thresholds to assess a project’s contribution to cumulative air quality impacts. The cumulative impact thresholds for project operations are the same as the individual project thresholds; 55 lbs/day for ROG and NO_x and 82 lbs/day for PM₁₀ and PM_{2.5} (PCAPCD 2017a). Emissions from any individual project or emissions source that remain below these thresholds would not jeopardize maintaining or achieving air quality attainment targets in air basins in the District’s jurisdiction. Therefore, emissions from any individual project or emissions source that remains below these thresholds would not be considered to make a substantial contribution to a significant cumulative impact. The PCAPCD provides an analysis supporting this conclusion in a document titled *California Environmental Quality Act Thresholds of Significance Justification Report* (PCAPCD 2016). Because CAP emissions associated with project generated VMT would not exceed

these cumulative thresholds (see Table 10-4), they would not make a substantial contribution to a significant cumulative impact in the Lake Tahoe Basin. In addition, if considering Placer County as a whole, Countywide vehicle emissions remain below the PCAPCD thresholds with ROG emissions of 27.7 lb/day, NO_x emissions of 52.2 lb/day, PM₁₀ emissions of 4.97 lb/day, and PM_{2.5} emissions of 2.03 lb/day.

However, unlike the discussion of Impact 10-6 above, where a specific portion of the total project emissions were evaluated in direct response to the Court Ruling, in this cumulative impact analysis, to be conservative the entirety of project emissions are also considered. The PCAPCD cumulative thresholds are applied to the entirety of the project, both emissions that occur within the Lake Tahoe Basin, and emissions that occur outside the Basin. As shown in Table 10-5 of the 2016 Draft EIR, at full buildout ROG emissions exceed the 82 lb/day threshold in effect at the time during both the summer peak day (180.2 lbs/day) and the winter peak day (142.1 lb/day). NO_x emissions only exceed the 82 lb/day threshold during the peak summer day (82.7 lb/day) during winter peak day). These emissions calculations are based on peak day activity. Using average annual daily VMT to calculate mobile source emissions could result in NO_x emissions falling below the 82 lb/day threshold in effect when the 2016 Draft EIR was prepared, but ROG emissions would continue to remain above the threshold. Particulate emissions (PM₁₀ and PM_{2.5}) were well below applicable thresholds. The ROG and NO_x threshold exceedances were identified as both a significant project specific impact and a significant cumulative impact in the 2016 EIR. The impact was reduced to a less than significant level with implementation of Mitigation Measure 10-2, which provided mechanisms for the project to reduce emissions below the PCAPCD thresholds and a monitoring and reporting program to ensure that emission reductions, if necessary, were achieved.

As described above in Section 10.3.1, “Significance Criteria,” since the 2016 EIR was prepared, PCAPCD has updated their CEQA significance thresholds. As identified at the beginning of this cumulative impact analysis, the current thresholds are 55 lbs/day for ROG and NO_x and 82 lbs/day for PM₁₀ and PM_{2.5} for both assessing project specific impacts and cumulative impacts. With the current ROG and NO_x thresholds being more stringent than the thresholds that serve as the performance criteria in Mitigation Measure 10-2, implementation of Mitigation Measure 10-2 would no longer meet the intent of keeping emissions below PCAPCD thresholds. Therefore, Mitigation Measure 10-2 is updated to apply the more stringent standard as shown below. Edits to the original Mitigation Measure 10-2 language are shown in underline and ~~striketrough~~. With the implementation of this updated version of Mitigation Measure 10-2, any significant project specific or cumulative impacts related to emissions of criteria pollutants from the Village at Palisades Tahoe Specific Plan would be reduced to a less-than-significant level.

Revised Mitigation Measure 10-2: Implement an ongoing ROG and NO_x emissions review and reduction program.

Mitigation measures for reducing operational emissions of ozone precursors were developed using PCAPCD guidance (PCAPCD 2012: C-1 through C-2) and mitigation guidance published by the California Air Pollution Control Officers Association (CAPCOA 2010) and the California Attorney General’s Office (2010). The Lake Tahoe Sustainability Collaborative’s *Sustainability Action Plan* was also reviewed for mitigation options as it includes multiple emission reduction measures that are well-suited to the climate and development patterns in the Sierra Nevada (Lake Tahoe Sustainability Collaborative 2013: 4-1 through 4-37).

Prior to recordation of each Small Lot Final Map, the project applicant shall prepare, to the satisfaction of Placer County Planning Services Division and PCAPCD, a chart or table with supporting analysis, which demonstrates that construction and operation of the proposed phase, combined with emissions from all past approved phases, will not result in ROG or NO_x emissions in excess of ~~82~~ 55 lbs/day. Compliance with this threshold may be achieved through project design and/or other “on-site” measures, which may include any of the project-level reduction measures listed below. Alternatively, the project applicant may demonstrate compliance with this mitigation measure, partially or wholly, through off-site measures (i.e., emission reductions not directly associated with the proposed project but funded/implemented by the applicant, such as reducing emissions associated with ski operations) and/or purchase of offset credits identified below.

Placer County Planning Services Division shall maintain a file for the charts to provide future applicants with the historical emissions record and approved tracking methodology.

The project applicant shall be responsible for the funding and implementation of all identified reduction measures. The ROG and NO_x reduction benefits achieved by all measures must occur during the ozone season (May through October). The method used to quantify the reduction or offset amount achieved by each measure must be approved by the County and PCAPCD.

Subsequent to the implementation of all selected reduction measures, the project applicant shall evaluate and report the effectiveness of the measures annually to the County and PCAPCD to verify that the suite of measures will result in the combined reduction in ROG and NO_x that was expected. This annual reporting shall be completed and submitted to the County and PCAPCD within 30 days of the end of each ozone season. If it is determined that the effectiveness of reduction measures has been overestimated, then additional reduction measures must be implemented. Similarly, if it can be verified that reduction measures achieve better than anticipated results, or previous emission estimates were above actual emission levels, the overall emission reduction approach can be adjusted accordingly.

Types of reduction and offset measures implemented by the project applicant may include, but are not limited to, the measures listed below, so long as the combination of selected measures results in calculated emissions below the target threshold. Note that not all of these measures need to be implemented; rather, the project applicant will be required to implement a combination of those measures needed to reduce ROG and NO_x emissions below the ~~82~~ 55 lbs/day threshold:

TRIP EMISSION REDUCTION MEASURES

- ▲ Provide free or discounted transportation service between the Village and the Amtrak station in Truckee to all overnight visitors who arrive by train. This may be implemented in coordination with a local taxi service, the North Tahoe-Truckee Free Ski Shuttle, or other public or private shuttle service.
- ▲ Offer discounted overnight accommodations, meals, activities, or other incentives to visitors who arrive by train to the Amtrak station in Truckee and/or to groups who arrive by bus or some other emissions-efficient vehicle type.
- ▲ Provide preferential parking to alternatively-powered vehicles, including electric cars, natural gas vehicles, and hydrogen fuel cell vehicles.
- ▲ Provide charging stations for electric vehicles.
- ▲ Designate a location for the future installation of a hydrogen fueling station in the event that hydrogen fuel vehicles become readily available and widely used.
- ▲ Offer free, shared, or discount rental bicycles to all visitors staying in the hotel or resort residential units.
- ▲ Provide shuttle service to other key destinations in the region (e.g., North/West Shore of Lake Tahoe, casinos, Truckee) to serve guests who want to tour regional offerings.
- ▲ Provide a covered bicycle parking area near entrance of all commercial establishments.
- ▲ Provide parking for, and subsidize a car-sharing service for resort employees and/or patrons.
- ▲ Provide “end-of-trip” facilities for employees who bike to their work sites from outside of Olympic Valley including showers, secure weather-protected bicycle lockers, storage lockers for other gear, and changing spaces. This measure is consistent with measure TRT-5 in guidance published by the California Air Pollution Control Officers Association (CAPCOA 2010:234-236).

- ▲ Provide free transit passes or reimburse the transit costs of employees who commute from outside Olympic Valley using Tahoe Area Regional Transit or another transit service. This measure is consistent with measure TRT-4 in CAPCOA's guidance (CAPCOA 2010:230-233).
- ▲ Provide adequate secure weather-protected bicycle lockers or storage area for employees living at the East Parcel. The number of lockers or size of the storage area shall be adequate to meet the demand of employee residents.
- ▲ Provide virtual and/or real bulletin boards in common areas of employee housing units and other areas where employees congregate to foster the development of carpools and other ride sharing opportunities.

AREA-SOURCE MEASURES

- ▲ Prohibit diesel trucks from idling more than 5 minutes at all loading docks, including those at the East Parcel. Prior to the issuance of an Improvement/Grading Plan, the project applicant shall show on the submitted building elevations that all truck loading and unloading docks will be equipped with one 110/208 volt power outlet for every two dock doors. Diesel trucks idling for more than 5 minutes shall be required to connect to the 110/208 volt power to run any auxiliary equipment. A requirement for minimum 2 foot by 3 foot signage at loading docks that indicates "Diesel engine Idling limited to a maximum of 5 minutes" shall be included with the submittal of building plans. This measure is recommended in PCAPCD's *CEQA Handbook* (PCAPCD 2012: C-1) and is also consistent with measure VT-1 in the CAPCOA guide (CAPCOA 2010: 300-303).
- ▲ On- and off-road service and maintenance vehicles used by the operators of land uses developed under the Specific Plan, including landscape maintenance vehicles, housekeeping vehicles, and maintenance vehicles, shall be electric, electric-hybrids, or alternatively fueled.
- ▲ Electrify new and existing well pumps.
- ▲ Design and engineer new and remodeled resort-residential, commercial, institutional, and civic construction to exceed 20194 Title 24 State energy-efficiency requirements by a designated percentage. This measure is consistent with Specific Plan Policy CC-1, which encourages that 20194 Title 24 standards be exceeded by 15 percent.
- ▲ Design all new resort-residential buildings and major renovations to meet or exceed the guidelines for the California Energy Star Certified Homes Program or similar accreditation. The Energy Star Certified Homes Program is a joint program of EPA and the Department of Energy. The program establishes criteria for energy efficiency for household products and labels energy efficient products with the Energy Star seal. Homes and residential buildings can be qualified as Energy Star homes as well if they meet efficiency standards. In California, Energy Star homes must use at least 15 percent less energy than Title 24 regulations, pass the California Energy Star Homes Quality Insulation Installation Thermal Bypass Checklist Procedures, have Energy Star windows, and have minimal duct leakage. This measure is consistent with Specific Plan Policy CC-2, which encourages this performance standard.
- ▲ Only include outdoor cooking grills or outdoor cooking appliances that are fueled by propane or natural gas, or are electrified. No charcoal grills shall be allowed. This measure is recommended in PCAPCD's *CEQA Handbook* (PCAPCD 2012: C-1 and C-2).
- ▲ Install all pools with integrated insulation that has a verified insulation R-value that exceeds what is required by the building code at the time of construction, or insulate walls and floor of swimming pools with insulation that has a verified insulation R-value that exceeds what is required by the building code at the time of construction.
- ▲ Incorporate solar heating into pool heating systems.

- ▲ Cover outdoor pools with a cover designed to absorb heat from the sun when pools are not open (i.e., a transparent or bubble cover).
- ▲ Equip all heated swimming pools with energy efficient pumps and automatic covers for maintaining water temperature when not in use. This measure is recommended by the California Attorney General's Office (2010).
- ▲ Install into each dwelling unit Energy Star-rated programmable thermostats that can be controlled remotely (e.g., via internet and/or phone) by property owners/overnight patrons and building management/maintenance staff. The system should allow property management staff to monitor and adjust the thermostats when the dwelling units are unoccupied. Develop a system of default interior temperatures when dwelling units are unoccupied in order to prevent freezing water pipes and maximize heating and cooling efficiently throughout the occupied portions of the multi-story, multi-unit buildings.
- ▲ Install an occupancy-sensing energy management system into residential units. This occupancy sensing system may consist of a master keycard unit that relies on a key card's presence in an electronic sensor, or a Passive Infra-Red System to positively determine room occupancy status, or equally effective technology. The system must prevent the use of all light fixtures, exhaust fans, ceiling fans, and televisions when the unit is unoccupied.
- ▲ Install Energy Star-rated ceiling fans in residential units.
- ▲ Install on-demand (tankless or instantaneous) hot water heaters in residential units and commercial areas that are not served by a central water boiler in the building. Install systems that recirculate hot water.
- ▲ Renovate off-site buildings to make them more energy efficient, particularly regarding their levels of propane consumption for space and water heating.
- ▲ Prohibit the application of ROG-emitting paint or other architectural coatings as part of regular ongoing maintenance during peak activity periods when ROG emissions from other sources are the highest.

OFFSET MEASURES

- ▲ Establish mitigation off-site within the portion of Placer County that is within the MCAB by participating in an off-site mitigation program, coordinated through PCAPCD. Examples include, but are not limited to retrofitting, repowering, or replacing heavy duty engines from mobile sources (e.g., busses, construction equipment, on-road haulers, boilers, ski lift equipment, grooming equipment); or other programs that the project proponent may propose to reduce emissions.
- ▲ Participate in PCAPCD's Off-site Mitigation Program by paying the equivalent amount of fees for the project's contribution of ROG and NO_x that exceeds the ~~82.55~~ lbs/day. The applicable fee rates ~~changes over time~~ is adjusted annually to account for Consumer Price Index (CPI) rates. At the time of writing this EIR, the fee rate is ~~\$17,720~~ \$20,873 per ton emitted during the ozone season. The actual amount to be paid shall be determined, and satisfied per PCAPCD and current California Air Resource Board guidelines, at the time of recordation of the Final Map (residential projects), or issuance of a Building Permit (non-residential projects).

CONSTRUCTION MEASURES

- ▲ Cease or substantially limit ROG- and NO_x-generating construction activity during peak operations (i.e., peak occupancy periods) of buildings and facilities that are already built and operational under the Specific Plan.

- ▲ The prime contractor shall provide a plan for approval by PCAPCD demonstrating that the heavy-duty (50 horsepower [hp] or more) land-based, off-road vehicles to be used for project-related demolition and construction activity, including owned, leased, and subcontractor equipment, shall achieve a project wide fleet-average percent reduction in ROG and/or NO_x compared to the most current ARB fleet average that exists at the time of construction. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels (such as LNG/CNG/biodiesel), engine retrofit technology, after-treatment products, and/or other options as they become available. The prime contract shall use SMAQMD's Construction Mitigation Calculator (SMAQMD 2012), which is approved by PCAPCD (or the approved calculator in effect at the time of construction), to demonstrate that its selected equipment fleet achieves these reductions.
- ▲ During construction the contractors shall utilize existing power sources (e.g., power poles) or natural gas- or propane-fueled generators that emit less ROG and NO_x rather than temporary diesel power generators.
- ▲ Signs shall be posted in the designated queuing areas of the construction site to remind off-road equipment operators that idling shall be limited to a maximum of 5 minutes.

Significance after Mitigation

Because implementation of Revised Mitigation Measure 10-2 would require a program to ensure that the net maximum daily operational levels of ROG and NO_x emissions in combination with any project-related construction emissions do not exceed PCAPCD's thresholds of ~~82~~ 55 lbs/day, the project would not result in emission levels that would violate or substantially contribute to a violation of the ambient air quality standards for ozone. Therefore, implementation of Revised Mitigation Measure 10-2 would reduce this impact to **less-than-significant** level.

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11 NOISE

Chapter 11 of the 2016 EIR (i.e., 2015 Draft EIR, and where relevant, additional material in the 2016 Final EIR and post Final EIR comments and responses) described existing ambient noise levels in the project area and the potential for the project to result in short-term construction and long-term operational noise increases. Specifically, the 2016 EIR addressed potential impacts from construction noise, vibration-induced disturbance and structural damage, long-term increases in traffic noise on affected roadways, and long-term noise exposure associated with non-transportation sources (i.e., stationary Heating Ventilation and Air Conditioning [HVAC] equipment and generators, parking lot and loading dock activities, and outdoor recreational noise) that could affect both existing and future noise-sensitive land uses.

This section of the REIR provides the additional, revised analysis of and mitigation for construction noise for the project as required by the Court of Appeal's Ruling in *Sierra Watch v. County of Placer* (Ruling). See Chapter 1, "Introduction," in this REIR for further information on the Ruling and its relationship to this REIR. Additional calculations conducted for this analysis are provided in Appendix E to this REIR.

The Ruling identifies two items in Chapter 11 of the 2016 EIR as deficiencies requiring further discussion and analysis. The first item pertains to the geographic scope of the construction noise analysis of Impact 11-1 and the second pertains to implementation details of Mitigation Measure 11-1a.

Impact 11-1 in the 2016 EIR evaluates whether the project would result in a substantial temporary (i.e., construction) noise increase in the project vicinity. To do this, reference noise levels for typical construction equipment associated with various phases of construction, were used to quantify likely noise exposure levels at nearby receptors. The construction noise analysis identified a worst-case noise scenario that included the combined effects of multiple pieces of equipment operating at the same time. Considering the anticipated duration of the project's buildout over a 25-year period and the proximity of existing and future noise-sensitive receptors to proposed construction activities, the impact was found to be significant and unavoidable, even with implementation of Mitigation Measures 11-1a and 11-1b.

As identified in the Ruling, commenters on the Draft EIR faulted the document for failing to "adequately analyze and mitigate construction noise impacts." This became a specific issue in the lawsuit filed by Sierra Watch (plaintiffs) against the 2016 EIR and the resulting Ruling. Regarding the geographic scope of the construction analysis, pages 31 through 33 of the Ruling explain:

Sierra Watch next asserts that "the EIR does not analyze the Project's full geographic range of noise impacts, for it ignores activities occurring farther than 50 feet from sensitive receptors." We agree on this point. The EIR discussed noise impacts to "sensitive receptors" lying within 50 feet of expected construction activity. It explained that, "at 50 feet from the acoustical center of the construction site," daytime "construction-related activities . . . could result in noise levels of up to 94 dBA L_{eq} and 98 dBA L_{max} "—louder than a gas lawn mower at three feet.¹ It added that, "at 50 feet from the construction site," "[n]ighttime construction activities could result in noise levels of up to 79 dB[A] L_{eq} and 84 dB[A] L_{max} "—about as loud as a garbage disposal at three feet. Based on these considerations, the EIR concluded that these daytime and nighttime noise levels could significantly disturb certain "sensitive receptors" sitting at or within 50 feet of expected construction activity. But, with one exception for a boarding school, the EIR never considered impacts to sensitive receptors lying outside this 50-foot zone. Nor did it

¹ "The terms dB, dBA, L_{eq} , and L_{max} are shorthand for decibels (dB), A-weighted decibels (dBA), A-weighted equivalent sound level (L_{eq}), and A-weighted maximum sound level (L_{max}). Because these terms are probably unfamiliar to most, we will briefly summarize the meaning of each. Decibels are the units of measurement for sound intensity. Because knowing a sound's decibel level does not in itself adequately characterize how humans perceive the sound, the sound is often described in terms of A-weighted decibels — which, unlike unweighted decibels, account for the human ear's varying sensitivity to different frequencies. To account for varying sound levels over time, the sound is also often described in terms of the A-weighted equivalent sound level — which represents the average sound level over a specified period — and in terms of the A-weighted maximum sound level — which represents the highest sound level over a specified period."

discuss its reasons for not doing so. As a result, while the EIR would acknowledge significant impacts to a receptor sitting 50 feet from expected construction activity, it would altogether ignore potential impacts to a receptor sitting an inch more distant—even though the noise levels at these two distances would presumably be the same.

We find the EIR fell short with this arbitrary line drawing. A lead agency cannot ignore a project's expected impacts merely because they occur, as Sierra Watch puts it, "outside an arbitrary radius." Our Supreme Court has long demonstrated as much, explaining, for example, "that an EIR may not ignore the regional impacts of a project proposal, including those impacts that occur outside of its borders." (*Citizens of Goleta, supra*, 52 Cal.3d at p.575.) And if an EIR cannot ignore a project's impacts on the surrounding region, it certainly cannot ignore its impacts on sensitive areas sitting only a little over 50 feet from the project. That is particularly true here, as the EIR itself acknowledged that sound impacts may be significant even beyond 50 feet. In particular, in discussing the boarding school, the EIR acknowledged the school would experience noise levels up to 85 decibels, even at a distance of 250 feet from construction activity. And it acknowledged also that these noise levels would cause a significant impact. But without any apparent explanation, it declined to consider potential noise impacts to other receptors sitting at a similar distance from planned construction activities. That was improper.

Attempting to address this issue, respondents contend it is "standard" to "focus[] on receptors located within 50 feet of construction activities." But even assuming that is true, respondents have not shown it is standard, or appropriate, to ignore evidence of noise disturbance outside this radius. Nor have they shown, as they allege, that this is "a methodological issue" for which they are "entitled to deference." An agency, to be sure, "may" be entitled to deference in its "decision as to which methodologies to employ for analyzing an environmental effect." (*Sierra Club, supra*, 6 Cal.5th at p. 516.) But it cannot employ a methodological approach in a manner that entirely forecloses consideration of evidence showing impacts to the neighboring region, impacts beyond a project's boundaries, or, as occurred in this case, impacts to areas sitting beyond 50 feet from construction activities. (See *Citizens of Goleta Valley, supra*, 52 Cal.3d at p. 575["an EIR may not ignore the regional impacts of a project proposal, including those impacts that occur outside of its borders"]; cf. *East Sacramento Partnerships, supra*, 5 Cal.App.5th at p. 303["a threshold of significance cannot be applied in a way that would foreclose the consideration of other substantial evidence tending to show the environmental effect to which the threshold relates might be significant"].)

The second issue identified by the Court is related to Mitigation Measure 11-1a, where commenters on the Draft EIR faulted the document because it includes "no performance standards" for mitigation measures and "never assures that the measures would actually avoid noise impacts." The Court explains on pages 36 and 37 of the Ruling:

But we agree the second challenged mitigation measure falls short. That measure, again, requires "operations and techniques" to "be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete off-site instead of on-site) where feasible and consistent with building codes and other applicable laws and regulations." The measure is specific in terms of its examples — construction contractors must weld instead of rivet and mix concrete off-site instead of on-site. But it is otherwise entirely vague — "operations and techniques shall be replaced with quieter procedures...where feasible."...It defers until later the determination of which construction procedures can feasibly be changed and how these procedures can be modified to be quieter. And it offers no instruction on how either of these determinations are to be made. It is inadequate as a result. (See *Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 520 [finding inadequate a mitigation measure that set a "generalized goal" for reducing emissions and then, to achieve that goal,

relied on “unspecified and undefined” protocols]; *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 [finding inadequate a mitigation measure that required the future approval of a habitat management plan but did not “describe the actions anticipated for active management” or “specify performance standards or provide other guidelines for the active management requirement”]; see also CEQA Guidelines, § 15126.4, subd. (a)(1)(B).

This REIR chapter retains the same chapter numbering (i.e., Chapter 11), title, and general organization as 2016 EIR to simplify comparisons across the two documents if desired. However, this chapter only addresses the issues necessary to rectify any inadequacies identified in the Ruling. Therefore, Section 11.1, “Characteristics of Environmental Noise,” and 11.4 “Environmental Setting,” only provide information relevant to the discussion of Impact 11-1, “Construction noise impacts.” Similarly, Section 11.5, “Regulatory Setting,” in this REIR only provides information relevant to the discussion of Impact 11-1 with the full discussion of regulatory setting available in the 2016 EIR. Section 11.6, “Impacts,” only includes a discussion of Impact 11-1 as this was the only part of Chapter 11 addressed by the Ruling (all 2016 EIR documents are available at: <https://www.placer.ca.gov/2747/Village-at-Squaw-Valley-Specific-Plan>).

In addition to adding information to this chapter in response to the Ruling, this chapter also provides updated information since completion of the 2016 EIR, where relevant. This chapter also incorporates text that was added in the 2016 Final EIR that supplemented the Draft EIR prepared at that time; that is, revisions to Chapter 11 of the Draft EIR identified in 2016 Final EIR Section 2.3.15, “Revisions to Chapter 11, ‘Noise’” (available at <https://www.placer.ca.gov/DocumentCenter/View/45765/Chapter-2---Revisions-to-Draft-EIR>) are reflected in this chapter.

11.1 CHARACTERISTICS OF ENVIRONMENTAL NOISE

The following repeats the discussion from the 2016 EIR.

Prior to discussing the noise setting for the project, background information on sound, noise, vibration, and common noise descriptors is needed to provide context and a better understanding of the technical terms and regulations referenced throughout this chapter.

11.1.1 Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

11.1.2 Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz, or thousands of hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

11.1.3 Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.0000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB).

11.1.4 Addition of Decibels

Because decibels are logarithmic units, SPL cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than if only one of the sound sources was producing sound under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

11.1.5 A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz, and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an “A-weighted” sound level (expressed in units of A-weighted decibels [dBA]) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgment correlates well with the A-scale sound levels of those sounds. Thus, noise levels are typically reported in terms of A-weighted decibels or dBA. Table 11-1 describes typical A-weighted noise levels for various noise sources.

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	– 110 –	Rock band
Jet fly-over at 1,000 feet	– 100 –	
Gas lawn mower at 3 feet	– 90 –	
Diesel truck at 50 feet at 50 miles per hour	– 80 –	Food blender at 3 feet, Garbage disposal at 3 feet
Noisy urban area, daytime, Gas lawn mower at 100 feet	– 70 –	Vacuum cleaner at 10 feet, Normal speech at 3 feet
Commercial area, Heavy traffic at 300 feet	– 60 –	

Table 11-1 Typical A-Weighted Noise Levels		
Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Quiet urban daytime	- 50 -	Large business office, Dishwasher next room
Quiet urban nighttime	- 40 -	Theater, large conference room (background)
Quiet suburban nighttime	- 30 -	Library, Bedroom at night
Quiet rural nighttime	- 20 -	Broadcast/recording studio
	- 10 -	
Lowest threshold of human hearing	- 0 -	Lowest threshold of human hearing

Notes: dBA = A-weighted decibel.
Source: California Department of Transportation 2009.

11.1.6 Human Response to Changes in Noise Levels

As discussed above, the doubling of sound energy results in a 3-dB increase in sound. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different from what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency (“pure-tone”) signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3-dB increase in sound would generally be perceived as barely detectable.

11.2 COMMON NOISE DESCRIPTORS

The following repeats the discussion from the 2016 EIR.

Noise in our daily environment fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others fluctuate slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors used throughout this chapter.

Equivalent Continuous Sound Level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour A-weighted equivalent sound level ($L_{eq(1h)}$) is the energy average of A-weighted sound levels occurring during a 1-hour period and is the basis for noise abatement criteria used by Caltrans and Federal Highway Administration (FHWA).

Minimum Sound Level (L_{min}): L_{min} is the lowest instantaneous sound level measured during a specified period.

Maximum Sound Level (L_{max}): L_{max} is the highest instantaneous sound level measured during a specified period.

Day-Night Level (L_{dn}): L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB “penalty” applied to A-weighted sound levels occurring during nighttime hours between 10 p.m. and 7 a.m.

11.3 SOUND PROPAGATION

The following repeats the discussion from the 2016 EIR.

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on the following factors.

11.3.1 Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source (FTA 2018). Roads and highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources, thus propagating at a slower rate in comparison to a point source. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. Because of this characteristic of noise, all noise levels presented in this chapter are always accompanied by a reference distance from the source, which represents the perceived noise level at said reference distance.

11.3.2 Ground Absorption

The propagation path of noise from a source to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective-wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance. This would hold true for point sources, resulting in an overall drop-off rate of up to 7.5 dB per doubling of distance.

11.3.3 Atmospheric Effects

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels, as wind can carry sound. Sound levels can be increased at large distances (e.g., more than 500 feet) from the source because of atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects.

11.3.4 Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. Vegetation between the source and receiver is rarely effective in reducing noise because it does not create a solid barrier.

11.4 ENVIRONMENTAL SETTING

The following repeats the discussion from the 2016 EIR.

11.4.1 Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, schools, historic sites, cemeteries, and recreation areas are also generally considered sensitive to increases in exterior noise levels. Places of worship and transient lodging, and other places where low interior noise levels are essential, are also considered noise-sensitive. Those noted above are also considered vibration-sensitive land uses in addition to commercial and industrial buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance. In addition, buildings of older age are more prone to vibration-induced damage.

Existing sensitive land uses exist throughout the project vicinity with the closest receptors at or around the existing Village and the East Parcel. Receptors located closest to the proposed Specific Plan development include The Intrawest Village, The Olympic Village Inn, Olympic Valley Chapel, Squaw Valley Lodge, and other scattered residences located around the project site, such as the residences on Indian Trail Court adjacent to the East Parcel, the condominiums at Olympic Valley Road and Far East Road, and the residential neighborhood along Olympic Valley Road to the north of the project site. Refer to Exhibit 11-1 and 11-2 for specific locations.

11.4.2 Regional Setting

Regional noise sources include traffic-related noise on roadways and highways, airplanes flying overhead, and noise associated with typical residential development (e.g., people talking, dogs barking, children playing, yard maintenance equipment).

As discussed above, sound is affected by distance from the source, surrounding obstacles, and atmospheric properties. Thus, regional noise sources would not typically interfere or combine with noise sources within or in close proximity to the project site. Therefore, noise sources and levels that would affect the proposed project or nearby sensitive receptors are discussed below in Section 11.4.3, "Local Setting."

11.4.3 Local Setting

The sound levels in most communities fluctuate, depending on the activity of nearby and distant noise sources, time of the day, or season of the year. To characterize the existing environment, noise measurements were taken at various locations in the existing Village, at the East Parcel, and at surrounding sensitive land uses. A total of 18 short-term measurements and one long-term (24 hour) measurement were taken. The location of each measurement is shown in Exhibits 11-1 and 11-2. Measurement location numbers in Exhibits 11-1 and 11-2 correspond to the measurement location numbers indicated in Table 11-2, which presents the results of the short-and long-term ambient noise measurements. As shown in Table 11-2, the noise measurements captured sound generated from a variety of sources, including traffic, ski operations, snow making, snow removal, and human voices (e.g., people talking, children playing), which represent typical activities and noise sources at the existing Village at Palisades Tahoe.

Exhibit 11-3 shows the recorded 24-hour measurement (location 19, April 12, 2013) for each hour of the day and the calculated L_{dn} . A 24-hour measurement records the ambient sound level over an extended period of time and records various sound level measurements.

Noise level measurements were conducted in accordance with American National Standards Institute standards using a Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter. The sound level meter was calibrated before and after use with an LDL Model CAL200 acoustical calibrator. Meteorological conditions during the measurement period were adequate for reliable noise measurements, with partly cloudy skies, temperatures ranging from 24 degrees Fahrenheit ($^{\circ}$ F) to 62 $^{\circ}$ F, and light winds averaging 0 to 3 miles per hour (mph), and no precipitation.

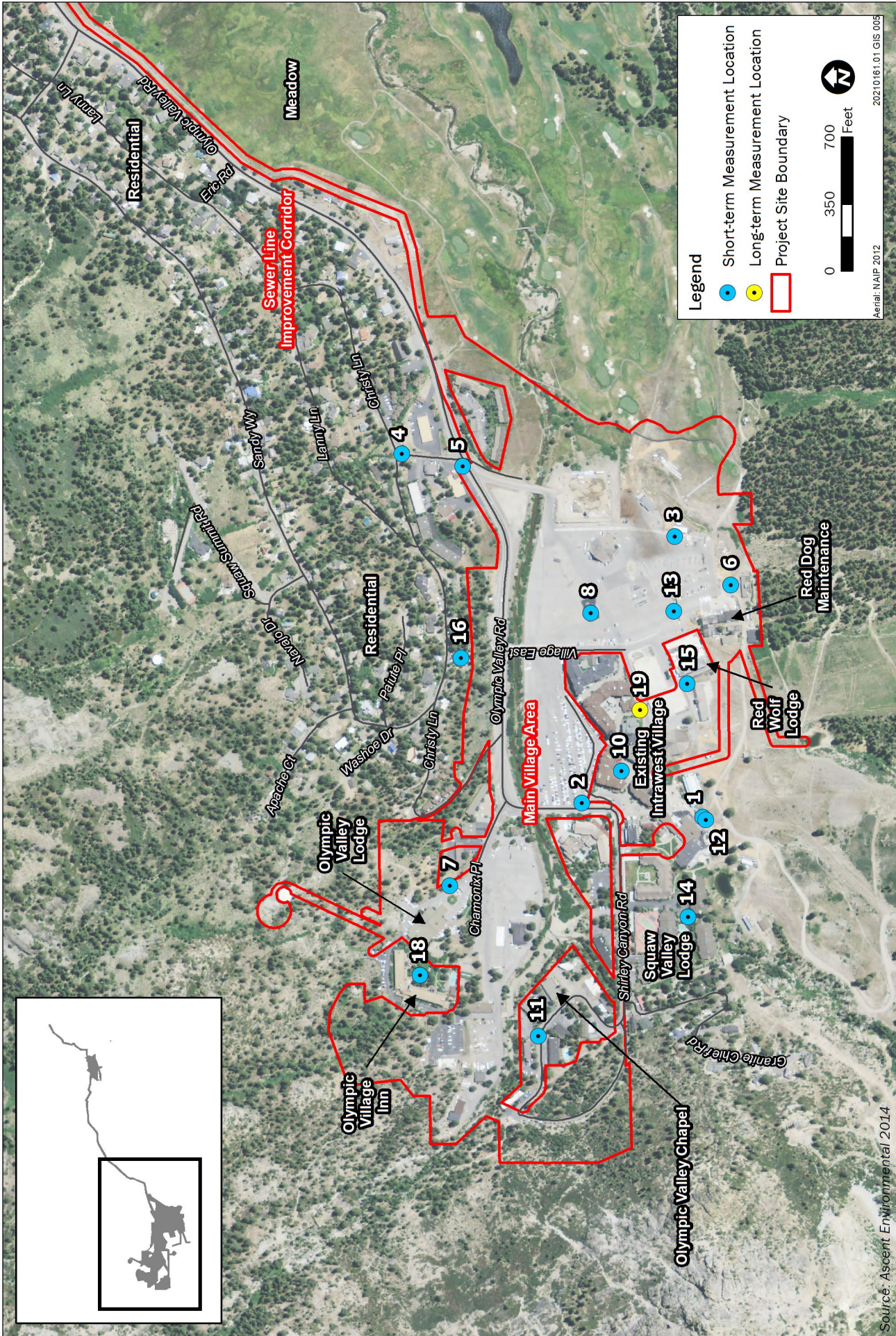


Exhibit 11-1

Noise Sensitive Land Uses and Noise Measurement Location



Source: Ascent Environmental 2014

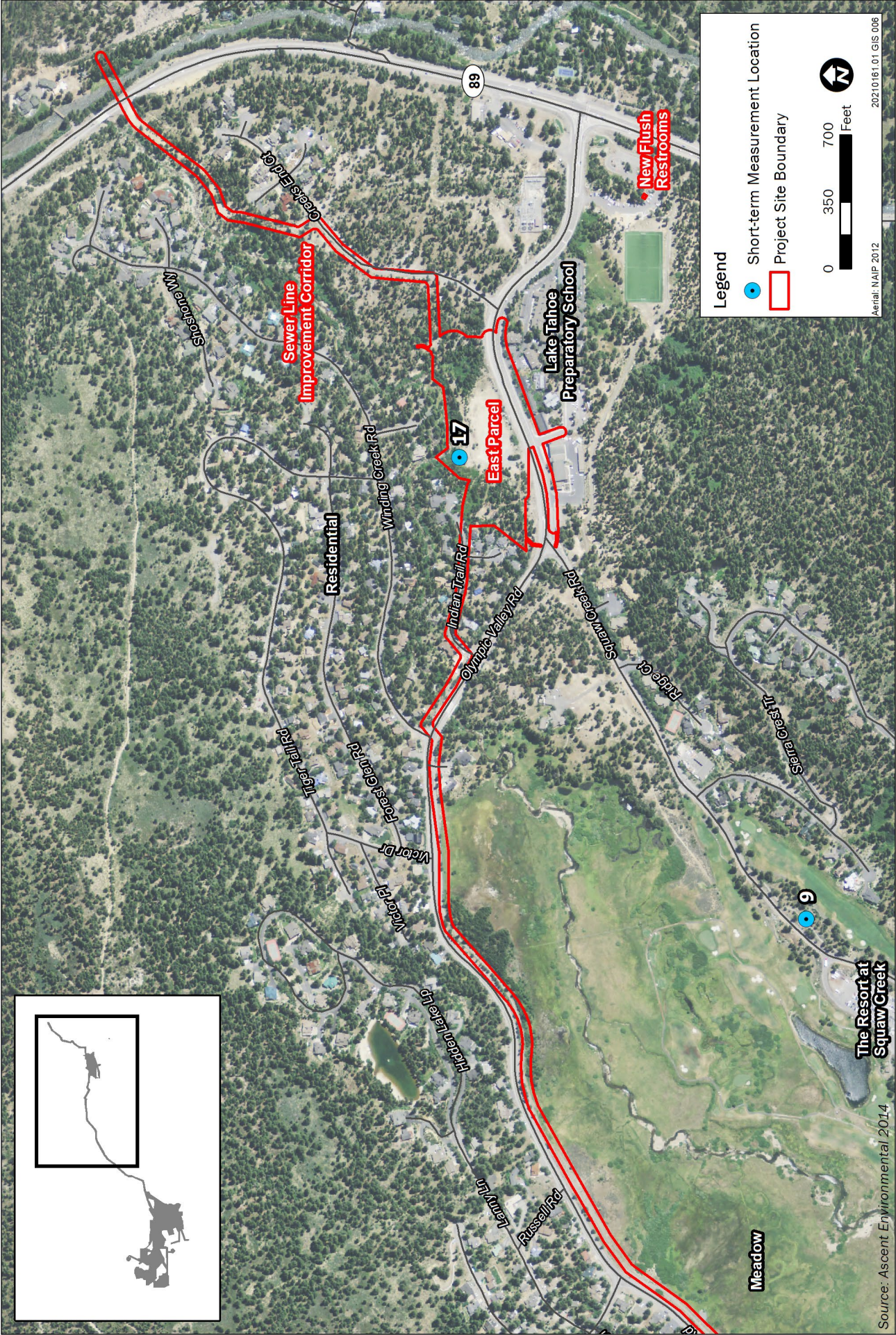


Exhibit 11-2 Noise Sensitive Land Uses and Noise Measurement Location

Exhibit 11-2

Source: Ascent Environmental 2014



Table 11-2 Summary of Sound Level Noise Measurements

Measurement Location	Date	Time/Duration	Primary Noise Source	Leq	Lmin	Lmax
1	3/30/2012	9:40 a.m./15 min	Funitel Ski Lift	69.2	66.6	80.8
2	3/30/2012	11:40 a.m./15 min	Road Traffic	61.3	48.9	65.0
	3/30/2012	10:30 p.m./15 min	Road Traffic	53.9	45.2	72.3
3	3/30/2012	3:30 p.m./15 min	Far East Express Lift	69.6	66.8	73.5
4	3/30/2012	4:00 p.m./15 min	Road Traffic	53.4	44.5	63.7
	4/1/2012	8:00 p.m./15 min	Road Traffic	46.5	37.1	60.0
5	3/30/2012	4:30 p.m./15 min	Road Traffic	67.9	49.6	80.1
	4/1/2012	2:20 p.m./15 min	Road Traffic	65.5	46.1	78.8
6	4/1/2012	9:00 a.m./15 min	Red Dog Snowmaking	63.7	61.9	75.8
7	4/1/2012	10:30 a.m./15 min	Road Traffic	59.8	40.5	78.1
8	4/1/2012	11:45 a.m./25 min	Road Traffic	54.6	44.8	73.0
9	4/1/2012	2:00 p.m./15 min	Road Traffic	57.9	39.9	72.7
10	4/1/2012	5:00 p.m./15 min	People Talking/Music/Children Playing	67.8	61.5	80.6
11	4/2/2012	9:30 a.m./15 min	Road Traffic	53.4	42.3	71.3
12	4/11/2013	10:50 a.m./10 min	Snow Cat on Slopes (1,000 feet away)	48.3	40.6	58.4
13	4/12/2013	10:00 a.m./5 min	Scraper/Dozer (27 feet away)	82.4	65.1	91.5
	4/12/2013	10:05 a.m./5 min	Snow Plow (18 feet away)	82.0	65.1	93.0
14	4/12/2013	11:10 a.m./15 min	Ski Lift	55.5	53.7	64.2
15	4/12/2012	11:50 a.m./15 min	People Skiing	53.0	51.2	62.6
16	4/12/2013	1:45 p.m./15 min	Road Traffic	59.5	39.2	71.5
17	4/12/2013	2:25 p.m./15 min	Road Traffic	44.3	40.7	63.0
18	4/12/2013	3:00 p.m./15 min	Road Traffic	42.1	38.1	55.8
19	4/12/2013	9:00 a.m./24-Hour	Village Activity/Snow Grooming on Slopes	52.2	40.4	89.7

Notes: dBA = A-weighted decibel; Leq = Equivalent Continuous Sound Level; Lmin = Minimum Sound Level; Lmax = Maximum Sound Level. Data presented in this table for the Long-term 24-hour measurement are average values recorded over the entire 24-hour period.

Source: Measurements conducted by Ascent Environmental in 2012 and 2013.

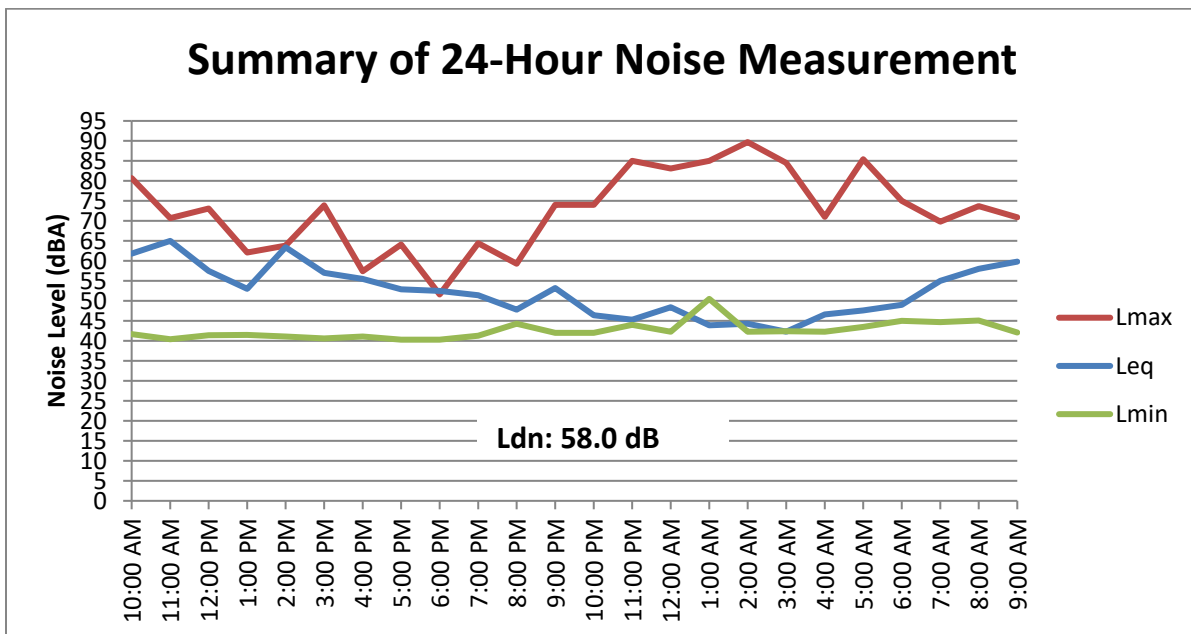


Exhibit 11-3

Summary of Long-term (24-hour) Noise Measurement

11.5 REGULATORY SETTING

This section provides information on laws, regulations, and policies related to the discussion of Impact 11-1, “Construction noise impacts.” For a complete list and discussion of Federal, State, and Local regulations that pertain to other noise and vibration topics, the full discussion of regulatory setting is available in the 2016 EIR (<https://www.placer.ca.gov/2747/Village-at-Squaw-Valley-Specific-Planhttps://www.placer.ca.gov/DocumentCenter/View/8186/Chapter-11---Noise-PDF>).

11.5.1 Federal

There are no Federal regulations that apply to construction noise. However, the Federal Transit Administration (FTA) and the U.S. Department of Transportation provide guidance for conducting construction noise impact assessments as well as documented reference noise levels for various construction equipment. Reference noise levels, noise propagation principles and methods, contained in the Noise and Vibration Impact Assessment Manual (FTA 2018) and Roadway Construction Noise Model User Guide were used in this analysis (FTA 2018, FHWA 2017).

11.5.2 State

There are no State regulations that apply to construction noise.

11.5.3 Local

PLACER COUNTY NOISE ORDINANCE

The Placer County Noise Ordinance (Article 9.36.060 Sound limits for sensitive receptors of the Placer County Code) defines sound level performance standards for sensitive receptors (Table 11-3). The ordinance states that it is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied, or otherwise controlled by such a person that causes the exterior sound level, when measured at the property line of any affected sensitive receptor, to exceed the ambient sound level by 5 dBA or exceed the sound level standards as set forth in Table 11-3, whichever is greater.

Each of the sound level standards specified in Table 11-3 shall be reduced by 5 dBA for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus 5 dBA.

Table 11-3 Placer County Noise Ordinance Noise Level Standards for Sensitive Receptors		
Sound Level Descriptor (dBA)	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly L_{eq}	55	45
L_{max}	70	65

Notes: dBA = A-weighted decibel; L_{eq} = Equivalent Continuous Sound Level; L_{max} = Maximum Sound Level.
Source: Placer County 2014.

According to Article 9.36.030, “Exemptions,” some noise-generating activities are exempt from the above noise ordinance standards, including construction that is performed between 6:00 a.m. and 8:00 p.m., Monday through Friday, and between 8:00 a.m. and 8:00 p.m. Saturday and Sunday, provided that all construction equipment is fitted with factory-installed muffler devices and maintained in good working order.

11.6 IMPACTS

11.6.1 Significance Criteria

As stated in the introduction to this chapter, this chapter only updates the discussion of Impact 11-1, “Construction noise impacts,” as this is the only portion of this chapter related to impacts addressed in the Ruling. Where the 2016 EIR included significance criteria relevant to a comprehensive CEQA analysis of noise, only the one significance criterion relevant to the analysis of Impact 11-1 is provided here. Based on CEQA Guidelines Appendix G, a project would be considered to have a significant construction noise impact if it would:

- ▲ generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

To establish appropriate thresholds of significance to assess construction noise, the Placer County Code (Section 9.36.060) was referenced. Specifically, the code states that it is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied, or otherwise controlled by such a person that causes the exterior sound level, when measured at the property line of any affected sensitive receptor, to exceed the ambient sound level by 5 dBA. In addition, as discussed in Section 11.5, “Regulatory Setting,” Placer County has adopted noise standards to protect sensitive receptors from substantial noise exposure; these standards are contained in Section 9.36.060 Sound limits for sensitive receptors, of the Placer County Code. These noise limits are presented above in Table 11-3 (i.e., 55 dBA L_{eq} during the day and 45 dBA L_{eq} during the night).

Therefore, based on the Placer County CEQA checklist, Appendix G of the State CEQA Guidelines, noise policies in the Placer County Code, and ambient noise conditions, the proposed project would result in a significant impact related to construction noise if it would:

- ▲ result in daytime construction activities that exceed 55 dBA L_{eq} ;
- ▲ result in nighttime construction activities that exceed 45 dBA L_{eq} ; or
- ▲ result in a substantial temporary increase (i.e., 5 dB) in noise during daytime or nighttime construction.

As stated above in the discussion of the Placer County Noise Ordinance, the County exempts construction noise from noise standards provided that construction occurs during the daytime hours (i.e., 6:00 a.m. and 8:00 p.m., Monday through Friday, and between 8:00 a.m. and 8:00 p.m. Saturday and Sunday). However, due to the long-term nature of anticipated construction and the proximity of construction activities to nearby receptors, the 2016 EIR treated construction noise as a permanent impact and did not apply the County’s daytime exemption. The Ruling acknowledged this approach to the analysis and did not have any objections; therefore, the approach is retained in this REIR.

11.6.2 Methods and Assumptions

POLICIES PROPOSED IN THE SPECIFIC PLAN THAT COULD AFFECT PROJECT IMPACTS

Chapter 8, “Implementation,” of the *Village at Squaw Valley Specific Plan* (Squaw Valley Real Estate, LLC 2015) includes the following requirement that is applicable to the evaluation of construction noise effects:

The Draft EIR analyzed a project buildout scenario which assumed that no more than 20 percent of the project would be developed in any single year. Each application for project entitlements shall

include a projected timeline for project construction activities, including demolition, site preparation, grading, paving, building construction and architectural coatings. This inventory shall include the projections for construction of any other VSVSP projects that would involve construction activities that are foreseeable to occur concurrent with the project for which the application is submitted, including approved Tentative Small-Lot Subdivision Maps that have not recorded but remain within the valid exercise period and any approved projects not requiring a Small-Lot Tentative Map that are within the valid exercise period. If the total amount of construction in any construction year would exceed 20 percent of the total VSVSP buildout, then the application shall be accompanied by air quality and greenhouse gas analyses to determine if emissions would exceed applicable thresholds in any of the construction years of the project application. If the thresholds are exceeded, additional CEQA review may be required.

IMPACT ANALYSIS METHODOLOGY

To assess potential short-term construction-related noise impacts, sensitive receptors and their relative exposure were identified. To do this, project-generated construction noise levels were determined based on methodologies, reference noise levels, and usage factors from FTA's *Guide on Transit Noise and Vibration Impact Assessment* methodology (FTA 2018) and FHWA's *Roadway Construction Noise Model User's Guide* (FHWA 2017). Published reference noise levels from FTA and FHWA for typical construction equipment were used to estimate project-generated construction noise. Reference noise levels are the degree of sound at a specific distance from the noise source. The referenced sound level is used to project, based on the physics of sound, the distance to which noise standards would be exceeded. Noise is attenuated (reduced) by air, ground surfaces, and physical barriers as it travels from the noise source. All reference noise levels used in FTA 2018 and FHWA 2017 are noise levels at 50 feet from the noise source (e.g., dozer, excavator). See Table 7-1 in FTA 2018 (available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf) and Table 1 in FHWA 2017 (available at https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm01.cfm). Reference noise levels must always include a distance from the source, due to the fact that perceived noise levels reduce as the source moves further from the receiver. In acoustics, to obtain reference noise levels, noise measurements are conducted using noise monitoring equipment that must be placed at a distance sufficient to accurately capture fluctuations in noise levels from equipment operation, provide enough distance between the equipment and the person conducting the measurement for safety reasons, and be located far enough away from structures that could reflect sound (e.g., walls, buildings). FTA and FHWA consistently use 50 feet from the source for all noise levels presented in FTA 2018 and FHWA 2017, to provide a consistent methodology for comparison of noise levels between different sources (such as a jackhammer or a tractor) and as a starting point for conducting a noise assessment.

Note that the use of 50 feet as the reference noise level does not mean the analysis is ignoring noise at greater distances. Rather, 50 feet is used by FTA and FHWA guidance so that estimated noise levels generated by different types of sources are standardized and comparable. Some distance from the noise source must be used in order to estimate the amount of noise generated by the source. The FTA and FHWA have determined that 50 feet is appropriate, given that noise receptors are not located directly at the noise source at a construction site, but are generally located some distance from the construction site, due to the safety and security zones located around construction sites. The Court of Appeal interpreted the reference to the 50-foot distance as meaning that the analysis ignored noise at distances greater than 50 feet. That was not the intent. Rather, reporting noise from a source at a distance of 50 feet from the source aligns with data available to estimate the noise generated from different types of sources. In addition, because the analysis identified an impact as close as 50 feet from construction activity, essentially all properties adjacent to the project site would experience an impact and that analysis effectively captured the greatest potential impact that could occur. Presenting noise levels at incremental distances beyond 50 feet would not have revealed new or greater impacts, as noise exposure would continue to decrease at increasing distances from the source and the greatest potential impact was determined using the starting point reference distance of 50 feet from the source. However, the analysis set forth below provides additional

information on estimated noise levels at locations beyond the 50-foot perimeter to demonstrate how noise levels decrease as the distance from the source increases.

Reference noise levels can be propagated (i.e., adjusted) as needed to determine noise levels at varying distances from the source, closer than 50 feet (louder than the referenced noise level) or further than 50 feet (quieter than the referenced noise level). As an example, assuming a typical attenuation rate of 6 dB for each doubling of distance from the source, if noise levels were perceived as 100 dBA at 50 feet from the source, noise would reduce to 84 dBA at 100 feet, 78 dBA at 200 feet, 72 dBA at 400 feet, and so on. All reference noise levels for construction equipment used in this analysis were obtained from FTA and FHWA and represent noise levels at 50 feet from equipment. Because noise attenuates over distance, however, the reference noise levels can be adjusted to reflect anticipated noise levels at other distances from the source. Accordingly, in this case the FTA and FHWA reference noise levels at 50 feet were adjusted to obtain noise levels at various distances, for comparison to thresholds as well as disclosure of noise levels that may occur at sensitive receptors that are located at varying distances from construction activity. This extrapolation of noise levels at distances other than 50 feet is consistent with the physical properties of noise, and is standard practice in analysis of construction noise performed under CEQA or for other purposes. Thus, noise at 50 feet provides a standardized benchmark, from where noise levels at other distances from the source can be extrapolated.

Consistent with FTA's General Noise Assessment (FTA 2018: 37), a worst-case noise scenario for daytime and nighttime construction activities was modeled. This scenario assumes that multiple pieces of construction equipment are in operation at the same time, to obtain a combined maximum noise level at 50 feet from construction activities for daytime construction and for nighttime construction. The daytime construction model assumed a higher number of equipment, associated with typical daytime activities such as grading, site preparation, and building construction. The nighttime construction model, by contrast, assumed fewer pieces of equipment associated with activities more likely to occur at night, such as concrete pouring. Then, considering the project site boundary, numerous points were chosen around the entire project site, both at 50 feet from the sources, and at other distances from the sources using the standard attenuation rate of 6 dBA reduction per doubling of distance from the source. In this way, the analysis estimated the distance to noise contours achieving the established thresholds of significance; these contours establish the point at which there is sufficient attenuation so that significance thresholds will not be exceeded. All areas within these contours, therefore, would experience construction noise under "worst-case" conditions that exceed the significance thresholds. Using these distances, construction noise contours were drawn on maps for both daytime and nighttime construction activities to identify areas that would be affected by construction noise that exceeded applicable thresholds. A review of proposed project features and their location in proximity to existing residential uses was conducted and in some locations around the project boundary, such as near the proposed Village Neighborhood and near the existing meadows (ST 7 and ST 5, respectively, in Exhibit 11-1), receptors are located within 50 feet of the project site boundary. However, given that the project involves several different components that would be constructed at different times by different contractors, the precise location of operating equipment within the project boundary cannot be known. Thus, in the event that a receiver was located within 50 feet of construction equipment, and conservatively applying the standard attenuation rate of construction noise described above, noise exposure would be up to 6 dB higher than 50-foot noise levels reported here. This is unlikely and improbable due to the fact that construction sites are fenced off for safety.

It should be noted that because of the fluctuating nature of construction noise throughout the periods of active construction, an hourly-average, or L_{eq} noise level is appropriate for evaluating noise, consistent with FTA guidance and the same noise descriptor used in Placer County code; this is the noise descriptor that is used in this analysis, but L_{max} levels are also presented for informational purposes.

11.6.3 Issues or Potential Impacts Not Discussed Further

The 2016 EIR identified that noise associated with the intermittent use of the proposed onsite helipad for emergency use was exempt from the Placer County Noise Ordinance per Section 9.36.03 and did not warrant further discussion. In addition, noise exposure from nearby airports and private airstrips also did not warrant further discussion as there were no airports or private airstrips in the vicinity of the project site. All other issues and potential impacts relevant to a comprehensive CEQA analysis of noise and vibration were evaluated (e.g., construction noise and vibration, operational stationary and mobile noise). However, as stated in the introduction to this chapter, this chapter only updates the discussion of Impact 11-1, "Construction noise impacts," as this is the only portion of this chapter addressed in the Ruling. Therefore, all other issues and potential impacts considered in the 2016 EIR are not discussed further in this REIR.

11.6.4 Impact Analysis

Impact 11-1: Construction noise impacts.

Existing noise-sensitive receptors are located in close proximity to proposed construction areas and, as the Specific Plan is developed, newly constructed sensitive receptors may be located adjacent to, or in close proximity to, ongoing construction. Most construction activities are proposed during the daytime hours, when construction noise is exempted by the Placer County Municipal Code. Although construction noise occurring during the exempted hours of the day would comply with the Placer County noise ordinance, the relatively large scale of construction occurring over a long period of time, and in close proximity to existing and future sensitive receptors, may result in excessive noise levels that disturb nearby sensitive receptors. Further, construction activity may be required during the night for actions such as large continuous concrete pours and to protect the construction site and buildings from anticipated storms. Proposed nighttime construction activities would exceed Placer County nighttime standards for sensitive receptors and could result in a substantial temporary increase in ambient noise levels. This impact would be **significant**.

Construction noise levels in the vicinity of the project site would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day; noise levels generated by those activities; distances to noise sensitive receptors; potential noise attenuating features such as topography, vegetation, and existing structures; and the existing ambient noise environment in the receptor's vicinity. Construction generally occurs in several discrete stages, with each stage requiring a certain complement of equipment with varying equipment types, quantities, and intensities of use. These variations in the type of equipment and operational characteristics of the equipment change the effect they have on the noise environment of the project site and in the surrounding area for the duration of the construction process.

To assess noise levels associated with the various equipment types and operations, construction equipment can be considered to operate in two modes, mobile and stationary. Mobile equipment sources move around a construction site performing tasks in a recurring manner (e.g., loaders, graders, dozers). Stationary equipment operates in a given location for an extended period of time to perform continuous or periodic operations (e.g., stationary crane, generator). Operational characteristics of heavy construction equipment are additionally typified by short periods of full-power operation followed by extended periods of operation at lower power, idling, or powered-off conditions.

Additionally, when construction-related noise levels are being evaluated, activities that occur during the more noise-sensitive evening and nighttime hours are of increased concern. Because exterior ambient noise levels typically decrease during the late evening and nighttime hours as traffic volumes and commercial activities decrease, construction activities performed during these more noise-sensitive periods of the day can result in increased annoyance and potential sleep disruption for occupants of nearby residences.

The Specific Plan would be developed over an estimated 25-year buildout period. The sequence and pace for constructing various land uses and facilities would be market driven; therefore, a specific construction schedule has not been developed. During some years there may be several Specific Plan elements under construction simultaneously and during other years there may be very little or no construction activity. Even during those years when construction activities are taking place, construction noise will not be continuous. In particular, construction activities that involve ground disturbance are highly restricted during roughly half the year (from October 15 to snowmelt the following year). However, it is anticipated that during the single most active possible construction year, no more than 20 percent of the total Specific Plan construction could occur (see Section 3.4.6, “Project Construction,” in the 2016 EIR as well as Section 11.6.2, above). It is anticipated that this peak year, if it were to occur, would only happen once during the Specific Plan’s estimated 25-year buildout period.

Typical construction activities would include demolition and removal of existing pavement and structures, grubbing/clearing of on-site areas, excavation and relocation of soil/rock on the site, backfilling and compaction of soils, construction of utilities (i.e., potable water conveyance, wastewater conveyance, storm water drainage facilities, underground electrical and propane facilities), and construction of proposed buildings. Construction staging areas would be located on existing and future surface lots in the main Village Area and a staging area would be established on the East Parcel. If the parking structure is complete on the East Parcel, it would be available for staging for construction of other project elements in the East Parcel. Staging areas would be placed in parking lots because during the construction season (spring, summer, fall) there is reduced demand for parking and portions of parking lots could be used for staging without disrupting resort operations.

The site preparation phase typically generates the most substantial noise levels because the on-site equipment associated with grading, compacting, and excavation are the noisiest. Because construction of the various project components may overlap, it is possible that site preparation activities would occur simultaneously with building construction and/or demolition activities at any given location on the site. Therefore, as a conservative approach to this analysis, it was assumed that noise from site preparation and building construction activities could combine, representing a worst-case scenario, and affect the same sensitive receptor at some point during the construction phase.

In addition, some periodic night time construction work is anticipated to occur during some parts of project development, such as large continuous concrete pours (for some larger concrete elements once a “pour” starts it must continue without interruption to ensure proper setting and cohesion of the concrete), rapidly covering or otherwise protecting partially constructed buildings/structures in anticipation of oncoming storms, and delivery of materials and supplies during some nighttime operations. Aside from these few instances, construction would not occur during the nighttime hours on a regular basis.

Construction equipment would vary day-to-day depending on the project phase and the activities occurring but would involve operation of all-terrain heavy-duty diesel equipment. Typical noise levels generated by various types of construction equipment likely to be used are identified in Table 11-4.

Equipment Type	Typical Noise Level (dBA) @ 50 feet
Pile Driving	95
Backhoe	80
Concrete Mixer	85
Concrete Pump	82
Crane	85
Dozer	85
Fork lift	85
Generator	81
Loader	85

Table 11-4 Noise Emission Levels from Construction Equipment

Equipment Type	Typical Noise Level (dBA) @ 50 feet
Paver	89
Pneumatic Tools	85
Scraper	89
Trucks	74-88

Notes: dBA = A-weighted decibel. Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment.

Source: Table 7-1 in FTA 2018 and Table 1 in FHWA 2017.

Based on reference noise levels at 50 feet for various construction equipment published by FTA and FHWA, and summarized above in Table 11-4, and accounting for typical usage factors of individual pieces of equipment and activity types, worst-case construction-related activities (daytime) could result in noise levels of up to 94 dBA L_{eq} and 98 dBA L_{max} at 50 feet from operating construction equipment. Nighttime construction activities could result in noise levels of up to 79 dB L_{eq} and 84 dB L_{max} at 50 feet from operating construction equipment. The distance this sound travels and may be disruptive to sensitive receptors, is discussed below.

Existing sensitive receptors that would be exposed to construction-noise (based on the modelling of construction noise at 50 feet from the activity and beyond) include lodging units at the Intrawest Village and Red Wolf Lodge, The Olympic Village Inn, Olympic Valley Chapel, Squaw Valley Lodge, and other scattered residences located around the project site, such as the residences on Indian Trail Court adjacent to the East Parcel, the Tavern Inn Condominiums located at Olympic Valley Road and Tavern Way, and the Lake Tahoe Preparatory School (formerly, Squaw Valley Academy) across Olympic Valley Road from the East Parcel (approximately 250 feet between the closest academy buildings and construction activities). Construction activity (e.g., demolition, site preparation, grading, and building construction) could potentially occur as close as 50 feet of most of these existing sensitive receptors during some point in the construction process, and as close as 250 feet from the Academy for construction of the proposed market. Daytime noise levels could be as high as 85 dB at the exterior of the Academy buildings for short periods during construction at the East Parcel, which could result in disruptive noise within classrooms. There are scattered residential uses surrounding the East Parcel construction area, but all receptors are at least 50 feet from proposed construction locations.

At receptor locations beyond 50 feet from construction activity, noise levels would reduce at a rate of 6 dBA per each doubling of distance (see Section 11.3.1 for an explanation). For example, using the modeled daytime construction noise levels of 94 dBA at 50 feet, noise would be reduced, from distance alone, by 6 dBA to 88 dBA at 100 feet and then to 82 dBA L_{eq} at 200 feet from construction activities, and so on. In addition, as the Specific Plan is developed over the years, new sensitive land uses would be constructed and potentially occupied while construction continues and, therefore, construction activities could also expose these new on-site receptors to these same noise levels. Further, the locations potentially exposed to excessive construction noise would change over the course of project construction, based on where the construction activity would occur and whether structures are in place that would act as noise barriers between construction activity and a sensitive receptor.

To evaluate construction noise impacts in this REIR and illustrate where construction noise levels could exceed thresholds *at some time during construction* as well as to disclose potential noise exposure levels at affected receptors at all distances from the project site, noise contours for daytime and nighttime construction noise were developed using the worst-case noise generation scenarios presented above: construction noise of 94 dBA L_{eq} at 50 feet for daytime construction and 79 dBA L_{eq} at 50 feet for nighttime construction activities.

To account for the distance between noise-generating equipment onsite and the respective variable distances of these sources to a receptor, noise contours begin at the reference distance of 50 feet from construction activities, consistent with FTA guidance for large sites with multiple sources. Specifically, FTA

guidance states that “the reference distance should be the equivalent distance of 50 feet, which is determined by estimating the noise levels from the center of the site at a distance far enough to capture all noise sources and projecting back to 50 feet from the center of the site. This approach allows for a conservative estimate of noise for all surrounding areas and the equivalent noise can be considered as concentrated at the center of the site.” Thus, the daytime construction noise modeling assumed the simultaneous use of thirteen pieces of construction equipment, combined the noise levels from each individual piece, and reported the combined levels at 50 feet. This is the initial reference point used to determine noise levels at distances further than 50 feet, taking into account the attenuation of noise that occurs over distance. In this fashion, the analysis determines whether noise would be sufficiently high to exceed thresholds of significance at longer distances. In the unlikely event that the maximum noise levels from thirteen pieces of equipment for daytime construction activities and two pieces for nighttime construction activities combined at the same receptor within 50 feet, noise levels could reach up to 6 dBA higher, or 100 dBA L_{eq} for daytime construction and 85 dBA L_{eq} for nighttime construction.

Applying the standard attenuation rate of 6 dBA reduction for every doubling of the distance from the source, noise contours were calculated to show the distance, and affected area, where construction activities could produce noise levels at some point in the 25-year construction period that could exceed the thresholds of significance discussed above. Contours were drawn around multiple points chosen at all boundaries of where construction could occur, and propagated outward; thus, contours represent the worst-case noise scenario that could occur outside the project boundary as the contours represent multiple construction equipment moving around the edge of project site. It is important to consider that these contours represent the totality of where significant construction noise would occur. Some of these areas would be exposed to construction noise more frequently and for longer periods of time than other areas. It is important to note, however, that even those areas with the highest noise exposure will not be subject to these noise levels on a continuous basis for 25 years. Rather, construction noise will be episodic. In addition, because of the conservative assumptions used in this analysis, the construction noise levels experienced at sensitive receptors may actually be lower than shown in Exhibits 11-4 and 11-5 as the modeling does not account for any existing structures or other obstructions that could reduce noise at a receiver. However, at this time and level of planning, it would be speculative to determine the specific duration and frequency of noise exposure at any one location.

Table 11-5 provides the distances to each contour that coincides with the contours depicted in Exhibits 11-4 and 11-5, which show construction noise contours for daytime and nighttime construction activities, respectively.

Table 11-5 Daytime and Nighttime Construction Noise Contours			
Daytime Construction Noise Contours		Nighttime Construction Noise Contours	
dBA L_{eq}	Distance (ft) to Contour	dBA L_{eq}	Distance (ft) to Contour
94	50	79	50
88	100	73	100
82	200	67	200
76	400	61	400
70	800	55	800
64	1,600	49	1,600
58	3,200	45	2,667
55	4,800	NA	NA

Notes: dBA = A-weighted decibel; L_{eq} = Equivalent Continuous Sound Level; ft = feet; NA = not applicable.

1. Bolded text represents thresholds of significance.

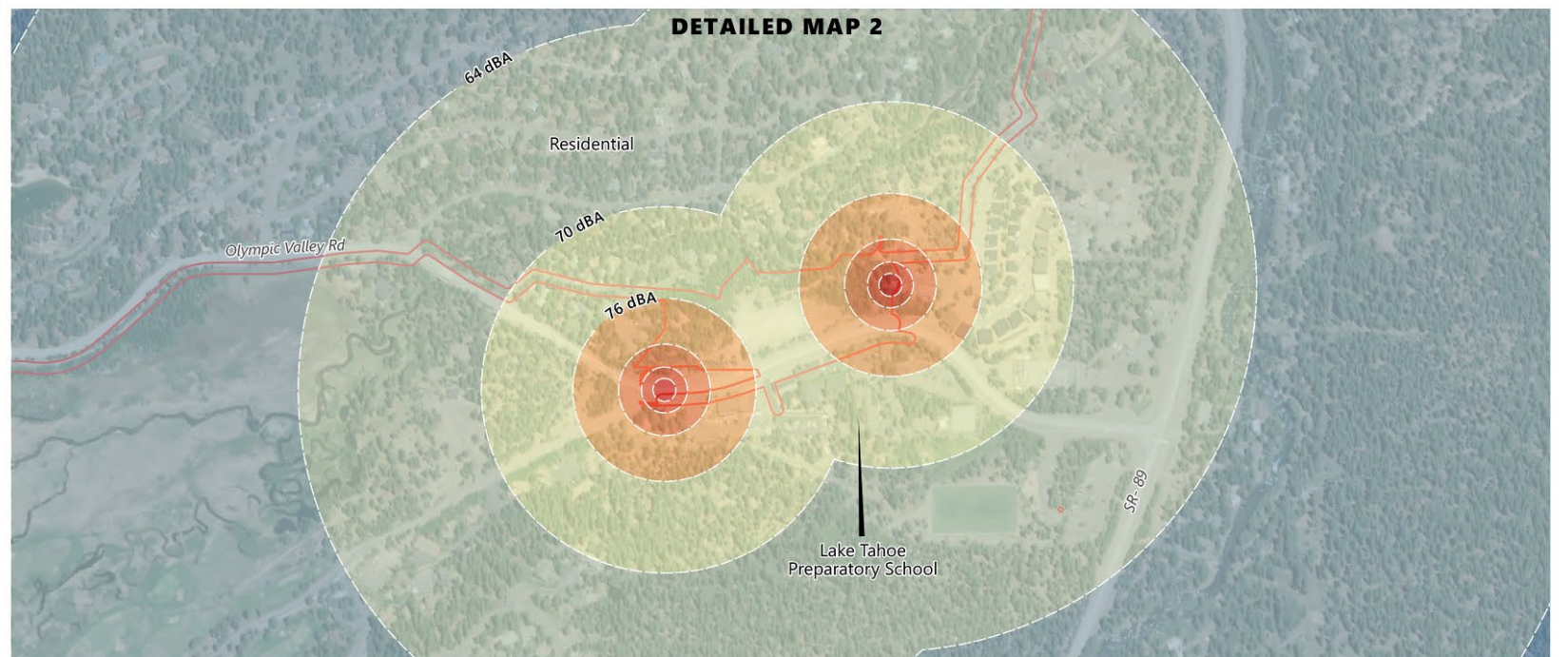
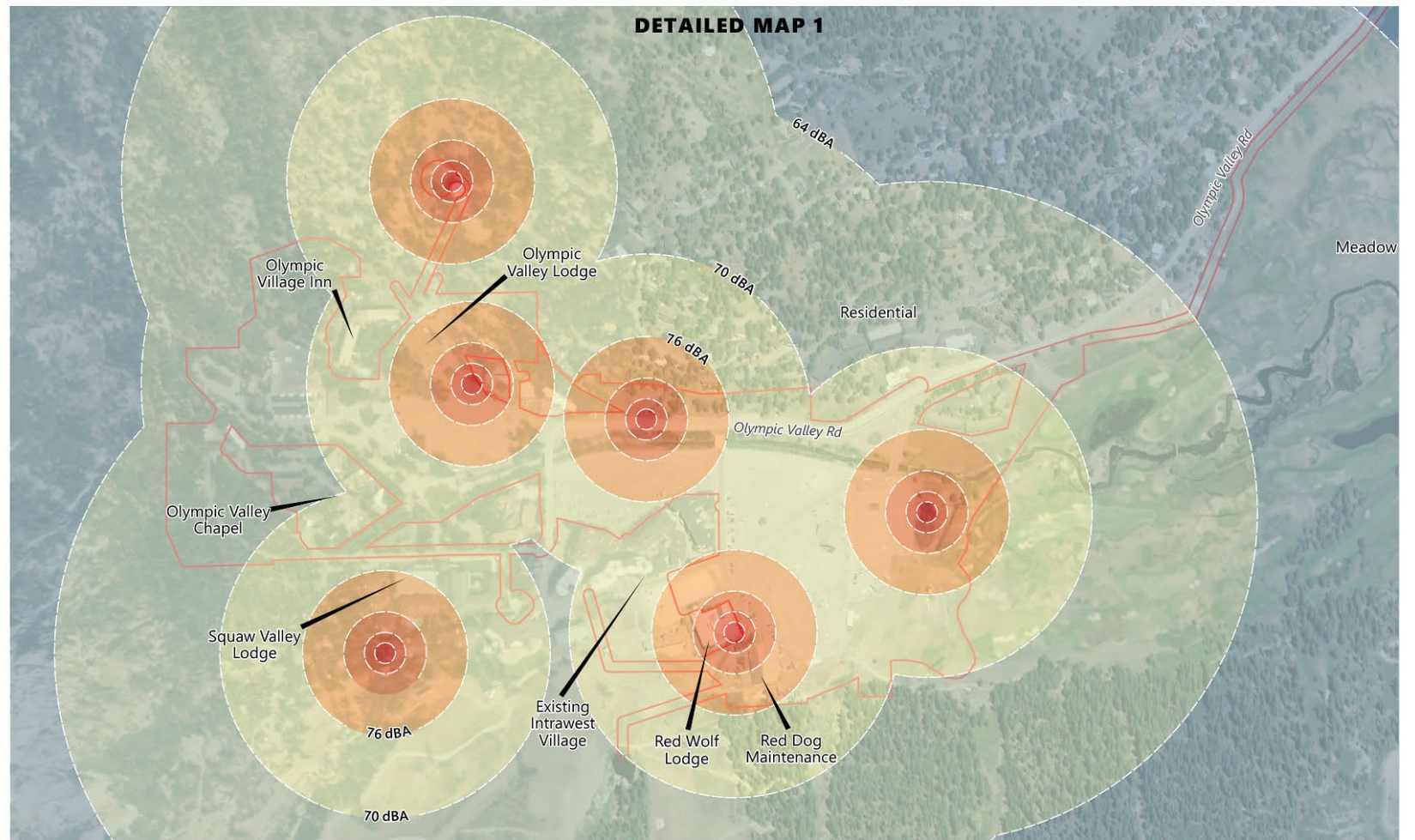
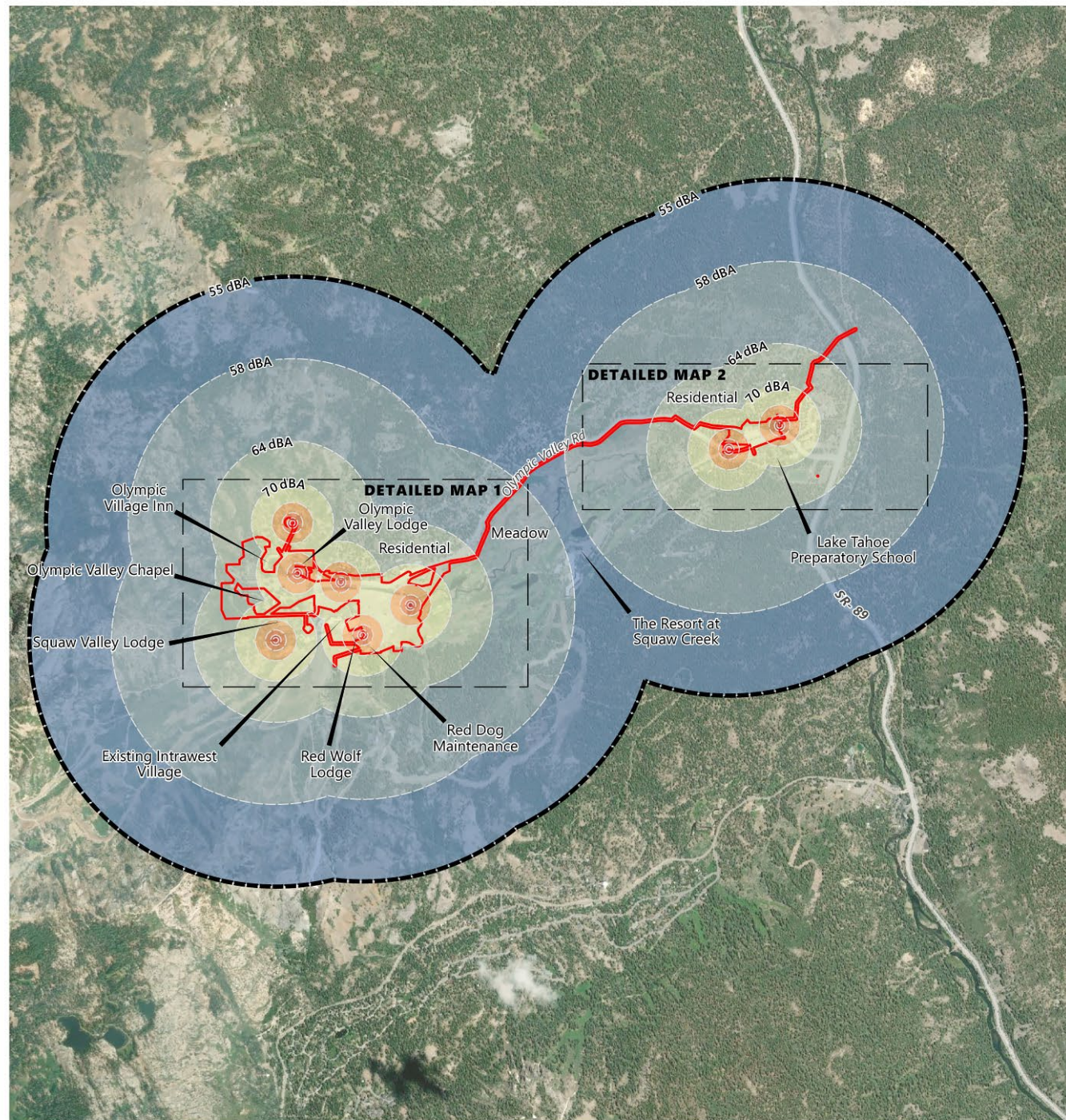
Source: Modeled by Ascent Environmental in 2022.

As shown above in Table 11-5 and Exhibits 11-4 and 11-5, the daytime threshold of 55 dBA L_{eq} would be achieved at 4,800 feet from construction activities and the nighttime threshold of 45 dBA L_{eq} would be achieved at 2,667 feet from construction activities. Therefore, given the maximum construction noise generation calculated used in this analysis, sensitive receptors that are within 4,800 feet of the project boundary, at some point during project construction, could experience construction noise levels that exceed the daytime threshold of 55 dBA L_{eq} (not considering the Placer County daytime construction noise exemption for the reasons described above). For the noise generated by modeled nighttime construction activities (e.g., continuous concrete pours), sensitive receptors that are within 2,667 feet of the project boundary, at some point during project construction, could experience construction noise levels that exceed the nighttime threshold of 45 dBA L_{eq} .

Using the information provided in Table 11-5 and Exhibits 11-4 and 11-5, anticipated noise levels at any particular receptor can be estimated. For example, using Exhibit 11-4 for daytime construction, residences north of Olympic Valley Road along Christy Lane would be exposed to hourly average exterior noise levels of 88 to 76 dBA while receptors a little further north along Squaw Summit would be exposed to hourly average exterior noise levels of between 76 dBA and 70 dBA, during peak construction activities occurring during daytime hours. It is important to note that, in addition to the different locations of construction, construction noise would fluctuate during the day and during the year depending on the specific construction phase and number of active construction sites at any one time. Further, night-time construction would occur less frequently than daytime construction. Also, daytime background noise levels without construction can also fluctuate depending on the types of events (e.g., live music, sporting events) and daily traffic occurring on the project site and surrounding areas. As background noise levels increase, construction noise would become less noticeable and as background levels decrease, such as during the night, construction noise levels would become more prominent. Depending on the proximity of receptors to construction activities, maximum construction noise levels could be perceived as loud as an airplane flying overhead (for nearby receptors right next to construction equipment) or similar to a lawnmower or heavy traffic in an urban area (for receptors approximately 800 feet from construction equipment).

Also, when two noise sources that generate the same levels are combined, an increase of only 3 dBA is perceived (i.e., two pieces of equipment that each produce 70 dB would combine to produce 73dB), and when a noise source is combined with another source that is not as loud, the louder source dominates. In addition, when a source is closer to the receiver, that source dominates that receiver's perception of environmental noise sources and other more distant sources become background noise. To illustrate this concept, using the measured noise level for the Funitel Ski Lift of 70 dBA L_{eq} at 50 feet (measurement location 1 in Table 11-2 adjusted to 50 feet), for a person standing 50 feet from the operating ski lift when construction is occurring 200 feet or more away at another portion of the project site, the Funitel would become the dominant noise source as construction activities move beyond 200 feet. Likewise, during peak traffic periods, roadway noise can be the dominant noise source at receptors near roads.

Thus, with construction activities and the presented contours that show construction noise levels exceeding applicable thresholds up to 4,800 feet away during the day and up to 2,667 feet away at night, it is likely that other existing noise sources (e.g., roadways, ski lifts and other equipment such as snow plows, recreational activities, yard landscape equipment) that could occur in close proximity to a receptor and in between the receptor and the construction activities, may actually be perceived as louder or similar to construction noise levels. This scenario would become more likely at farther distances from construction.



Unmitigated Daytime Noise Contours	
dBA Leq	Distance to Contour (ft)
94	50
88	100
82	200
76	400
70	800
64	1,600
58	3,200
55*	4,800*
NA	NA
NA	NA

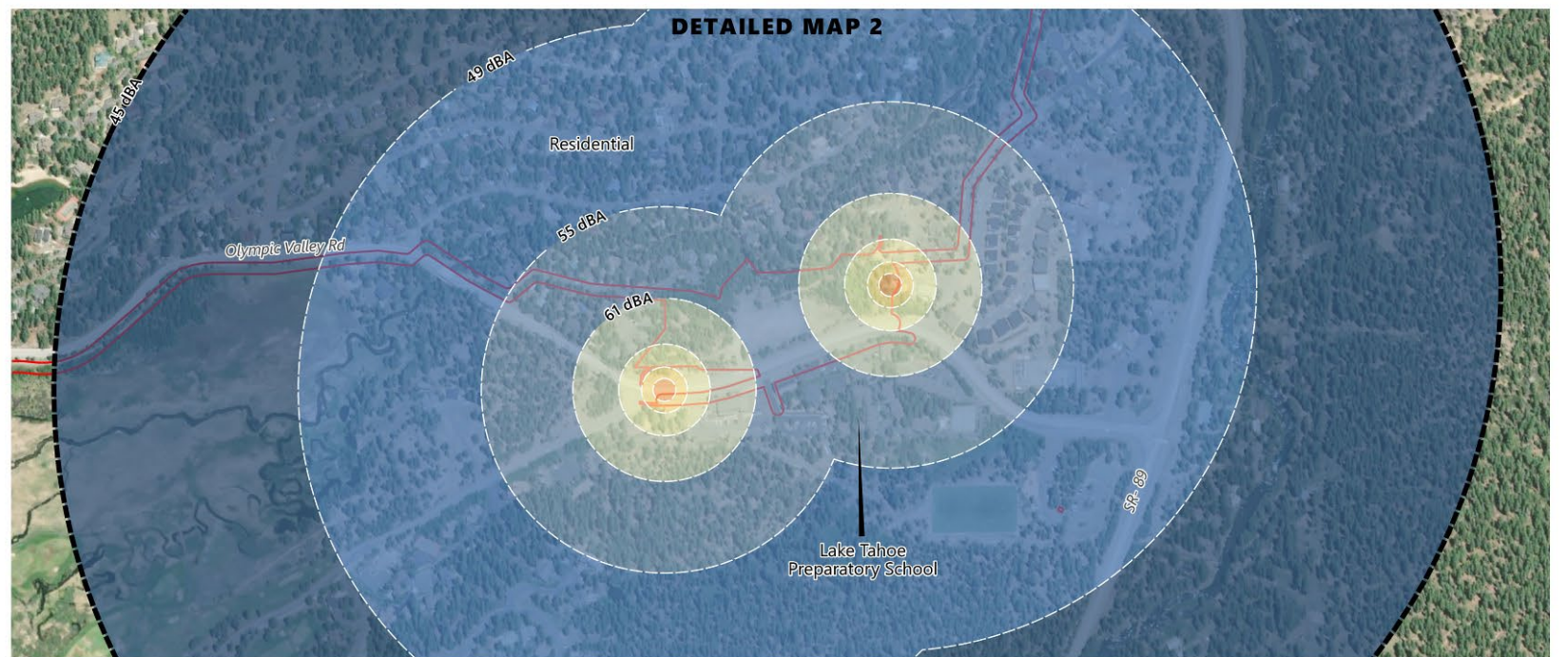
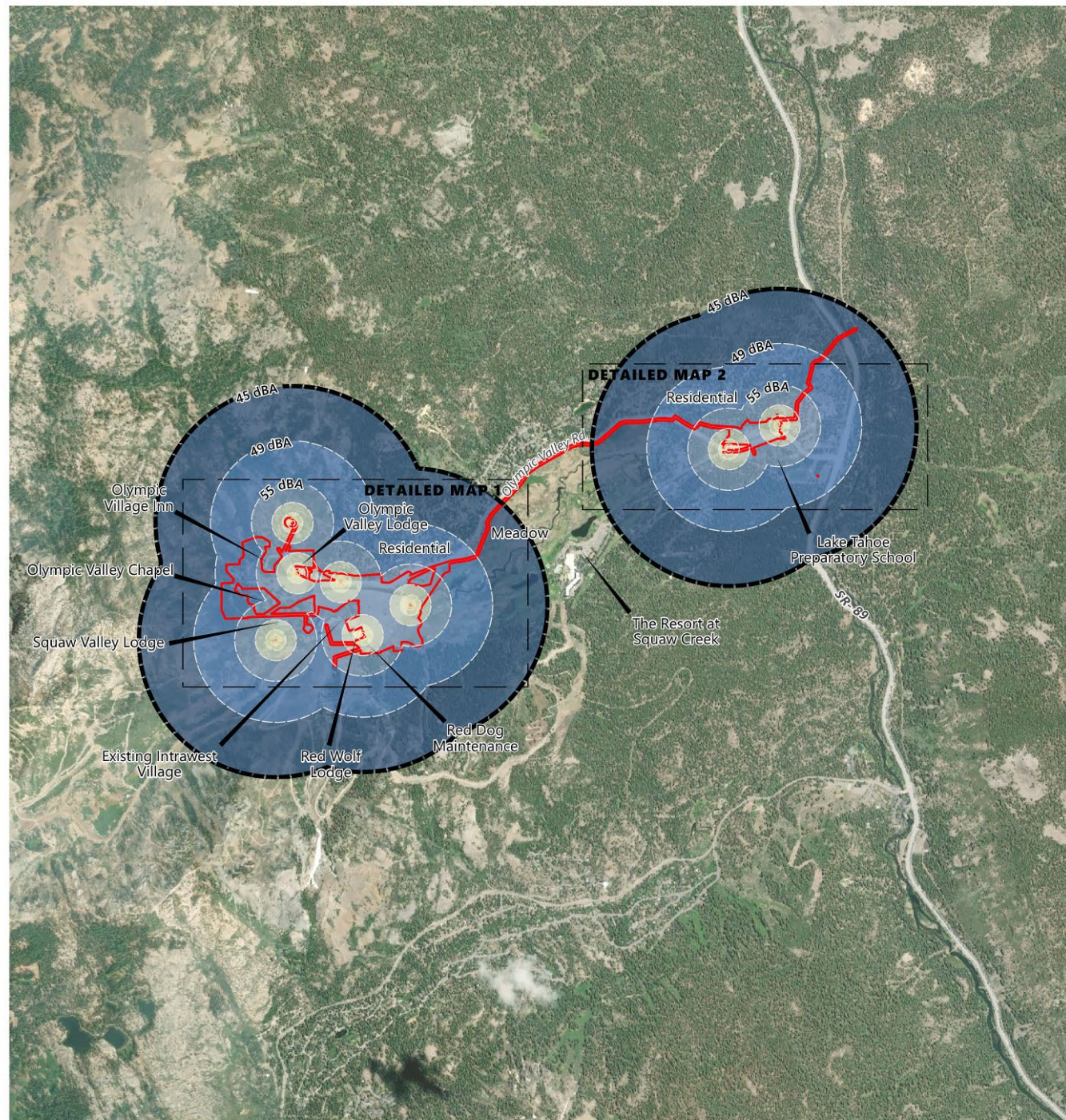
----- Unmitigated Daytime Noise Threshold (55 dBA Leq) Contour
 [Red Outline] Project Site

*threshold level

ESRI World Imagery
 20210161.01 GIS 003

Source: adapted by Ascent Environmental in 2022





Unmitigated Nighttime Noise Contours	
dBA Leq	Distance to Contour (ft)
NA	NA
NA	NA
NA	NA
79	50
73	100
67	200
61	400
55	800
49	1,600
45*	2,667*

----- Unmitigated Nighttime Noise Threshold (45 dBA Leq) Contour
 [Red Outline] Project Site

*threshold level

ESRI World Imagery
 20210161.01 GIS 004

Source: adapted by Ascent Environmental in 2022



Nonetheless, at various sensitive receptors, at some points during the construction process, anticipated daytime construction activities could result in noise levels that exceed Placer County's daytime (i.e., 7:00 a.m. to 10:00 p.m.) exterior noise standards of 55 dBA L_{eq} and nighttime (i.e., 10:00 p.m. to 7:00 a.m.) exterior (adjusted) standards of 45 dBA L_{eq} dBA. It should be noted that noise standards have been adopted by Placer County for the purpose of protecting the community from disruptive noise levels that could lead to certain adverse health outcomes, relating to sleep disturbance and repeated disruption of noise-sensitive activities (e.g., office work, churches, educational facilities) that can increase stress and annoyance in individuals. Consistent with this objective, noise sources that do not exceed established maximum noise limits would be unlikely to result in adverse effects to the community or individuals. Regarding construction noise, consistent with Placer County code, construction noise levels are generally exempt from noise standards because typical construction activities occur during daytime hours when people are much less likely to be disturbed, construction noise ceases at the end of the day, and construction is generally temporary in nature. However, when construction, and any excessive noise generation occurs for extended periods of time, people become increasingly disrupted, annoyed, and stressed. Furthermore, noise generating activities that occur during the nighttime, when most people are sleeping and ambient levels are quieter, tend to be more disruptive and less noise generation would be required to result in the same level of disruption compared to daytime noise generation, which is why nighttime noise standards are lower than daytime standards. In all cases, exceedance of established noise levels has the potential to result in disturbance to nearby receptors. For these reasons, construction-related noise during the daytime (Placer County exempted hours) and nighttime may result in excessive noise levels that disturb nearby sensitive receptors. This would be a **significant** impact.

Revised Mitigation Measure 11-1a: Implement construction-noise reduction measures.

To minimize noise levels during construction activities, construction contractors shall comply with the following measures during all proposed construction work:

Equipment Restrictions

- ▲ For individual construction projects, the construction equipment staging area shall be located on the opposite side from sensitive receptors, unless site specific conditions preclude that, in which case the staging area shall be located as far away as possible from the nearest sensitive land use. All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- ▲ All construction equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an object is detected. The self-adjusting backup alarms shall automatically adjust to 5 dBA over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels. In addition to the use of backup alarms, the construction contractor shall implement the use of observers and the scheduling of construction activities such that alarm noise is minimized.

Quieter Alternative Methods and Equipment

- ▲ Each construction contractor shall use noise reducing operations measures, techniques, and equipment. This requirement shall be enforced through its inclusion on all construction bid specifications for all potential construction contractors hired within the Village at Palisades Tahoe Specific Plan. The bid specifications shall require that construction contractors provide an equipment inventory list for all equipment within the fleet with greater than 50 horsepower engines, that includes (at a minimum), make, model, and horsepower of equipment; operating noise levels at 50 feet, available noise control device that are installed on each piece of equipment; and associated noise reduction from the installed technology. Control devices shall include, but are not limited to, high-efficiency mufflers, acoustic dampening and protected internal noise absorption layers to vibrating panels, enclosures, and electric motors. In addition, the contractor shall specify how proposed alternative construction procedures will be employed to reduce noise at sensitive receptors compared to other more traditional methods. Examples include, but are not limited to, welding instead of riveting, mixing concrete off-site instead of on-site, use of thermal lance

instead of drive motors and bits, and hydraulic pile driving or auger piles instead of impact pile driving. In all cases, the requirement is that the best commercially available noise-reducing technology and noise-reducing alternative construction method shall be used, provided that there are no safety concerns, engineering limits, or environmental constraints preventing it from being used. If a unique circumstance does exist that prevents an alternative quieter construction method to be used, the contractor shall provide evidence to support their proposal. The noise reduction elements of construction bid submittals shall be approved by Placer County, in coordination with a qualified acoustical professional.

- ▲ When existing and future noise sensitive uses are within close proximity (i.e., 4,800 feet during daytime construction and 2,667 feet during nighttime construction) to prolonged (i.e., construction equipment use for more than 30 days, based on FTA's use of a 30-day average noise level standard for the purpose of evaluating long-term construction noise exposure, affecting the same offsite receptor) construction noise, noise attenuating buffers such as structures, truck trailers, temporary noise curtains or sound walls, or soil piles shall be located between noise sources and the receptor to shield sensitive receptors from construction noise.
- ▲ Construction on the East Parcel shall be planned and implemented to avoid intrusive noise, defined as an interior noise level of 45 dBA L_{eq} /65 dBA L_{max} or greater, during the time when classroom activities take place at the Lake Tahoe Preparatory School. The applicant shall coordinate with administrators at the academy and shall achieve these performance standards either by adjusting the timing of construction, adjusting construction methods during times of classroom instruction, using temporary screening, and/or improving noise attenuation at the school by replacing windows, increasing insulation, etc., as needed. The applicant shall prepare and submit to Placer County an acoustical study that demonstrates these criteria will be met prior to approval of each Small Lot Tentative Map for all construction on the East Parcel.
- ▲ The project applicant shall sponsor and create a website that includes information on construction activities and includes when, where, and for how long noise generating construction activities would occur. In addition, prior to the beginning of each construction season written notification of construction activities shall be provided to all noise-sensitive receptors located within 4,800 feet of proposed daytime construction activities and 2,667 feet of proposed nighttime construction activities. Additional notifications shall be provided if there are substantive changes in construction operations or noise generating activities (e.g., need for nighttime construction, special notice for blasting). Notification shall include anticipated dates and hours during which construction activities are anticipated to occur and contact information, including a daytime telephone number, for the project representative to be contacted in the event that noise levels are deemed excessive.

Adopted Mitigation Measure 11-1b: Implement construction-noise reduction measures during noise-sensitive time periods.

For all construction activity that is to take place outside of the Placer County construction noise exception timeframes (i.e., 6:00 a.m. and 8:00 p.m., Monday through Friday, and between 8:00 a.m. and 8:00 p.m. Saturday and Sunday), and that is anticipated to generate more than 45 dBA L_{eq} / 65 dBA L_{max} at 50 feet, the construction contractor shall comply with the following measures:

- ▲ Consistent with Section 9.36.080 Exceptions, of the Placer County Code, obtain an exception to Article 9.36 Noise standards for nighttime construction. Implement noticing to adjacent landowners called for in Section 9.36.080 and implement conditions included in the exception, if approved.
- ▲ Install temporary noise curtains that meet the following parameters:

 - Install temporary noise curtains as close as possible to the boundary of the construction site within the direct line of sight path of the nearby sensitive receptor(s).

- Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot.
- ▲ Noise-reducing enclosures or acoustic barriers shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors).
- ▲ Operate heavy-duty construction equipment at the lowest operating power possible.

New Mitigation Measure 11-1c: Prepare pre-construction acoustical study.

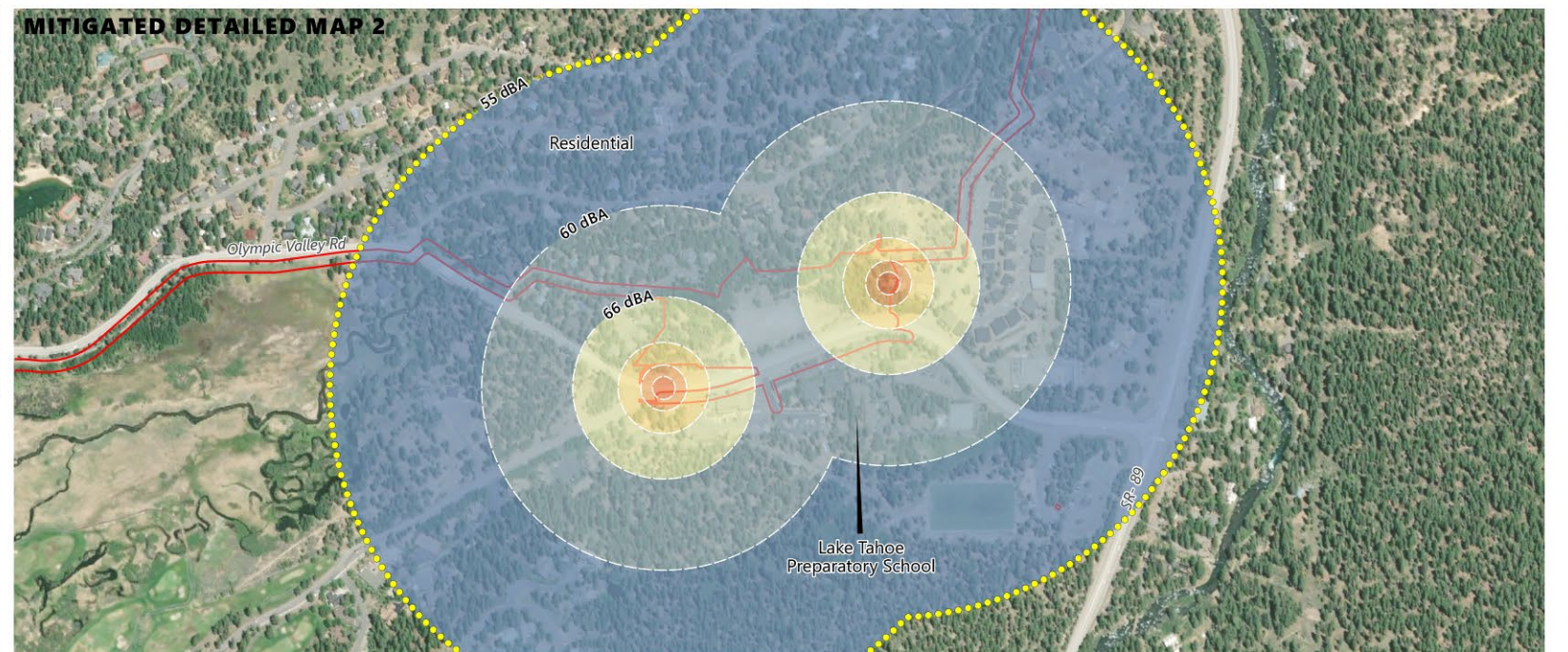
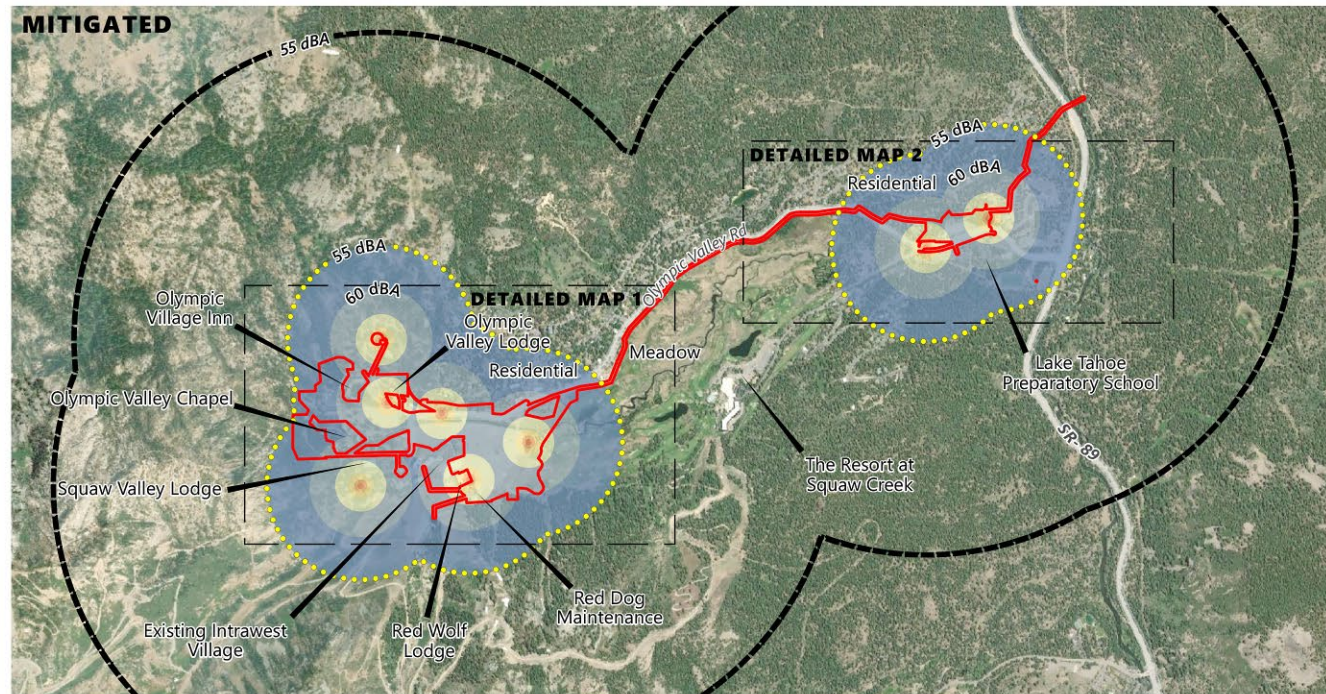
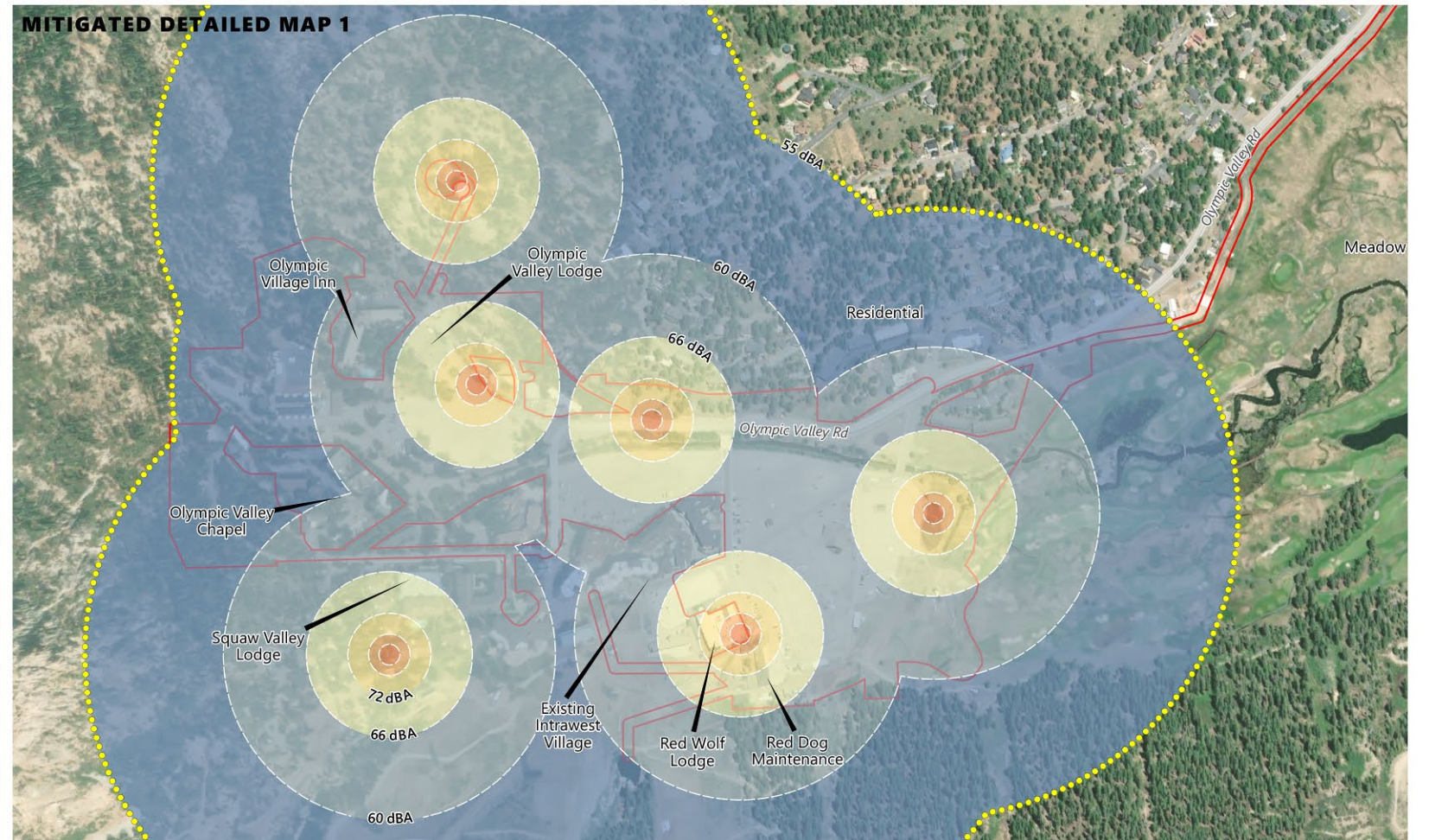
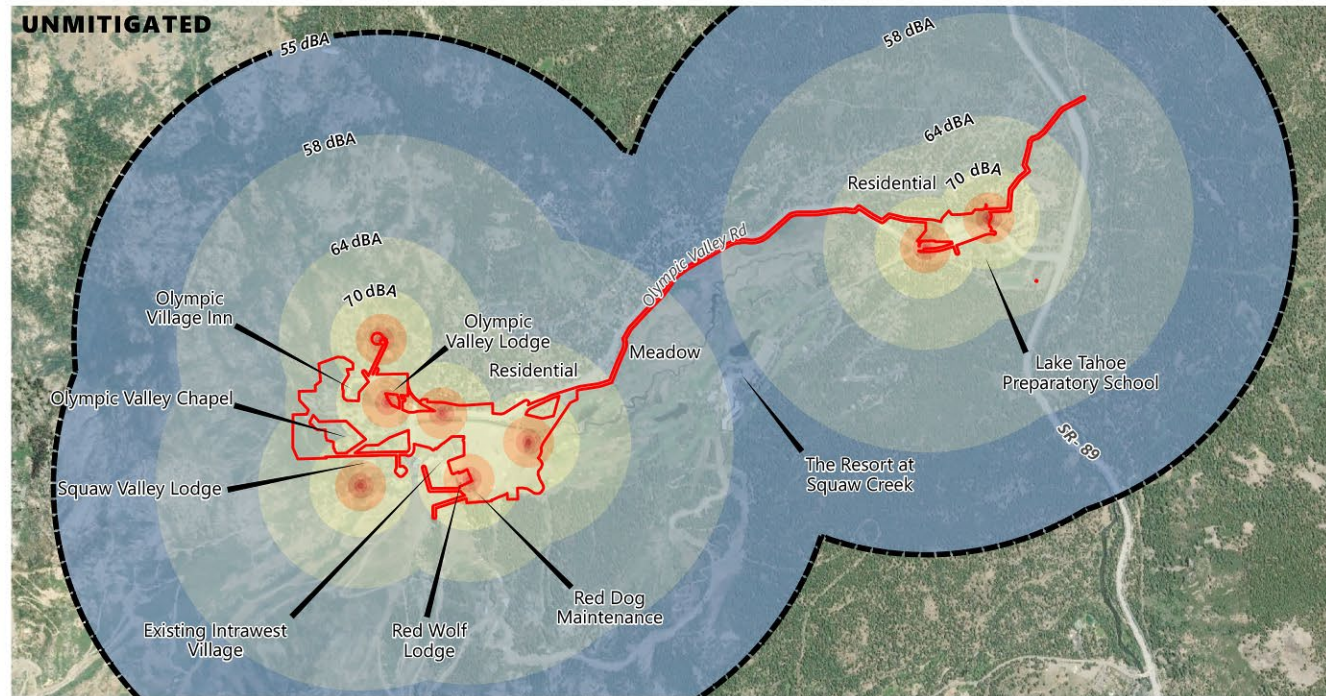
In lieu of implementing all of the measures set forth in Revised Mitigation Measure 11-1a and Adopted Mitigation Measure 11-1b, a project applicant may submit an acoustical study that demonstrates that construction noise levels would meet the adopted Placer County Code requirements set forth in Section 9.36.060, established for the protection of noise exposure at sensitive receptors. The acoustical study shall be prepared by a qualified acoustical professional and shall determine based on project-specific parameters, including construction schedule and duration, whether nighttime or daytime construction would occur, specific construction equipment that would be used and associated noise levels, and if a potential noise impact could occur at nearby sensitive receptors. The study shall be prepared and submitted for county review prior to issuance of any construction/grading permits at the time of final plot plan review.

Significance after Mitigation

Of interest in terms of community noise impact from construction noise is the overall noise resulting from a construction site. The noise of each individual piece of equipment and sometimes the highest noise source is not always the greatest concern. Noise control is directed toward modification of a perceived sound field and strives to change the impact at the receiver so that overall noise exposure achieves established noise standards (NCHRP 1999). Implementation of Revised Mitigation Measure 11-1a, Adopted Mitigation Measure 11-1b, and New Mitigation Measure 11-1c would provide substantial reductions in day and nighttime construction noise levels by ensuring use of equipment and construction methods that reduce noise generation; locating equipment away from sensitive land uses; requiring the use of enclosures, shields, and noise curtains; and requiring an acoustical study to determine appropriate noise reduction measures suited to the specifics of a proposed construction project. Regarding the efficacy of construction noise mitigation, as a rule-of-thumb, when considering all available technologies and methods described above in Mitigation Measures 11-1a through 11-1c, achieving a 5 dBA reduction is simple, a 10 dBA reduction is attainable, a 15 dBA reduction is very difficult, and a 20 dBA reduction is nearly impossible (NCHRP 1999). Considering that the included mitigation measures require a wide range of alternative construction measures, submission of equipment lists, temporary sound barriers/curtains, and an acoustical study, which represent all available construction noise mitigation measures, likely achievable noise reductions would fall between 10 dBA and 15 dBA. Applying the lower end of this range as a conservative approach, the maximum daytime noise levels at 50 feet, would be reduced to 84 dBA L_{eq} , and the maximum nighttime noise levels at 50 feet would be reduced to 69 dBA L_{eq} . The distance to the daytime noise standard (i.e., 55 dBA L_{eq}) contour would reduce from 4,800 feet to 1,467 feet with incorporation of above mitigation measures. Regarding nighttime construction noise, the distance to the nighttime noise standard (i.e., 45 dBA L_{eq}) contour would reduce from 2,667 feet to 800 feet with incorporated mitigation measures. The mitigated contours to the daytime and nighttime noise standards are shown in Exhibits 11-6 and 11-7, respectively.

Although, substantial noise reduction would be achieved with implementation of these measures, reductions of up to 34 dB would be required during some of the more intensive nighttime construction (e.g., during continuous concrete pours that would occur intermittently and only during the most intense construction periods, typically during the summer months), to comply with Placer County's nighttime standard of 45 dBA L_{eq} . Reductions of this magnitude are not expected to be achieved under all circumstances with implementation of Revised Mitigation Measure 11-1a, Adopted Mitigation Measure 11-1b, or New Mitigation Measure 11-1c. Further, construction activities would continue to produce disruptive daytime noise over an extended period. Thus, this impact would remain **significant and unavoidable**.

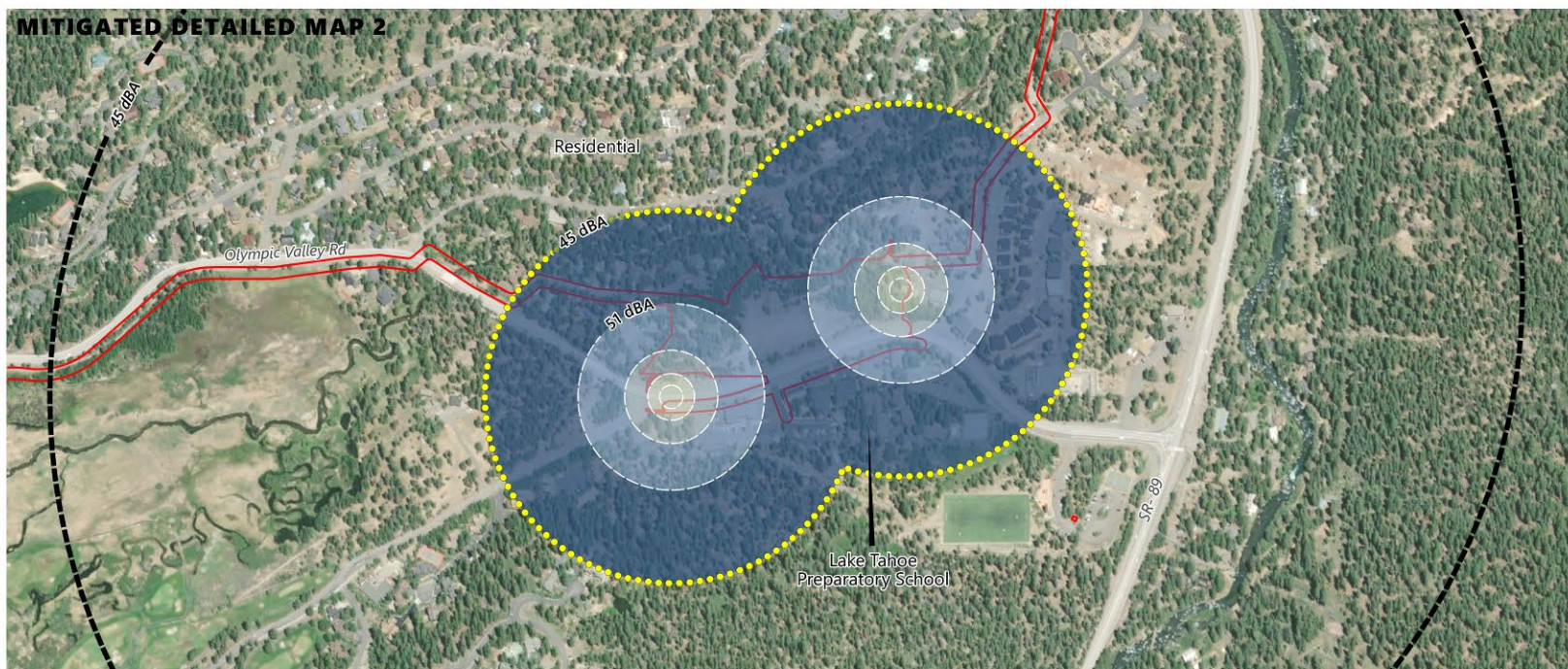
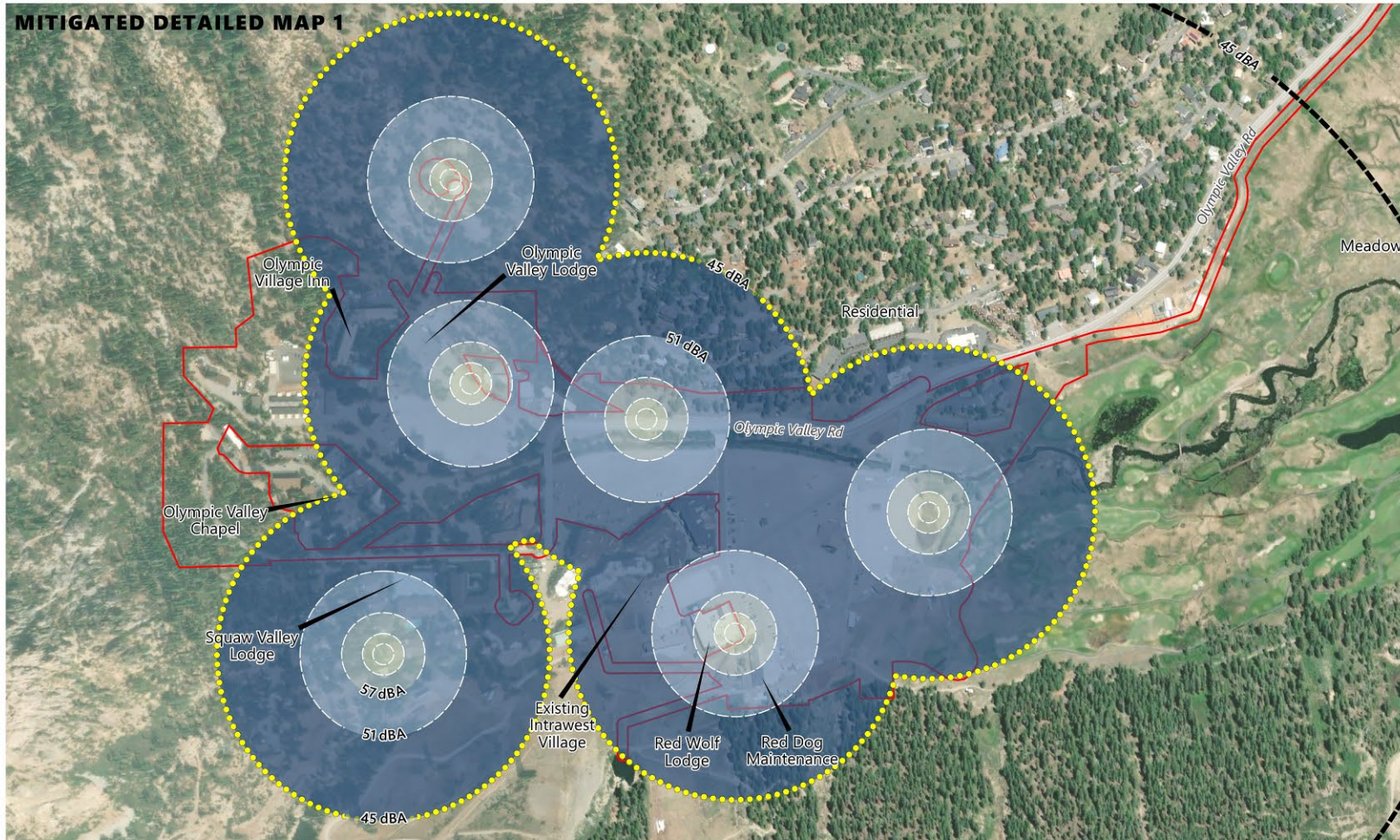
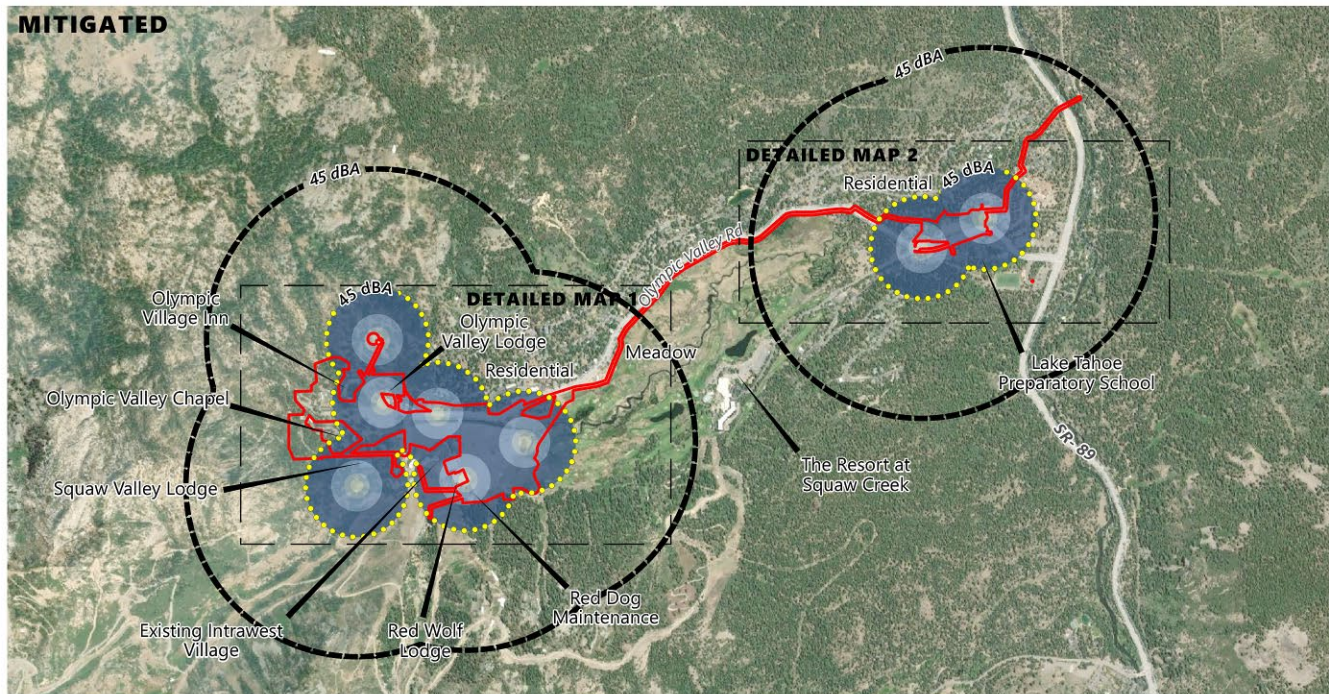
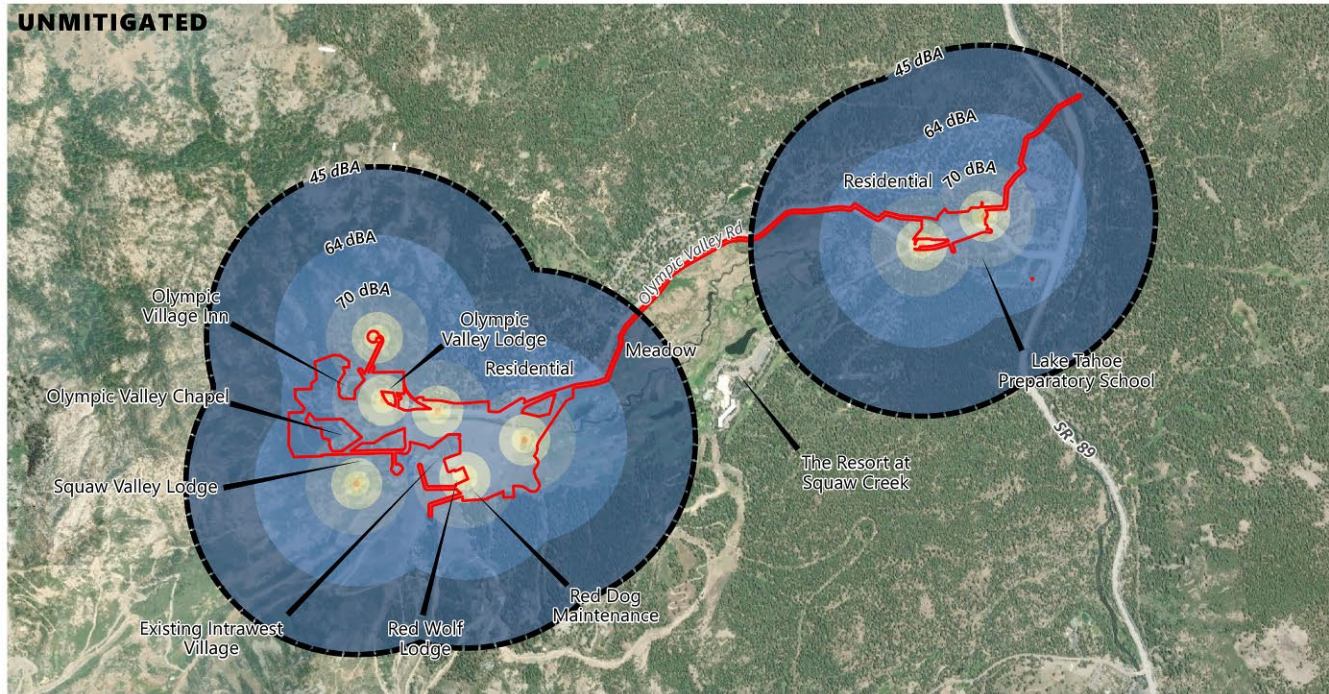
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Unmitigated Daytime Noise Contours		Mitigated Daytime Noise Contours	
dBA Leq	Distance to Contour (ft)	dBA Leq	Distance to Contour (ft)
94	50	NA	NA
88	100	NA	NA
82	200	84	50
76	400	78	100
		72	200
70	800	66	400
64	1,600		
58	3,200	60	800
55*	4,800*	55*	1,467*
NA	NA	NA	NA
NA	NA	NA	NA

- - - - - Unmitigated Daytime Noise Threshold (55 dBA Leq) Contour
 Mitigated Daytime Noise Threshold (55 dBA Leq) Contour
 [Red Outline] Project Site
 *threshold level
 ESRI World Imagery
 20210161.01 GIS 008
 Source: adapted by Ascent Environmental in 2022





Unmitigated Nighttime Noise Contours		Mitigated Nighttime Noise Contours	
dBA Leq	Distance to Contour (ft)	dBA Leq	Distance to Contour (ft)
NA	NA	NA	NA
NA	NA	NA	NA
NA	NA	NA	NA
79	50	NA	NA
73	100	NA	NA
67	200	69	50
61	400	63	100
		57	200
55	800	51	400
49	1,600	NA	NA
45*	2,667*	45*	800*

- - - - - Unmitigated Nighttime Noise Threshold (45 dBA Leq) Contour
 ••••• Mitigated Nighttime Noise Threshold (45 dBA Leq) Contour
 [Red Outline] Project Site
 *threshold level

ESRI World Imagery
 20210161.01 GIS 009
 Source: adapted by Ascent Environmental in 2022

0 1,500 3,000 Feet
 Inset: 1 inch = 800 feet

13 HYDROLOGY AND WATER QUALITY

Chapter 13 of the 2016 EIR (i.e., 2015 Draft EIR, and where relevant, additional material in the 2016 Final EIR and post Final EIR comments and responses) described the physical characteristics of the Village at Squaw Valley Specific Plan (VSVSP) area focusing on surface water hydrology, drainage, flooding, groundwater, and water quality; identified laws and regulations related to these resources; and presented an analysis of the effects on these resources associated with implementation of the proposed project.

This section of the REIR provides the additional, revised hydrology and water quality analysis for the project as required by Court of Appeal's Ruling in *Sierra Watch v. County of Placer* (Ruling) . See Chapter 1, "Introduction," in this REIR for further information on the Ruling and its relationship to this REIR.

The Ruling identifies three items related to hydrology and water quality (i.e., Chapter 13 of the 2016 EIR) as requiring further discussion and analysis. The first is to provide setting information specific to Lake Tahoe. The second relates to the analysis of potential vehicle mile traveled (VMT) impacts on Lake Tahoe water quality. The third item relates to the significance thresholds and impact conclusions associated with the analysis of VMT impacts on Lake Tahoe water quality.

The Ruling first addresses these issues in a section titled "Lake Tahoe and the EIR's Discussion of Water Quality." This section of the Ruling is reproduced below:

1. *Lake Tahoe and the EIR's Discussion of Water Quality*

We start with the EIR's discussion of Lake Tahoe and water quality. All parties appear to accept that Lake Tahoe is a unique and significant environmental resource that would be affected by the project. It is, as the United States Supreme Court has noted, " 'uniquely beautiful' " and a " 'national treasure' " famous for its water's "exceptional clarity." (Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency (2002) 535 U.S. 302, 307.) It is also, as all parties here acknowledge, a resource that would be affected by traffic generated by the project – though the parties disagree on the extent of that effect. Because of these considerations, the CEQA Guidelines instruct, the County should have placed "[s]pecial emphasis" on Lake Tahoe in its discussion of the environmental setting. (CEQA Guidelines, § 15125, subd. (c) ["Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project."].)

But, as Sierra Watch argues, the County's EIR never meaningfully discussed Lake Tahoe in its description of the environmental setting. In its discussion of the environmental setting for "Hydrology and Water Quality," the draft EIR offered only one parenthetical reference to Lake Tahoe, stating: "The plan area is located within the low elevation portion of the approximately eight square mile Squaw Creek watershed, a tributary to the middle reach of the Truckee River (downstream of Lake Tahoe)." Nowhere in this sentence, or elsewhere, did the draft EIR discuss the importance of Lake Tahoe, its characteristics, or its current condition.

After Sierra Watch commented about the draft EIR's "fail[ure] to adequately describe the Tahoe regional setting," the final EIR, in response, directed Sierra Watch to "[s]ee the Master Response regarding TRPA Thresholds." TRPA is the Tahoe Regional Planning Agency and is "the agency assigned 'to coordinate and regulate development in the [Lake Tahoe] Basin and to conserve its natural resources.' [Citation.]" (Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency, *supra*, 535 U.S. at p. 309.) According to the final EIR's "Master Response regarding TRPA Thresholds," TRPA tracks vehicle miles traveled (VMT) in the Lake Tahoe Basin and has established a cumulative "VMT threshold of 2,067,600" for the basin. And, the final EIR went on, although cumulative VMT in the basin is nearing this

threshold, estimated to be 1,984,600 VMT in the summer of 2010 (or at about 96 percent capacity), the project's anticipated contribution to VMT in the basin (23,842 VMT on busy summer days) would not cause an exceedance of TRPA's cumulative threshold.

But little in that discussion addressed the shortcomings in the draft EIR. Like the draft EIR, the final EIR still never discussed the importance of Lake Tahoe or its current condition. It instead largely appeared to presume that Lake Tahoe needed no introduction, and so little needed to be said about it. And although the final EIR at least offered some figures about current and anticipated VMT around Lake Tahoe, it never clearly explained how all these figures related to the lake. The County instead only acknowledged the connection between VMT and Lake Tahoe's clarity after the final EIR was prepared, revealing six days before the board of supervisors approved the project that increased "VMT and its related effects — tailpipe emissions and crushed abrasives — have a direct role in lake clarity." But none of that was disclosed in the EIR. And so when the final EIR acknowledged the project would significantly increase traffic in the basin — adding, again, an estimated 23,842 VMT in the basin on busy days — the public had little if any ability to evaluate the relevance of that change to Lake Tahoe. That was improper. (See *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 954-955 [finding inadequate an EIR that only superficially described the existing condition of several lakes that would be impacted by a project; the EIR's discussion, which focused only on lake levels, undermined the agency's ability "to assess the impacts of the proposed project"]; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1122 [finding inadequate an EIR that omitted a meaningful discussion of the regionally important vineyards and wineries that surrounded a project; "[d]ue to the inadequate description of the environmental setting for the project, a proper analysis of project impacts was impossible".])

The County, its board, Squaw, and Squaw Valley Resort LLC (collectively, respondents), attempting to address these shortcomings, assert that the draft EIR's "Hydrology and Water Quality chapter . . . noted that Lake Tahoe is a significant geographical feature in the region." But that chapter of the EIR, again, said only this about Lake Tahoe: "The plan area is located within the low elevation portion of the approximately eight square mile Squaw Creek watershed, a tributary to the middle reach of the Truckee River (downstream of Lake Tahoe)." No reader of that language could reasonably interpret it to "note that Lake Tahoe is a significant geographical feature in the region." Respondents' contrary position, like the EIR's analysis, simply appears to presume that Lake Tahoe is a known quantity and so the mere mention of the lake is sufficient to convey all that is necessary. It is not.

Respondents also challenge the need for a more robust discussion of Lake Tahoe in the environmental setting. No additional discussion was required, they reason, because "[t]he Project did not propose development in the Tahoe Basin . . . and would not result in stormwater runoff or other pollutants draining into the lake." But respondents' first point about the location of the development ignores the "critical" importance of the regional setting. Again, as the CEQA Guidelines instruct, "[k]nowledge of the regional setting is critical to the assessment of environmental impacts." (CEQA Guidelines, § 15125, subd. (c); see *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 575 (*Citizens of Goleta Valley*) ["an EIR may not ignore the regional impacts of a project proposal, including those impacts that occur outside of its borders; on the contrary, a regional perspective is required".]) Respondents' second point is less persuasive still. They argue the project "would not result in stormwater runoff or other pollutants draining into the lake," but their own post-EIR responses suggest otherwise. In these responses, the County plainly demonstrated that increased VMT resulting from the project would increase the amount of pollutants draining into Lake Tahoe. The County noted, for example, that "abrasives" applied to roads around Lake Tahoe "can be crushed by tires and washed into the lake by stormwater runoff." And in part for that reason, the County explained, increased VMT in the basin has a "direct role in lake clarity" because it is associated with an

increased amount of these abrasives (which are pollutants) washing into the lake. (See *People v. Ramsey* (2000) 79 Cal.App.4th 621, 629 [“Concrete, rebar, sand, and similar waste materials are pollutants” under state and federal water law].)

Respondents lastly, on the topic of VMT, contend “the EIR addressed the issue at length.” To make this showing, respondents cite two parts of the EIR. One part noted that “TRPA maintains several environmental carrying capacities pertaining to traffic,” including one concerning VMT “for the entire basin.” (See Gov. Code, § 66801, subd. (b) [TRPA has “the power to establish environmental threshold carrying capacities and to adopt and enforce a regional plan and implementing ordinances that will achieve and maintain such capacities. . .”].) Another part, which we have discussed, noted that VMT in the summer of 2010 was estimated to be 1,984,600 per day in the basin, the project would add an estimated 23,842 VMT per day, and, putting these two figures together, total daily VMT under project conditions would be 2,008,442 VMT and thus lower than TRPA’s cumulative threshold of 2,067,600 VMT. But neither of these portions of the EIR discussed or even intimated any relationship between VMT and Lake Tahoe’s clarity and water quality. Nor did either of these portions of the EIR supply any description of the lake. And so, again, when the final EIR acknowledged the project would significantly increase traffic in the basin, the public had little if any ability to evaluate the relevance of that change to Lake Tahoe. We find the EIR was inadequate as a result. (See *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, supra, 60 Cal.App.4th at p. 1122; see also *Sierra Club*, supra, 6 Cal.5th at p. 521 [finding inadequate an EIR that “ma[de] it impossible for the public to translate the bare numbers provided into adverse health impacts or to understand why such translation is not possible at this time (and what limited translation is, in fact, possible)”].)

The Ruling further addresses the issue of project VMT effects on Lake Tahoe in a section titled “Consideration of Impacts.” This section, which is part of a discussion of the Air Quality analysis in the EIR, relates to hydrology and water quality because project generated VMT in the Lake Tahoe Basin is identified as affecting both air quality and water quality in the Basin. The “Consideration of Impacts” section of the Ruling is reproduced below. See Chapter 10, “Air Quality,” of this REIR for a discussion of the Ruling’s input on air quality and a response to this input.

B. Consideration of Impacts

Sierra Watch next, still on the topic of Lake Tahoe Basin, contends the EIR failed to “meaningfully assess[] the Project’s [traffic] impacts on” Lake Tahoe and the basin’s air quality. We agree.

The EIR provided mixed messages on the project’s potential impacts to Lake Tahoe and the basin from increased traffic. On the one hand, it said the project would not result in an exceedance of TRPA’s cumulative VMT threshold for the Lake Tahoe Basin. But on the other hand, it showed the project would likely exceed TRPA’s project-level threshold of significance for traffic in the basin. The EIR noted that TRPA has not consistently applied any particular threshold when evaluating project-level impacts, but, after reviewing several EIRs from TRPA, it found two “used a daily trip generation threshold of 200 trips as a significance threshold,” one “used a criterion of 1,150 VMT as a significance threshold,” and another used a flexible significance criterion that considered whether an increase in VMT would be “substantial in relation to the [cumulative] VMT threshold standard.” Under the first two thresholds of significance — the VMT and daily-trip thresholds — the project here would plainly have a significant impact. It would result in daily VMT over 2,000 percent above the 1,150-VMT threshold and daily trips over 500 percent above the 200-daily-trip threshold. But under the third described threshold of significance, which eschewed a numerical threshold in favor of a more flexible standard focused on “substantial” increases in VMT, the significance of the project’s impacts is less straightforward. We can note, however, that the project would

increase daily VMT in the basin by about 1.2 percent and would reduce the available VMT capacity under TRPA's cumulative threshold by about 28.7 percent.

Rather than follow one of TRPA's approaches, however, the EIR simply declared that TRPA's thresholds were inapplicable because the project is not located in the basin. But if TRPA standards were inapplicable, what standards did apply? The EIR never answered the question. Nor did it supply any meaningful information to evaluate the significance of a daily addition of 23,842 VMT on Lake Tahoe's water quality and the basin's air quality. Nor did it even offer any clear conclusion on whether this additional traffic would significantly impact Lake Tahoe and the basin. It instead simply supplied some discussion about TRPA's thresholds of significance and then said "the TRPA thresholds are not used as standards of significance in this EIR."

We find this discussion inadequate. The EIR needed to determine whether the project's impacts on Lake Tahoe and the basin were potentially significant — not simply summarize, and then declare inapplicable, another agency's framework for evaluating these types of issues. Even supposing the EIR actually reached a conclusion about the project's impacts, we would still find it defective. Under CEQA, an agency's conclusion as to whether a given impact is significant is not enough; "there must [also] be a disclosure of the 'analytic route the . . . agency traveled from evidence to action'" — something that never occurred in the EIR here. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 404.)

Making matters worse, the EIR's offered figures on VMT underestimated expected cumulative VMT in the basin. The final EIR, again, said that cumulative VMT in the summer of 2010 were 1,984,600 and the addition of the project's estimated VMT would push that cumulative figure to 2,008,442 in the future. But in reaching these figures, the EIR improperly ignored the expected addition of VMT from other anticipated projects, including another large development the County was itself considering approving. (See CEQA Guidelines, § 15065, subd. (a)(3) [in determining whether a project's impacts are "cumulatively considerable," agencies must consider "the incremental effects of an individual project . . . in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects"].)

Although the County eventually, after the final EIR was prepared, recognized its failure to account for the expected addition of VMT from other projects and acknowledged the "important" connection between VMT and Lake Tahoe, its belated discussion of these issues came too late. Six days before the County's board of supervisors certified the EIR, and several months after the preparation of the final EIR, the County provided additional information about the project's impact on Lake Tahoe's water quality. In these post-EIR responses, the County acknowledged for the first time that "[t]he connection between VMT and Lake clarity is important, as vehicle emissions and roadway" fines "are known contributors to loss of clarity." It also acknowledged the connection between VMT and air quality, explaining that TRPA has historically "linked higher VMT to," among other things, "increased airborne concentrations of particulate matter that could affect regional and subregional visibility and human health." And, at least implicitly, it acknowledged too that the EIR's calculation of expected cumulative VMT in the basin should not have ignored the expected VMT from other anticipated projects.

After acknowledging these issues and updating its VMT estimates, the County then explained why, in its view, the increased traffic resulting from the project would not adversely impact Lake Tahoe or the basin. To start, the County wrote, "a direct link between a specific number of VMT and attainment of Lake clarity goals has not been established," and, as a result, even TRPA has acknowledged the need to further evaluate the relationship between the two. In addition, based on its review of an EIR prepared for a different project, the County opined

that technological advances emphasize the need for further evaluation of TRPA's standards. According to the County, improvements in technology since TRPA established its VMT thresholds – including improvements in limiting stormwater runoff into the lake and reducing tailpipe emissions – could mean that TRPA's thresholds, which were initially developed decades ago, are now outdated. Given these considerations, the County concluded, because “the relationship between a specific VMT and lake clarity is not well understood,” and because the “addition of the project's VMT to existing Tahoe Basin VMT would not be significant even if the [arguably outdated] TRPA VMT threshold was used as a threshold of significance for project impacts,” the final “EIR conclusion is accurate and supported by evidence in the record.”

All this information, however, came far too late in the CEQA process. CEQA requires agencies to discuss a project's potentially significant impacts in the draft EIR and final EIR. (CEQA Guidelines, § 15120, subd. (c); see also *id.*, §§ 15125, 15126.2.) And to the extent an agency omits an adequate discussion of a project's potential impacts in its EIR, it cannot afterward “make up for the lack of analysis in the EIR” through post-EIR analysis. (Save our Peninsula Committee v. Monterey County Board of Supervisors (2001) 87 Cal.App.4th 99, 130 [project information revealed in an “[e]rrata” shortly before project approval “[d]id not make up for the lack of analysis in the EIR”].) To find otherwise, after all, would deny the public “an ‘opportunity to test, assess, and evaluate the [newly revealed information] and make an informed judgment as to the validity of the conclusions to be drawn therefrom.’ [Citation.]” (*Id.* at p. 131; see also *Cleveland National Forest Foundation v. San Diego Assn. of Governments*, *supra*, 3 Cal.5th at p. 511 [an EIR must itself “ ‘include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project’ ”].)

Respondents never appear to argue otherwise on this last point. They instead contend the County's post-EIR responses only “elaborated on and confirmed” information in the EIR. But we find differently. Again, in these post-EIR responses, the County acknowledged and analyzed, apparently for the first time, the potential impacts from the project's generation of an additional 23,842 VMT per day in the Lake Tahoe Basin. In this way, these responses did not merely elaborate on and confirm the EIR's conclusions; they instead supplied critical analysis and conclusions that were initially absent from the EIR.

Sierra Watch, apart from challenging the County's ability to rely on these late responses, also contends these post-EIR responses were substantively flawed for several reasons. But the alleged inadequacy of the County's post-EIR comments are beside the point under CEQA, as “the inadequacy of [an agency's] responses to . . . comments [on the final EIR] is not sufficient to render approval of the CEQA Project ineffective or contrary to law.” (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1111.) And so, although we agree the EIR's analysis was flawed, we will not separately address the alleged inadequacy of these post-EIR comments.

The inadequacies identified in the Ruling with respect to water quality are corrected below. First, environmental setting and regulatory setting information specific to Lake Tahoe and lake water quality/water clarity is provided. Then a new impact discussion is provided, Impact 13-9, “Project Generated VMT Effects on Lake Tahoe Water Quality and Lake Clarity.” This impact discussion specifically evaluates the potential effects of project generated VMT entering the Lake Tahoe Basin on lake water quality and clarity. The analysis includes use of a clear significance threshold and provides a clear impact conclusion.

This REIR chapter retains the same chapter numbering (i.e., Chapter 13), title, and general organization as 2016 EIR to simplify comparisons across the two documents if desired. However, this chapter only addresses the issues necessary to rectify any inadequacies identified in the Ruling. Therefore, Section 13.1, “Environmental Setting,” only provides information relevant to conditions in the Lake Tahoe Basin potentially related to the project as this was the only deficiency in the environmental setting identified in the Ruling. Where the 2016 EIR included environmental setting information related to multiple aspects of hydrology and

water quality relevant to a comprehensive CEQA analysis of these resources, that information is not repeated here because it is not relevant to addressing the content of the Ruling. Similarly, Section 13.2, “Regulatory Setting,” in this REIR only provides information relevant to the analysis of Tahoe Basin VMT effects on lake water quality and lake clarity. Section 13.3, “Impacts,” only includes a discussion of new Impact 13-9, “Project Generated VMT Effects on Lake Tahoe Water Quality and Lake Clarity,” as this is the only hydrology and water quality impact issue addressed by the Ruling. The original version of Chapter 13 from the 2016 EIR, as well as all 2016 EIR documents are available at: <https://www.placer.ca.gov/2747/Village-at-Squaw-Valley-Specific-Plan>.

13.2 ENVIRONMENTAL SETTING

As stated above, this section only provides environmental setting information relevant to the Lake Tahoe Basin and Lake Tahoe water quality and clarity as this addresses the only deficiency in the 2016 EIR setting information identified in the Ruling. The full environmental setting information from Chapter 13 of the 2016 EIR is available at: <https://www.placer.ca.gov/DocumentCenter/View/8189/Chapter-13--Hydrology-and-Water-Quality--Part-1-PDF>.

13.2.1 Background

The Lake Tahoe Basin is one of the largest and deepest alpine lakes in the world, whose beauty is legendary and history complicated. The strikingly clear waters of the Lake are iconic, attracting visitors from around the world. According to the US Environmental Protection Agency (EPA), the Washoe Tribe considers Lake Tahoe a sacred life-sustaining water and the center of the Washoe world. However, human activities have resulted in degradation of the lake’s water quality. Logging around the lake began in the 1860s. Beginning in the 1950’s, development around the lake accelerated, including homes, hotels, ski resorts, casinos, and infrastructure. Particulate matter from surface runoff from development and roads as well as atmospheric deposition has degraded deep-water clarity. In addition, many developments destroyed sensitive wetlands critical for filtering sediment and nutrients from runoff before entering Lake Tahoe. Nutrients and aquatic invasive plants and animals also have degraded nearshore conditions, particularly in more urbanized areas around the lake. (EPA 2022)

The spectacular natural landscape surrounding the Lake has been recognized as a unique and sensitive region that requires special protection to preserve the values that make it attractive to so many people. Since the 1950s, researchers working on Lake Tahoe have advanced scientific knowledge about the lake and its surrounding ecosystem and used this understanding to initiate the current-day awareness of the need for actions to protect and restore Lake Tahoe’s famed transparency. Hundreds of millions of public dollars have been invested in developing scientific knowledge and implementing programs and projects aimed at restoring the lake’s famed clarity.

13.2.2 Lake Tahoe Basin Regional Hydrology

The Tahoe Basin was formed approximately 2–3 million years ago by geologic faulting and volcanic activity. Faults running in a north-south direction formed a valley between the uplifting Sierra Nevada and the Carson Range. The northern portion of the valley was blocked and dammed by volcanic activity that created the 506-square-mile basin. Precipitation and runoff eventually filled a portion of the basin to create Lake Tahoe, which has a water surface area covering nearly two-fifths of the total basin area.

Lake Tahoe is fed by 63 tributary streams and intervening zones that drain directly to the lake. The largest tributary is the Upper Truckee River on the south side of the lake, which accounts for 25 percent of the annual inflow to Lake Tahoe. The Truckee River, on the northwest side of the lake, is the lake’s only outlet, flowing

downstream to Pyramid Lake in Nevada. A dam constructed at Tahoe City in the early 1900s regulates water flow to the Truckee River from the natural rim of the lake at 6,223.0 feet above sea level to the maximum legal lake level of 6,229.1 feet (Lake Tahoe Datum). Olympic Valley, where the project site is located, is downstream of Lake Tahoe; runoff from the valley flows to Squaw Creek, a tributary of the Truckee River. Squaw Creek flows into the Truckee River approximately 5.7 miles downstream of Lake Tahoe.

Regional topography is characterized by steep mountain slopes at higher elevations, transitioning to more moderately sloped terrain near the lakeshore. A precipitation gradient exists from the western boundary of the Tahoe Region along the crest of the Sierra Nevada to the eastern boundary at the crest of the Carson Range. The west shore of Lake Tahoe averages about 35 inches per year of precipitation, while the east shore averages about 20 inches per year. Most precipitation in the Tahoe Region falls between October and May as snow at higher elevations and as a mixture of snow and rain at lake level. In the higher elevations, peak stream runoff from snowmelt occurs in May or June, while the snowpack near lake level melts a few weeks earlier.

13.2.3 Lake Tahoe Surface Water Quality

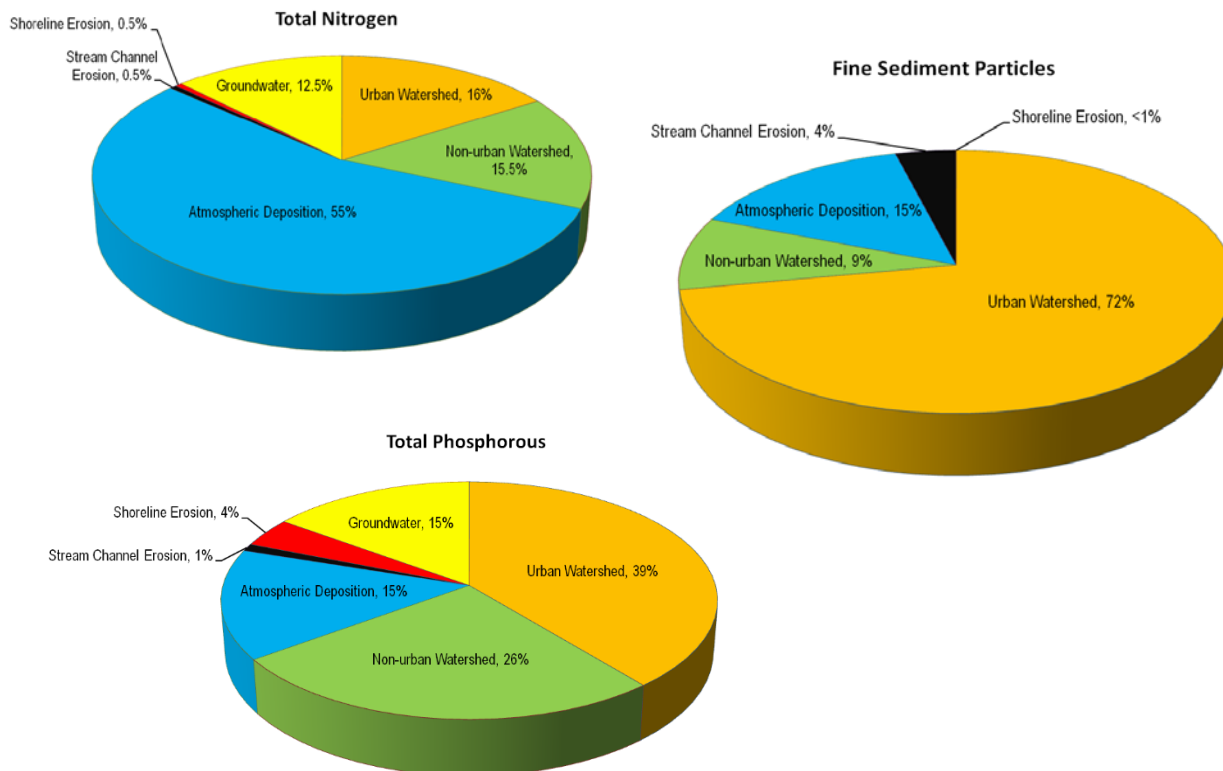
Lake Tahoe is classified by limnologists as an oligotrophic lake, which means the lake has very low concentrations of nutrients that can support algal growth, leading to clear water and high levels of dissolved oxygen (TERC 2011:6.15). The exceptional transparency of Lake Tahoe results from naturally low inputs of nutrients and sediment from the surrounding watershed. Lake Tahoe's historic deep-water transparency has declined from 31.2 meters (102.4 feet) annual average Secchi depth in 1968 (the best single year on record) to around 20 meters in 2001; since 2001, the visibility has improved slightly in some years, degraded a little in others, but has mostly hovered around this level of clarity. The most recent scientific research points to inorganic fine sediment particles (particles defined as less than 16 micrometers in diameter) as the primary pollutant of concern impairing Lake Tahoe's transparency. This finding is based on the ability of inorganic fine sediment particles to efficiently scatter light and decrease observed transparency. Swift et al. (2006) determined that light scattering by inorganic particles for the period between 1999 and 2002 was responsible for approximately 55-60 percent of measured light attenuation in the lake. Additional pollutants of concern include phosphorus and nitrogen, which stimulate algal growth in the lake contributing to declines in transparency and quality of the near-shore environment.

As further explained in the regulatory discussion below, following ten years of intensive scientific studies and modeling, California, Nevada, and EPA approved the Lake Tahoe Total Maximum Daily Load (TMDL) in 2011.¹ This enabled state and federal agencies to further identify the sources and amount of pollution discharged to the Lake, and to develop a plan to restore Lake Tahoe's historic deep-water transparency.

TMDLs are regulated by the federal Clean Water Act and represent the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet water quality standards for the pollutant. Research during the development of the Lake Tahoe TMDL included an analysis of pollutant sources to identify the magnitude of pollutant loads to Lake Tahoe from specific source categories. These categories were defined as surface runoff from developed lands (urban watershed), atmospheric deposition, forested runoff (nonurban watershed), stream channel erosion, groundwater, and shoreline erosion. Exhibit 13-1 displays the relative distribution of average annual pollutant loading to Lake Tahoe for each pollutant of concern among the source categories (Lahontan RWQCB and NDEP 2010). The primary threats to Lake Tahoe's water quality – as identified by the peer-reviewed TMDL studies and the Tahoe Regional Planning Agency (TRPA) are: (1) aging development in existing urban centers that lack adequate best management

¹ A TMDL is a water quality restoration plan required by the Clean Water Act (CWA) Section 303(d) (33 U.S.C. § 1313(d)) to achieve water quality standards. The Lake Tahoe TMDL requires steady, documented reductions in pollutant loading to the Lake. It is implemented through permits and Memoranda of Agreement (MOAs) requiring local governments and agencies to adopt and implement load reduction plans. The objective of the Lake Tahoe TMDL is to sufficiently reduce pollutant loading to restore Lake Tahoe's historic deep-water transparency to 29.7 meters (97.4 feet) annual average Secchi depth (Lahontan RWQCB and NDEP 2010).

practices (BMPs) to reduce stormwater runoff containing fine sediments and nutrients; and (2) legacy development on sensitive lands, primarily wetlands or stream environment zones (SEZs), that significantly diminish natural filtration of these same fine sediments and nutrients. As shown in Exhibit 13-1, the Lake Tahoe TMDL identifies surface runoff from developed lands as the most significant source of pollutant loading for fine sediment particles and phosphorus. For example, developed lands are estimated to deliver more than 70 percent of the average annual fine sediment particle load and approximately 40 percent of the average annual phosphorus load to the lake. For nitrogen, atmospheric deposition is identified as the most significant source of loading to the lake, contributing 55 percent of the average annual load.



Source: Adapted from Lahontan RWQCB and NDEP 2010

Exhibit 13-1 Lake Tahoe TMDL Pollutant Sources

The Lake Tahoe TMDL established the goal of restoring Lake Tahoe’s historic deep-water transparency to 29.7 meters (97.4 feet) annual average Secchi depth (Lahontan RWQCB and NDEP 2010). To achieve the transparency standard, the TMDL identifies that fine sediment particle, phosphorus, and nitrogen loads must be reduced by an estimated 65 percent, 35 percent, and 10 percent, respectively. It is anticipated that attainment of these load reduction standards will take 65 years from implementation (Lahontan RWQCB and NDEP 2010).

The monitoring program associated with the TMDL shows it had succeeded in meeting interim goals. For example, fine sediment load reductions in stormwater resulting from adjustments in road operations and implementation of treatment measures and BMPs in developed areas of the Lake Tahoe Basin (e.g., installation of curbs and gutters to direct stormwater to storm drain systems, sediment filters in storm drain systems, installation of vegetated swales to filter stormwater) exceeded targets from 2016 through 2020 (most recent data available). More specifically, the 2021 TMDL Performance Report shows that pollution from fine sediment particles in urban stormwater was reduced by over 523,000 pounds per year in 2020 as a result of efforts by federal, state, and local agencies, as well as private landowners in the Tahoe Basin. Available urban and non-urban results suggest TMDL implementation is on track to achieve the load reductions required to meet the overall lake clarity goal (NDEP and Water Board 2022; Lake Tahoe Info 2022).

Every four years, TRPA leads the development of a threshold evaluation report that examines conditions relative to the goals it establishes in its Regional Plan. The Regional Plan and thresholds are discussed further, in the Regulatory Setting. The most recent update was completed in 2019, with results published in a 2021 report. The results show lake clarity as measured by Secchi disk transparency each year and over a 5-year trend. The 5-year trend provides for a more stable view of clarity as it “evens out” pulse events like fire, heavy sedimentation from single-event heavy storms, etc. For instance, 1968, the best single year on record, showed a clarity of 31.2 meters, degrading to 26.1 meters in 1975, but improving to 27.4 meters the next year. The 5-year trend over this period degraded from 29.2 meters in 1971 (the year the 5-year trend was first reported by TRPA) to 26.8 meters in 1976. The 5-year trend continued to degrade until 2001, when it reached 20.7 meters, a degradation in clarity of 8.5 meters. Since 2001, the 5-year trend has hovered near the level of clarity in 2001, improving somewhat to a clarity of 22.5 meters in 2005, but remaining around 20 to 21 meters ever since 2005. In the 2021 report, lake clarity as measured by Secchi disk transparency was determined to be “Somewhat Worse Than Target” established in the TMDL goal of 29.7 meters, at 19.9 meters in the summer of 2020. The reasons for the lack of progress in improving the Lake’s clarity is being studied and may include addition of sediments (even though substantial progress has been made in reducing sediment inputs); drought, resulting in lower streamflow and entry of fresh water into the lake; algal growth; and other factors. As stated in the TRPA’s threshold evaluation report with respect to trends in clarity, “Since 2000, Secchi depth measurements have been better than predicted by the long-term trend of linear decline observed since 1968. Statistical analysis supports the observation that the decline in Lake Tahoe’s transparency has slowed since 2000, and the overall trend is now better represented by a curve, rather than a straight line.” (TRPA 2021d)

The University of California, Davis, Tahoe Environmental Research Center (UC Davis) has also measured clarity and other health indicators at Lake Tahoe since 1968. Similar to the TRPA’s most recent TRPA threshold evaluation report discussed above, UC Davis’s Lake Tahoe Clarity Report for 2021 expresses that there is no pattern of consistent clarity improvement over the last 20 years. A relatively steep decline in degradation of lake clarity starting in 1970 was slowed in the late 1990’s, and clarity has marginally improved or degraded in the years since. In 2017, unprecedented winter storms transported fine particles from streams into the lake and increased deposition fourfold that year, contributing to the worst clarity on record; fine particles in the lake similarly increased and have not returned to the pre-2017 levels. UC Davis also noted that lake particle readings were likely influenced by smoke deposition from wildfires in the region, and the role of wildfires in lake clarity is being studied (Kerlin 2022).

For some time, it was thought that there was a strong correlation between automobile travel—reflected as VMT—in the Basin and water quality. This is explored further below.

VEHICLE TAILPIPE EMISSION AND ATMOSPHERIC NITROGEN DEPOSITION

As described below in Section 13.2.2, “Tahoe Regional Planning Agency,” the TRPA Bi-State Compact gives TRPA authority to adopt environmental quality standards, called thresholds, and to enforce ordinances designed to achieve the thresholds. In 1982, TRPA adopted various environmental threshold carrying capacities (thresholds), which set environmental standards for the Lake Tahoe basin and indirectly defined the capacity of the Region to accommodate additional land development (TRPA 2012c).

In 1981, increased algal growth because of elevated nutrient inputs (phosphorus and nitrogen) was thought to be the primary driver of Lake Tahoe’s clarity loss. Among the thresholds adopted in 1982 was threshold AQ14. Threshold AQ14 set a goal of reducing in-basin nitrogen emissions by 10 percent from 1981 levels and benchmarked its performance to total regional VMT. The intent of this air quality threshold was to preserve lake clarity by minimizing atmospheric nitrogen deposition (i.e., material landing on the lake surface from the air that contributes nitrogen to the water and therefore could also contribute to algal growth). However, since 1982, a number of physical and scientific developments have occurred that have functionally rendered the original intent of the nitrate reduction threshold standard (AQ14) moot (TRPA 2021a). First, improvements in tailpipe emission controls have reduced nitrogen emissions from vehicles by more than 66 percent, far greater than the 10 percent objective of the adopted standard, functionally accomplishing the goal of the standard.

Second, scientific research conducted as part of establishing the TMDL for Lake Tahoe determined that fine particles were the principal driver of clarity loss rather than nutrient inputs (although nutrient inputs from sources other than atmospheric deposition still remain important). Every four years a Threshold Evaluation Report is prepared providing information on the trends in achieving each TRPA threshold. Each of the four Threshold Evaluation Reports prepared in 2001, 2006, 2011, and 2015 recommended that the 1982 VMT nitrogen deposition threshold standard (AQ14) be reviewed and updated; and in 2019 (included in the 2021 report) threshold standard AQ14 was officially replaced with a per capita VMT standard intended to reduce reliance on the automobile, reduce GHG emissions, and promote mobility. There is no longer a VMT threshold directly tied to vehicle emissions and lake clarity. With threshold standard AQ14 no longer in effect, the Tahoe Basin cumulative VMT threshold of 2,067,600 identified in the 2016 EIR is also no longer in effect. Therefore, the TRPA generated numeric threshold used to assess Tahoe Basin VMT effects to lake water quality in the 2016 EIR is no longer recognized by TRPA.

Part of the reason for replacing threshold AQ14 is because the goals of the threshold have been met. The goal of threshold AQ14, a 10 percent reduction of mobile source nitrogen (i.e., oxides of nitrogen or NO_x) emissions from 1981 levels was accomplished more than 25 years ago (i.e., before 2000). Beyond that, mobile source NO_x emissions today are two-thirds lower than they were in 2000 and are forecast to continue to decline as a result of increasingly clean automobiles, with a projection that in 2030 emissions will be 1/10 of 2000 levels (TRPA 2021a). This means that today the goal of threshold AQ14 has been exceeded by more than 3-fold, and by 2030 the goal will be exceeded by more than 10-fold.

The NO_x reductions identified above have occurred while total VMT in the basin has remained relatively static. VMT in the Tahoe Basin has remained within a relatively narrow band since the AQ14 threshold was adopted in 1982. VMT has generally fluctuated with macro-economic conditions, but never increased or decreased more than 10 percent from 1981 levels. Thus, while VMT has not been reduced by 10 percent from 1981 levels (e.g., VMT in 2018 was estimated to be 3.4 percent lower than it was 1981), NO_x emissions have dropped substantially more than 10 percent since 1981 (TRPA 2021a).

The TMDL also addresses emissions from vehicles as a source of nitrogen affecting lake clarity via atmospheric deposition (Lahontan RWQCB and NDEP 2010). According to the TMDL, reducing basin-wide atmospheric nitrogen loading below 2010 levels by at least 1 percent by 2025, and 2 percent by 2075 would be necessary to meet TMDL objectives. As part of the analysis of the 2020 Lake Tahoe Regional Transportation Plan (RTP), based on the proposed strategies to reduce VMT and the anticipated improvements in vehicle emissions technology documented in California's EMFAC models (which are used to calculate nitrogen load), TRPA expects nitrogen load reductions by 2025 to be significantly greater than the 1 percent reduction target (TRPA 2020). Although VMT reductions resulting from the RTP are identified as one mechanism to reduce nitrogen loads, the air quality analysis for the RTP "estimated reductions in on-road mobile source emissions are primarily due to stricter vehicle emissions standards that will phase in over the planning period" rather than VMT reductions resulting from the RTP.

In summary, current evidence indicates that in the Lake Tahoe Basin (a) atmospheric nitrogen deposition resulting from vehicle exhaust is not a substantial contributor to losses in lake clarity, and (b) the implementation of stricter vehicle emissions standards at the state and federal levels are sufficient on their own to exceed TRPA's atmospheric nitrogen deposition objectives.

SEDIMENT MOBILIZATION BY VEHICLES

It has long been known that fine sediment entering Lake Tahoe is a significant contributor to losses in lake clarity. As identified in the TMDL, paved roadways are the primary source of the fine sediment particles that are impairing the clarity of Lake Tahoe (Lahontan RWQCB and NDEP 2010). Stormwater runoff generated by the roadways can contain sediment, crushed road abrasives, trash and debris, and metals. In addition, the roadway abrasives used during winter (sand mixed with salt is added to roads after snow events to decrease ice on the road and increase traction) are ground down by the vehicle traffic and become suspended in stormwater runoff. In response to the known correlation between roadway generated fine sediment and

losses in lake clarity, there are multiple robust regulatory mechanisms to prevent and minimize fine sediment entering Lake Tahoe, including measures to specifically address sediment generated by roadway operations.

The Water Quality Management Plan for the Lake Tahoe Region (208 Plan) was prepared by TRPA in compliance with Section 208 of the CWA. The 208 Plan identifies pollution sources, control needs, and management practices to improve water quality. The 208 Plan management programs pertain to urban runoff and erosion, airborne nutrients, and water quality issues in Lake Tahoe. To determine if water quality goals are attained and maintained, water quality programs require continuous scientific monitoring of environmental conditions related to the threshold standards for Lake Tahoe, tributary streams, surface runoff, land coverage, and SEZs.

As identified previously, the TMDL for Lake Tahoe identifies strategies for local, state, and federal jurisdictions around the lake to reduce fine sediment pollutant loads (as well as phosphorous and nitrogen pollutant loads) so that Tahoe's deep-water transparency can be restored to meet a standard of 97.4 feet, as measured by a Secchi disk (TRPA 2020). The 97.4-foot deep-water transparency objective is the ultimate success criteria the TMDL is designed to achieve. Please see the discussion above regarding the success in reducing pollutant loads but current lack of progress in improving lake clarity.

Not specific to Lake Tahoe, but an important regulatory mechanism to reduce stormwater sediment transport, is the National Pollutant Discharge Elimination System, part of the federal Clean Water Act. The National Pollution Discharge Elimination System (NPDES) permits required for projects, including projects that contain paved or other surfaces used by vehicles, call for BMPs to be implemented as part of the project design to reduce the potential discharge of pollutants (including fine sediments) to the maximum extent practicable. Both the effluent and the receiving water must be monitored to ensure that the BMPs are effective and that the discharge is not causing or contributing to an exceedance of a Water Quality Standard. The results of monitoring efforts must be used to make adjustments or revisions to the BMPs as appropriate (SWRCB 2013; NDOT 2013).

A monitoring program associated with the TMDL shows success in reducing fine sediment loads in stormwater from roadways and other impervious surfaces. Fine sediment load reductions in stormwater resulting from adjustments in road operations and implementation of treatment measures and BMPs in developed areas of the Lake Tahoe Basin exceeded targets from 2016 through 2020 (most recent data available). More specifically, the 2021 TMDL Performance Report shows that pollution from fine sediment particles in urban stormwater was reduced by over 523,000 pounds per year in 2020 as a result of efforts by federal, state, and local agencies, as well as private landowners in the Tahoe Basin. Available urban and non-urban results suggest TMDL implementation is on track to achieve the load reductions required to meet the overall lake clarity goal (NDEP and Water Board 2022; Lake Tahoe Info 2022). The results of this monitoring report indicate that the existing water quality regulatory regime in the Tahoe Basin is controlling the generation and mobilization of roadway sediment at a sufficient level to meet the goals aimed at improving lake clarity objectives, notwithstanding whether clarity has, as of the date of this writing, in fact improved as described above.

Beyond the existing regulatory regime requiring BMPs and other sediment control measures for new projects, the replacement, renovation, and retrofitting of existing facilities is a key component of reducing sediment loads for roadways, as identified in the Initial Study – Mitigated Negative Declaration/Initial Environmental Checklist – Mitigated Finding of No Significant Effect prepared for the 2020 Regional Transportation Plan (TRPA 2021b):

“...implementation of the 2020 RTP/SCS would help the Plan Area meet the Lake Tahoe Maximum Daily Load Program (TMDL) Requirements by incorporating water quality improvements in projects. Active transportation projects proposed under the 2020 RTP/SCS, such as the Tahoe Valley Greenbelt, include water quality enhancements such as improving existing drainage systems to spread, treat, infiltrate and retain flows from roadways, commercial areas, and other high priority or urbanized areas. Additionally, several shared use and complete streets projects in 2020 RTP/SCS include source

control, conveyance, and treatment facilities for stormwater runoff as well as improvements to address urban stormwater quality and flooding.

The regulatory regimes identified above focus on the capture of roadway sediment rather than addressing VMT as it has been shown that reducing VMT is an inefficient mechanism for reducing roadway sediment originating from paved roads. As stated previously, the TMDL identifies that paved roadways are the primary source of the fine sediment particles that are impairing the clarity of Lake Tahoe (Lahontan RWQCB and NDEP 2010). However, the California Air Resources Board (CARB) and the TMDL do not use VMT to estimate fine sediment loading from paved road surfaces. Rather, fine sediment loading from paved surfaces is estimated based on the area of roadway surface (Lahontan RWQCB and NDEP 2008). (Note that the proposed project does not include any development activity in the Tahoe Basin, including creation of paved surfaces.) It is not that CARB and the TMDL cannot use VMT to estimate fine sediment loading; rather, it has been found that the area of paved surface is a more accurate metric. Fine sediment loading from unpaved road surfaces is calculated considering VMT (Lahontan RWQCB and NDEP 2008). For unpaved roads (e.g., dirt or gravel) VMT has been found to be an accurate metric for estimating fine sediment loading.

Fine sediment particle generation from paved roadways is primarily influenced by road operation and management practices and the application of winter traction material (Zhu et al. 2009). The importance of operations and management versus VMT in regard to fine sediment loading is reflected in the inverse relationship between fine sediment loading and seasonal VMT levels in the Tahoe Basin. Fine sediment loading from Tahoe Basin roadways is on average five times higher in the winter than the summer, in large part because of higher levels of precipitation and snow melt. Fine sediment loading can be 10 times higher following the application of winter traction material (Zhu et al. 2009, 2011). However, VMT in the Tahoe Basin is higher in the summer months, when there are more visitors in the region, and lower in the winter months. Total monthly VMT may exceed 2 million in July while remaining below 1.5 million in the winter peaks of December, January, and February (TRPA 2021c). Therefore, during the months when VMT is the lowest, fine sediment loading from paved roadways is the highest. This supports the approach of water quality regulations focusing on roadway operation and management, as well as design, including water quality improvement features, to minimize fine sediment generation and maximize fine sediment capture rather than VMT as a pathway to preserving water quality.

The discussion above focuses on the relationship between VMT and mobilization of roadway sediment by stormwater. However, a similar weak relationship has also been found between VMT and atmospheric deposition of fine sediment from paved roads (i.e., sediment or dust “kicked up” into the air by vehicle movement). The TMDL estimated that atmospheric deposition accounted for 16 percent of the annual average fine sediment load to the lake (Lahontan RWQCB and NDEP 2010). To restore the lake’s historic clarity the TMDL established a target of reducing atmospheric deposition of fine sediments by 55 percent over 65 years. TMDL development considered a number of management strategies for fine sediment load reduction. Preliminary studies conducted for the TMDL also explored the efficacy of VMT reduction as a strategy to reduce atmospheric fine sediment loading. The preliminary understanding of the system suggested that VMT reduction would likely not be a cost-effective strategy for fine sediment load reduction via atmospheric deposition (Lahontan RWQCB and NDEP 2008). This understanding was further supported by subsequent work that estimated that, “a 25 percent reduction in VMT would reduce fine sediment loads by less than half of one percent (Lahontan RWQCB and NDEP 2008).” Instead of focusing on traffic volumes, the TMDL focused on a) preventative controls – to prevent fine sediment from being deposited in the lake, and mitigative controls, such as street sweeping, to remove fine sediment already deposited on both roadways and parking lots (Lahontan RWQCB and NDEP 2008). Overall, because of the indirect nature of the relationship between VMT and fine sediment loading the TMDL determined it is not possible to develop a meaningful VMT target to reduce fine sediment loading (TRPA 2021c).

13.3 REGULATORY SETTING

As stated in the introduction to this chapter, this section only provides regulatory setting information relevant to the Lake Tahoe Basin and Lake Tahoe water quality and clarity as this is the only topic of deficiency in the 2016 EIR hydrology and water quality analysis identified in the Ruling. The full regulatory setting information from Chapter 13 of the 2016 EIR is available at: <https://www.placer.ca.gov/DocumentCenter/View/8189/Chapter-13--Hydrology-and-Water-Quality--Part-1-PDF>. Where any regulatory setting information from the 2016 EIR has been updated since that time, the updated information is provided here. Also, new or additional information that assists in addressing the Ruling may also be included.

13.3.1 Federal

The following discussions provide information from the 2016 EIR, as appropriate, and include updated information reflecting the current regulatory setting where applicable.

FEDERAL ANTIDEGRADATION POLICY

The US Environmental Protection Agency (EPA) has designated Lake Tahoe an Outstanding National Resource Water (ONRW). ONRWs are provided the highest level of protection under the EPA Antidegradation Policy, stipulating that states may allow temporary and short-term changes to water quality but that such changes should not adversely affect existing uses or alter the essential character or special uses for which the water was designated as an ONRW. EPA interprets this provision to mean that no new or increased discharges to ONRWs shall be permitted if that discharge would result in lower or poorer long-term water quality.

CLEAN WATER ACT

EPA is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) is the primary federal law that governs and authorizes water quality control activities by EPA as well as the states. Various elements of the CWA addressing water quality and that are relevant to this impact analysis are discussed below.

CWA Water Quality Criteria/Standards

Pursuant to federal law, EPA has published water quality regulations under Title 40 of the Code of Federal Regulations (CFR). Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the act, water quality standards consist of designated beneficial uses of the water body in question and criteria that protect the designated uses. Section 304(a) requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. As described in the discussion of state regulations below, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) have designated authority in California to identify beneficial uses and adopt applicable water quality objectives.

CWA Section 303(d) Impaired Waters List

Under Section 303(d) of the CWA, states are required to develop lists of water bodies that do not attain water quality objectives after implementation of required levels of treatment by point source dischargers (municipalities and industries). Section 303(d) requires that the state develop a TMDL for each of the listed pollutants. The TMDL is the amount of the pollutant that the water body can receive and still be in compliance with water quality objectives. The TMDL is also a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. EPA must either approve a TMDL prepared by the state or disapprove the state's TMDL and issue its own. NPDES permit limits for listed pollutants must be

consistent with the waste load allocation prescribed in the TMDL. After implementation of the TMDL, it is anticipated that the problems that led to placement of a given pollutant on the Section 303(d) list would be remediated. A TMDL has been adopted for Lake Tahoe and is discussed in detail further below.

13.3.2 Tahoe Regional Planning Agency

Bisected by the California-Nevada state line, Lake Tahoe has been protected by those states and the federal government for more than 50 years through the unique Tahoe Regional Planning Agency (TRPA) governance model. Late in the 1960s rapid development and lax regulatory standards spurred the governors of California and Nevada to create the Joint California and Nevada Interstate Compact Commission in 1968 and to adopt the first Lake Tahoe Regional Planning Compact. This Compact created TRPA in 1969 and strengthened it in 1980 to provide TRPA with broad powers, authorities, and responsibilities in the planning and regulation of the Lake Tahoe environment to restore Lake Tahoe.

The Tahoe Regional Planning Compact charged TRPA with identifying Environmental Threshold Carrying Capacities and required TRPA to prepare and implement a Regional Plan to attain and maintain those threshold standards. In 1982, TRPA adopted Environmental Threshold Carrying Capacities (or “Threshold Standards”), and in 1987 adopted a plan that, over time, would achieve and maintain those standards while “providing opportunities for orderly growth and development.” TRPA Compact, arts. V(b), (c) and I(b).

Guided by the 15-member TRPA Governing Board representing both states, the federal government, and local jurisdictions, TRPA is charged with adopting and amending threshold standards, the Regional Plan, and implementing ordinances that guide development in the Tahoe Region.

TRPA was designated as an areawide planning agency under Section 208 of the CWA in 1974. Under the Tahoe Regional Planning Compact, TRPA has established environmental threshold standards, goals and policies, and ordinances directed at protecting and improving water quality in Lake Tahoe and the Tahoe region. The focus of water quality enhancement and protection is to minimize the effects of human-made disturbances to the watershed and reduce or eliminate pollutants that result from existing and proposed development. The Tahoe Regional Planning Compact includes the following statements and direction related to water quality:

- ▲ The waters of Lake Tahoe are threatened with deterioration or degeneration, which endangers the natural beauty and economic productivity of the Region (Article I)(a)(1));
- ▲ TRPA shall develop an enforceable land use plan for, among other purposes, the uses of water and other natural resources within the Region (Article V)(1));
- ▲ The Regional Plan shall provide for attaining and maintaining federal, state, or local water quality standards, whichever are the strictest, in the respective portions of the Region for which the standards are applicable (Article (V)(d)); and
- ▲ The Regional Plan shall, by ordinance, identify the means and time schedule by which water quality standards will be attained (Article (V)(d)).

Thresholds

The TRPA Governing Board adopted Resolution 82-11, which established water quality threshold standards for six indicator categories: (1) Lake Tahoe pelagic (deep) waters, (2) Lake Tahoe littoral (nearshore) waters, (3) tributaries, (4) direct surface runoff and stormwater discharge to surface waters, (5) stormwater discharge to groundwater, and (6) other lakes (i.e., lakes in the Tahoe Basin other than Lake Tahoe). Resolution 82-11 sets numerical and management standards for water quality. Some of these threshold standards are referenced to state standards, and in other cases, target reference conditions related to

specific time periods are noted. The following value statements are used in setting the threshold standards and targets for water quality:

- ▲ Attain levels of water quality in the lakes and streams within the Tahoe Region suitable to maintain the identified beneficial uses of Lake Tahoe.
- ▲ Restrict algal productivity (rate of growth) to levels that do not impair beneficial uses or deteriorate existing water quality conditions in the Tahoe Region.
- ▲ Prevent degradation of the water quality of Lake Tahoe and its tributaries to preserve the lake for future generations.
- ▲ Restore all watersheds in the Tahoe Region so that they respond to runoff in a natural hydrologic function.

Goals and Policies

TRPA has established goals and policies related to water quality. Goals include the reduction of sediment and nutrients to Lake Tahoe and the elimination or reduction of other pollutants. The existing goals and policies for water quality protection and shorezone conservation encompass the following regulatory framework (TRPA 2012a):

- ▲ Support the Lake Tahoe TMDL program (see Section 6.2.5) and local government pollutant/stormwater load reduction planning and implementation.
- ▲ Regulate developed properties to install and maintain best management practices (BMPs) that reduce erosion and control stormwater runoff.
- ▲ Prohibit the discharge of wastewater, toxic waste, and solid waste into Lake Tahoe, its tributaries, and groundwater resources.
- ▲ Regulate the placement and design of shorezone structures to avoid degradation of fish habitat and interference with littoral drift.

Code of Ordinances

The TRPA Code of Ordinances (TRPA Code) contains the requirements and standards intended to achieve water quality thresholds, and the goals and policies of the TRPA Regional Plan. Chapter 60 of the TRPA Code is directed specifically at water quality protection (TRPA 2012b). Chapters 80–85 of the TRPA Code contain provisions related to permissible uses, activities, and placement of structures within the shorezone (Table 13-1).

Table 13-1 Code Requirements Related to Water Quality Protection and Shorezone Structures	
Code Section	Requirements
Chapter 33	Sets standards for grading and excavation.
Chapter 60.1	Sets discharge standards for runoff to surface water and groundwater.
Chapter 60.2	Sets requirements that new residential, commercial, and public projects completely offset their water quality impacts.
Chapter 60.3	Contains regulations pertaining to recognition of source water, prevention of contamination to source water, and protection of public health relating to drinking water.
Chapter 60.4	Sets standards for installation of BMPs for the protection or restoration of water quality.
Chapter 80	Sets forth findings that must be made by TRPA before approving a project in the shorezone.
Chapter 81	Identifies permissible uses and accessory structures in the shorezone.
Chapter 82	Sets requirements for maintenance, repair, or expansion of existing structures in the shorezone.

Table 13-1 Code Requirements Related to Water Quality Protection and Shorezone Structures	
Code Section	Requirements
Chapter 84	Regulates the placement of new piers, buoys, and other structures in the shorezone to avoid interference with littoral drift; sets BMP compliance standards for new marinas or marina expansions; sets conditions for permissible filling and dredging activities; and sets standards for operation of motorized watercraft.
Chapter 85	Sets standards and policies for projects and activities in the backshore.

Note: BMP = best management practice.

Source: TRPA 2012b.

The Water Quality Management Plan for the Lake Tahoe Region (208 Plan)

The Water Quality Management Plan for the Lake Tahoe Region (208 Plan) was prepared by TRPA in compliance with Section 208 of the CWA. The 208 Plan is considered a living document and includes by reference the most recent versions of TRPA's Best Management Practices Handbook, the Stream Environment Zone Protection and Restoration Program, and the Capital Improvements Program for Erosion and Runoff Control. The 208 Plan identifies pollution sources, control needs, and management practices to improve water quality. The 208 Plan management programs pertain to urban runoff and erosion, airborne nutrients, waste management, natural area management, and water quality issues in Lake Tahoe and the Shorezone. To determine if water quality goals are attained and maintained, water quality programs require continuous scientific monitoring of environmental conditions related to the threshold standards for pelagic Lake Tahoe, littoral Lake Tahoe, tributary streams, surface runoff, groundwater, land coverage, and SEZs.

13.3.3 State

CALIFORNIA PORTER-COLOGNE ACT

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Board and each of the nine RWQCBs power to protect water quality and is the primary vehicle for implementation of California's responsibilities under the Clean Water Act. The applicable RWQCB for the proposed project is the Lahontan RWQCB. The State Water Board and the Lahontan RWQCB have the authority and responsibility to adopt plans and policies, regulate discharges to surface and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants. Under the Porter-Cologne Act, each RWQCB must formulate and adopt a water quality control plan (known as a "Basin Plan") for its region.

Lahontan RWQCB Basin Plan

Water quality standards and control measures for surface water and groundwater within the Lahontan Region are contained in the Water Quality Control Plan for the Lahontan Region (Basin Plan). The Basin Plan designates beneficial uses for water bodies. It establishes water quality objectives, waste discharge prohibitions, and other implementation measures to protect those beneficial uses. Chapter 5 of the Basin Plan, "Water Quality Standards and Control Measures for the Tahoe Region," summarizes a variety of control measures for the protection and enhancement of Lake Tahoe.

The Basin Plan was first adopted in 1975 and was most recently updated in 2019. It contains both narrative and numeric water quality objectives for the region. The Basin Plan amendments include additional language related to "mixing zones" for dilution of discharged water, compliance schedules for NPDES permits, discharge prohibition exemptions, simplification of existing prohibition exemptions, and the removal of the prohibition on new pier construction in sensitive areas along the California side of Lake Tahoe (LRWQCB 2019).

LAKE TAHOE TMDL

The Lake Tahoe TMDL was developed in a partnership between the Lahontan Water Board and Nevada Department of Environmental Protection to address the declining transparency and clarity of Lake Tahoe, which results from light scatter from fine sediment particles (primarily particles less than 16 micrometers in diameter) and light absorption by phytoplankton (algae). The addition of phosphorus and nitrogen to Lake Tahoe contribute to phytoplankton growth. Because fine sediment particles, phosphorus, and nitrogen are responsible for the decline in lake transparency and clarity, Lake Tahoe is listed under Section 303(d) of the CWA as impaired by the input of these three pollutants of concern.

California's Lake Tahoe TMDL is dated November 2010 and was approved by EPA in 2011. The TMDL requires steady, documented reductions in pollutant loading to the Lake and attainment of the California transparency objective for Lake Tahoe over a 65-year implementation period. California has identified Lake Tahoe's lack of transparency as the primary basis for its impaired status under its Section 303(d) impaired water listings filed with EPA. The TMDL for Lake Tahoe identifies strategies for local, state, and federal jurisdictions around the lake to reduce fine sediment pollutant loads (as well as phosphorous and nitrogen pollutant loads) so that Tahoe's deep-water transparency can be restored. It is implemented through permits and Memoranda of Agreement (MOAs) requiring local governments and agencies to adopt and implement load reduction plans. To comply with California's Lake Tahoe transparency standard, a Secchi disk would need to be visible 29.7 meters (97.4 feet) below the surface of Lake Tahoe on an average annual basis. The 97.4-foot deep-water transparency objective is the ultimate success criteria the TMDL is designed to achieve.

Based on California law, the Lahontan Water Board has the obligation to implement and enforce the California Lake Tahoe TMDL through NPDES discharge permits (over which EPA has jurisdiction) issued to California government entities that include Placer and El Dorado Counties.

TRPA does not duplicate the states' lead regulatory role under the TMDL, but instead creates incentives for achieving and surpassing TMDL targets through the RPU's land-use policies. The TMDL load reduction targets provide local jurisdictions with flexible prescriptions for implementing BMPs in order to maximize available resources. In particular, jurisdictions prioritize areas that can benefit most from BMPs. The combined regulatory approach now scientifically links pollutant reduction plans to improvements in water quality.

13.4 IMPACTS

13.4.1 Significance Criteria

As stated in the introduction to this chapter, this chapter only addresses the issues necessary to rectify any inadequacies identified in the Ruling. Therefore, the impact analysis only includes a discussion of new Impact 13-9, "Project Generated VMT Effects on Lake Tahoe Water Quality and Lake Clarity," as this is the only hydrology and water quality impact issue addressed by the Ruling. Development of significance criteria specific to the assessment of Impact 13-9 is discussed below.

Because the analysis herein is focused on potential effects of the project on Lake Tahoe water quality, consideration was given to jurisdictional issues pertaining to the lake. The Threshold Standards promulgated by TRPA and discussed above are repeated here:

- ▲ Attain levels of water quality in the lakes and streams within the Tahoe Region suitable to maintain the identified beneficial uses of Lake Tahoe.
- ▲ Restrict algal productivity (rate of growth) to levels that do not impair beneficial uses or deteriorate existing water quality conditions in the Tahoe Region.

- ▲ Prevent degradation of the water quality of Lake Tahoe and its tributaries to preserve the lake for future generations.
- ▲ Restore all watersheds in the Tahoe Region so that they respond to runoff in a natural hydrologic function.

These standards are not, themselves, CEQA standards in that they pertain to the overall watershed of the lake and not how individual projects are measured. To that end, the project's significant effects to the lake are based on the Placer County CEQA checklist, Appendix G of the State CEQA Guidelines, as modified, and the specific conditions of this impact analysis. The proposed project would result in a potentially significant impact if it would:

- ▲ substantially degrade Lake Tahoe water quality or water clarity, including if it would conflict with TRPA Threshold Standards related to Lake water quality.

To address the Ruling's conclusion that the 2016 EIR did not sufficiently address the potential linkage between VMT and lake water quality, this REIR explores the use of VMT thresholds developed by TRPA and if they are linked to Lake Tahoe water quality. As explained further below, whereas VMT was used as a potential indicator of impacts to Lake Tahoe water quality in the past, TRPA no longer provides this direct linkage in its Threshold Standards. In its current Threshold Evaluation, VMT is considered under the category of Transportation and Sustainable Communities:

The Transportation and Sustainable Communities threshold is designed to reduce reliance on the automobile, support the attainment of the greenhouse gas emissions (GHG) reduction goals of California and Nevada, and increase mobility.

TRPA's unique planning authority allows it to closely coordinate land use (Regional Plan) and transportation (Regional Transportation Plan) planning. The two plans work together to provide visitors and residents with alternatives to personal automobile travel and reduce VMT. For more than twenty years the focus of both has been supporting compact, mixed-use development, and walkable, bikeable, transit-friendly communities. (TRPA 2021d)

No VMT threshold directly related to lake clarity is currently in use by TRPA or other agencies with a role in protecting the water quality of the lake. TRPA no longer uses VMT thresholds to assess potential impacts to lake clarity (TRPA staff, pers. comm., 2021). However, because the only mechanism by which the project could affect water quality in Lake Tahoe is from vehicle use—the project site is downstream from and does not otherwise have runoff that affects the Lake—VMT is used to determine if the project would produce pollution that would substantially degrade Lake Tahoe water quality or clarity.

13.4.2 Methods and Assumptions

Calculations of project-generated VMT provided in the 2016 EIR, as modified by additional analysis for this REIR, continue to be used here to indicate project-generated VMT that would occur in the Tahoe Basin as there are no changes to the project that would result in increased VMT. Some updated VMT and transit information has been compiled by Fehr & Peers (Fehr & Peers 2022), a transportation planning and engineering firm, and is provided in a memo reproduced as Appendix C of this REIR.

13.4.3 Issues or Potential Impacts Not Discussed Further

The 2016 EIR identified that issues related to placing structures within a 100-year flood hazard area, flooding resulting from a levee or dam failure, and inundation by seiche or tsunami did not warrant further discussion as these conditions were not present in the project area. All other issues and potential impacts

relevant to a comprehensive CEQA analysis of hydrology and water quality were evaluated (e.g., groundwater quality, surface water quality, drainage, stormwater management, water supply). The 2016 EIR concluded that runoff from project activities in Olympic Valley would not affect Lake Tahoe, because the Olympic Valley is downstream of the lake, and runoff flows away from Lake Tahoe. As stated in the introduction to this chapter, this chapter only addresses the issue of project generated VMT effects on Lake Tahoe water quality and lake clarity because these are the only project-related activities with the potential to affect these resources. Therefore, all other issues and potential impacts considered in the 2016 EIR are not discussed further in this REIR.

13.4.4 Impact Analysis

Impact 13-9: Project generated VMT effects on Lake Tahoe water quality and lake clarity.

Although there is no hydrologic connection between the Village at Palisades Tahoe Specific Plan area and Lake Tahoe, the project could have a direct physical effect on lake clarity and water quality via VMT in the Tahoe Basin generated by the project. Implementation of the proposed project would result in an estimated addition of 12,406 average daily VMT to the Lake Tahoe Basin. At one time, vehicle tailpipe emissions in the Basin were thought to have a substantial adverse effect on Lake clarity/water quality; however, due in large part to modern vehicle emission controls, VMT is no longer thought to have a substantial adverse effect on Lake Tahoe clarity or water quality through the mechanism of atmospheric nitrogen deposition. It has long been known that fine sediment entering Lake Tahoe via stormwater is a significant contributor to losses in lake clarity and roadways and paved surfaces are a significant contributor to fine sediment loads. However, recent studies performed for the TMDL and TRPA's threshold evaluation reports (TERs) have found that there is a limited correlation between VMT and roadway sediment loads. Roadway management practices (e.g., controls on use of winter roadway sand, installation of sediment capturing BMPs) have been shown to be the most effective means of limiting roadway generated sediment from entering Lake Tahoe. Consequently, VMT in the Tahoe Basin generated by the Village at Palisades Tahoe Project would have little effect on roadway sediment reaching Lake Tahoe. Consequently, VMT in the Tahoe Basin generated by the Village at Palisades Tahoe Project would not result in a substantial degradation of Lake Tahoe water quality or clarity and would not conflict with TRPA threshold standards related to Lake water quality. Therefore, this impact would be **less than significant**.

The Village at Palisades project area is located several miles from Lake Tahoe and is outside the Tahoe Basin. As identified in the 2016 EIR, there is no hydrologic connection between the project site and Lake Tahoe. However, some vehicle trips generated by the proposed project would enter the Tahoe Basin. As identified in the 2016 EIR and described in a recent analysis prepared by Fehr & Peers (Fehr & Peers 2022) provided as Appendix C of this REIR, the Village at Palisades Tahoe Specific Plan is conservatively estimated to generate 23,842 VMT in the Tahoe Basin on a summer Friday, 20,960 VMT in the Basin on a winter Saturday, and an average daily VMT in the Basin of 12,406. As this impact analysis addresses the potential overall long-term effects of project generated VMT on Lake Tahoe water quality and lake clarity, the average daily VMT metric is used herein.

An increase in VMT in the Tahoe Basin could have the potential to result in an increase in the amount of pollutants draining into Lake Tahoe if there was a link between VMT and sedimentation. For example, "abrasives" applied to roads around Lake Tahoe "can be crushed by tires and washed into the lake by stormwater runoff." These crushed particles can then contribute to decreased lake clarity. There is also the potential for tailpipe emissions to increase atmospheric nitrogen deposition that can contribute to algal growth and reduced lake clarity (i.e., material landing on the lake surface from the air that contributes nitrogen to the water and therefore also contributes to algal growth). The greater the VMT, the higher the levels of tailpipe emissions. The nexus (or lack thereof) between VMT, atmospheric nitrogen deposition, sediment entering Lake Tahoe, and Lake Tahoe water clarity is discussed above in Section 13.2.1, "Environmental Setting," and Section 13.2.2, "Regulatory Setting."

Vehicle Tailpipe Emission and Atmospheric Nitrogen Deposition

As described in Section 13.2.1 and 13.2.2, current evidence indicates that (a) atmospheric nitrogen deposition resulting from vehicle exhaust is not a substantial contributor to losses in lake clarity, and (b) the implementation of stricter vehicle emissions standards at the state and federal levels is sufficient on its own to exceed TRPA's atmospheric nitrogen deposition objectives. According to the TMDL, reducing basin-wide atmospheric nitrogen loading below 2010 levels by at least 1 percent by 2025, and 2 percent by 2075 would be necessary to meet TMDL objectives. As previously described, TRPA expects nitrogen load reductions by 2025 to be significantly greater than the 1 percent reduction target (TRPA 2020). Although VMT reductions resulting from the RTP are identified as one mechanism to reduce nitrogen loads, the air quality analysis for the RTP "estimated reductions in on-road mobile source emissions are primarily due to stricter vehicle emissions standards that will phase in over the planning period" rather than VMT reductions resulting from the RTP. Even if there were a nexus between nitrogen deposition from tailpipe emissions (and therefore VMT) and Lake clarity, the project's addition of VMT to the Basin, 12,406 is only an 0.8 percent addition of VMT to baseline levels of 1,483,050 VMT² and would therefore add less than 1 percent to Basin VMT by buildout of the project. Consequently, the project would not impede the ability to attain the TMDL goal related to nitrogen reduction.

Therefore, vehicle exhaust attributable to VMT associated with the Village at Palisades Tahoe Specific Plan (or vehicles from other projects for that matter) would not have a substantial adverse effect on Lake Tahoe water quality and associated lake clarity or conflict with TRPA threshold standards related to Lake water quality.

Sediment Mobilization by Vehicles

The annual average daily VMT contribution to the Tahoe Basin for the Village at Palisades Tahoe Project represents a 0.8 percent increase over the Tahoe Basin's total annual average daily VMT of 1,483,050. As described in Section 13.2.1 and 13.2.2, there is very little correlation between VMT in the Tahoe Basin and adverse effects on lake clarity fine sediment deposition. Over the 5-year period identified in the discussion above, TMDL targets for sediment reduction were exceeded every year between 2016 to 2020, and while VMT was higher in some years than others, the overall positive trend continued through this variability. This supports both concepts of focusing on roadway operations, management, and design to reduce fine sediment loads (as the TMDL does) and the lack of correlation between VMT and fine sediment loading. However, even if there were a direct 1:1 correlation, the project's contribution to total VMT would be minimal.

The Village at Palisades Tahoe Specific Plan also includes multiple policies, amenities, and actions that support travel by walking, biking, and transit; thereby reducing reliance on the automobile for travel and reducing VMT. These items are listed in Appendix C, in a section titled "Comparison of Project Attributes with TRPA Policies Reducing VMT" and include access to bikes, bike racks, and bike parking facilities; provision of a Transit Center, scheduled shuttle services, and on-demand shuttle services; and promotion of transit services to guests and visitors. As identified in Appendix C, many of these policies, amenities, and actions that reduce reliance on the automobile for travel are consistent with TRPA policies for reducing VMT. Therefore, in many ways, the Village at Palisades Tahoe Specific Plan aligns with TRPA efforts to have projects include components that reduce VMT.

Conclusion

Lake Tahoe is a national treasure. Its strikingly clear waters are iconic. The clarity of the lake deteriorated rapidly between the 1967 to 1971 period and the early 2000's. An incredible effort has been undertaken to study the reasons for the degradation in lake water quality, to control the degradation, and to restore clarity. Hundreds of millions of dollars have been spent on this effort. The rate of degradation of clarity has slowed. Much study is ongoing to understand the relationship between factors that have been shown to reduce clarity and the lack of progress in improving it. While the discussion and analysis included herein has attempted to

² The average Tahoe Basin VMT of 1,483,050 for the 3-year period between 2017 and 2019 (pre-Covid19) is used as the baseline VMT value. More recent data is not used because Covid19 and its related economic disruptions would not reliably reflect expected baseline travel patterns.

provide a complete discussion of Lake Tahoe, its water quality and clarity, it is clear that there is more study needed to fully grasp the factors affecting the lake. Given the complexity, amount of scientific effort, and relative role of this project, it is outside the scope of this EIR to provide this additional scientific study.

Placer County recognizes the importance of this effort. Lake Tahoe is not only an environmental treasure, it is a tourist destination for residents in the county, all of California, and beyond. The proposed project benefits from its proximity to the lake, which is why VMT from the project is expected to find its way to the Lake Tahoe Basin; many visitors to the project would no doubt want to experience the beauty of the lake and the recreational opportunities it affords.

The analysis herein attempts to answer the question of whether this visitation, the VMT from the project, would substantially degrade the water quality and clarity of the lake. The vast body of evidence suggests that the answer is no. Whereas in the past vehicle tailpipe emission in the Basin were thought to have a substantial adverse effect on lake clarity/water quality, that is no longer the case. Due in large part to modern vehicle emission controls, targets for reductions in atmospheric nitrogen deposition attributable to vehicle emissions (and therefore connected to VMT) were achieved more than a decade ago. VMT is no longer thought to have a substantial adverse effect on Lake Tahoe clarity or water quality through the mechanism of atmospheric nitrogen deposition. It has long been known that fine sediment entering Lake Tahoe via stormwater is a significant contributor to losses in lake clarity and roadways and paved surfaces are a significant contributor to fine sediment loads. However, it has been found that there is a very limited correlation between total VMT and roadway sediment loads. Roadway management practices (e.g., controls on use of winter roadway sand, installation of sediment capturing BMPs), rather than VMT management, have been shown to be the most effective means of limiting roadway generated sediment from entering Lake Tahoe with sediment monitoring results supporting the use of this approach. Therefore, VMT in the Tahoe Basin generated by the Village at Palisades Tahoe Project would not, at least measurably (if at all), increase roadway sediment reaching Lake Tahoe, and certainly not to an extent that could credibly asserted to result in a substantial adverse effect on Lake Tahoe clarity or water quality. There simply is no substantial evidence that would support a conclusion that the project's potential contribution of sediments to the lake would affect water quality.

TRPA has established certain goals for Lake Tahoe water quality:

Because the analysis herein is focused on potential effects of the project on Lake Tahoe water quality, consideration was given to jurisdictional issues pertaining to the lake. The Threshold Standards promulgated by TRPA and discussed above are repeated here:

- ▲ Attain levels of water quality in the lakes and streams within the Tahoe Region suitable to maintain the identified beneficial uses of Lake Tahoe.
- ▲ Restrict algal productivity (rate of growth) to levels that do not impair beneficial uses or deteriorate existing water quality conditions in the Tahoe Region.
- ▲ Prevent degradation of the water quality of Lake Tahoe and its tributaries to preserve the lake for future generations.
- ▲ Restore all watersheds in the Tahoe Region so that they respond to runoff in a natural hydrologic function

There is no evidence to suggest that the project, including its VMT, would impede attainment of any of these goals. For all of these reasons, the project's impact on Lake Tahoe's water quality and clarity would be **less than significant**.

Mitigation Measures

No mitigation is required.

Cumulative Impacts

Pursuant to Section 15130 of the CEQA Guidelines, an “EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable.” Per State CEQA Guidelines Section 15065(a)(3), “‘Cumulatively considerable’ means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

As documented in Section 13.1, development in and around Lake Tahoe from the 1950’s onward has resulted in degradation of Lake Tahoe water quality and clarity. Runoff from development, unpaved roadways, and to a lesser extent, paved roadways has added sedimentation to the lake. Nitrogen deposition, particularly prior to improvements of automobile emissions controls, added nutrients to the lake. Degradation in Lake Tahoe water quality reduced the depth to which a Secchi disk can be seen from 31.2 meters (102.4 feet) in 1968 (the best single year on record) to around 20 meters in 2001. Since 2001, the visibility has improved slightly in some years, degraded a little in others, but has mostly hovered around this level of clarity. Cumulative development in the past has substantially affected the clarity of Lake Tahoe.

The project is not in the Lake Tahoe Basin watershed. Development and use of the project would not result in any pollution to the lake associated with runoff from the site; this runoff flows away from the lake. The potential mechanisms for the project to affect the quality of Lake Tahoe is through atmospheric deposition of nitrogen from vehicles and from vehicles crushing roadway sediment that makes its way to the lake.

As discussed in Section 13.3.4, TRPA goals for atmospheric nitrogen reduction have been substantially exceeded. As stated in the TRPA “Threshold Dashboard” (TRPA 2021d):

- ▲ The goal of the standard, a 10% reduction of mobile source NO_x emissions from 1981 levels was accomplished more than 25 years ago. Mobile source NO_x emissions today are less than a third of what they were in 2000 and are forecast to continue to decline as a result of increasingly clean automobiles.
- ▲ While the intent of the standard was reducing NO_x emissions, and four consecutive threshold evaluations have suggested the NO_x - VMT relationship should be revisited, the standard has typically been evaluated as it is written, through VMT. VMT in 2018 was estimated to be 1,393,994, 3.4% lower than it was 1981 (1,443,319). The 3.4% drop in VMT is short of the 10% reduction identified in the standard.
- ▲ NO_x emissions from mobile sources have rapidly declined over the last 20 years.
- ▲ VMT in Tahoe has remained within a relatively narrow band since the standard was adopted in 1982. VMT has generally fluctuated with macro-economic conditions, but never increased or decreased more than 10% 1981 levels.
- ▲ Although VMT reductions resulting from the RTP are identified as one mechanism to reduce nitrogen loads, the air quality analysis for the RTP “estimated reductions in on-road mobile source emissions are primarily due to stricter vehicle emissions standards that will phase in over the planning period” rather than VMT reductions resulting from the RTP.

This information indicates that reduced emissions resulting from a cleaner vehicle fleet have been far more important to meeting and exceeding NO_x emissions and nitrogen load objectives than any changes in VMT. Due to the ongoing restrictions on vehicle emissions for all vehicles in California and the U.S., any cumulative contribution to NO_x emissions from increased VMT in the basin would not make a substantial contribution to a cumulative adverse effect on meeting NO_x emissions objectives related to water quality. Appendix F of this document includes an updated cumulative project list, describing a number of recently proposed, approved, and completed projects in the region. The majority of the projects are located outside the Tahoe Basin, with over 1,000 residences in the Truckee area and up to 1,400 units proposed in Martis

Camp. Projects outside the Lake Tahoe basin would generate VMT which could enter the basin; they would have the same mechanisms for atmospheric and sediment deposition as the project.

Projects in the Tahoe Basin have the potential for direct impacts to Lake Tahoe. These include projects in Homewood, Tahoe City and in other scattered locations around the lake. All projects developed in the Tahoe Basin are required to implement substantial BMPs, which include sediment traps, reduction in sediment runoff, and other mechanisms that are expected to reduce sedimentation to Lake Tahoe. The TRPA Code of Ordinances provides specific direction to ensure that activities and development in the Region are compatible with the Regional Plan and support the attainment and maintenance of the Region's shared goals for restoration and environmental quality as expressed in the threshold standards (TRPA 2020). Other projects, like the Caltrans Highway Improvement Projects, include improvements to sediment control on existing roadways through installation of curbs and gutters and sediment traps. Additionally, there are several cumulative projects as part of TRPA's Environmental Improvement Program, not included in the Appendix F list (Appendix F is focused on development projects), whose primary purpose is to improve Lake Tahoe water quality. As shown on the EIP Accomplishment webpage, 197 miles of bike and pedestrian trails have been constructed or improved, 833 miles of roads have been improved to reduce erosion and stormwater pollution, 134 acres of shoreline has been treated to remove invasive weeds and Asian clams, and these are only some of the programs listed (TRPA 2022).

The project would add 0.8 percent VMT to the Lake Tahoe Basin. As discussed in Section 13.3.4, in light of the rapid reduction in nitrogen emissions from vehicles, which is expected to continue into the future, the exceedance of prior nitrogen reduction goals and the expected continued "substantial" exceedance of near and long-term nitrogen reduction goals, it cannot be reasonably argued that the nitrogen emissions associated with VMT from project vehicles would make a considerable contribution to cumulative impacts.

As discussed in Section 13.3.4, the VMT from the project would not be expected to contribute measurable sedimentation, if any at all, to Lake Tahoe. The project would add an estimated 0.8 percent of VMT to the Lake Tahoe Basin. It has been found that there is a very limited correlation between total VMT and roadway sediment loads. Roadway management practices (e.g., controls on use of winter roadway sand, installation of sediment capturing BMPs), rather than VMT management, have been shown to be the most effective means of limiting roadway generated sediment from entering Lake Tahoe with sediment monitoring results supporting the use of this approach. Based on this information, it can be concluded the project would not contribute considerably to cumulative sediment runoff to Lake Tahoe.

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15 HAZARDOUS MATERIALS AND HAZARDS

Chapter 15 of the 2016 EIR (i.e., 2015 Draft EIR, and where relevant, additional material in the 2016 Final EIR and post Final EIR comments and responses) described existing and potential future hazards within the project area, including the potential for exposure to hazardous materials; hazards associated with nearby airports (if present); the potential to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; wildfire hazards; and potential health hazards. The 2016 EIR addressed potential impacts posed by these hazards to the environment, as well as to workers, visitors, and residents within and adjacent to the plan area.

This section of the REIR) provides the additional, revised hazardous materials and hazards analysis for the project as required by the Court of Appeal's Ruling in *Sierra Watch v. County of Placer* (Ruling). See Chapter 1, "Introduction," in this REIR for further information on the Ruling and its relationship to this REIR.

The Ruling identifies one item in Chapter 15 of the 2016 EIR as requiring further discussion and analysis. This item is part of the analysis of Impact 15-4: "Interference with an adopted emergency evacuation plan," regarding traffic modelling used to estimate the time needed to evacuate Olympic Valley in response to wildfire. Although this issue relates to wildfire, as wildfire generates the need for a potential emergency evacuation in the scenario considered, the deficiency identified in the Ruling solely addresses the topic of the implementation of an emergency evacuation in the event of a wildfire, but not other issues related to wildfire hazards.

Impact 15-4 in the 2016 EIR evaluates whether the Project would impair implementation of an emergency evacuation plan. As identified in the 2016 EIR, the Project would not interfere with implementation of already developed wildfire emergency response plans as rally points, shelter in place locations, and evacuation options called for in existing planning would continue to be available. However, Impact 15-4 also identifies that lane closures and increased traffic expected during project construction could cause or contribute to temporary adverse effects on vehicle movement and could, as a result, interfere with the use of planned roadway evacuation routes. To address this potentially significant impact, the draft EIR required the preparation of a "Construction Traffic Management Plan" as part of Mitigation Measure 15-4. The impact was considered less than significant with implementation of Mitigation Measure 15-4.

As identified in the Ruling, after commenters on the Draft EIR faulted the document "...for failing to evaluate an evacuation scenario under peak traffic conditions, the County offered further analysis in the final EIR." Part of the additional analysis was modelling of vehicle evacuation time requirements for Olympic Valley completed by LSC Transportation Consultants, Inc. (LSC 2016), a professional traffic engineering and planning firm. The evacuation time requirements provided by LSC were based, in part, on the assumption that:

"Per direction from Chief Bansen of the Squaw Valley Fire Department, adequate staff would be available to control traffic at key intersections, but staff would not be sufficient to manage coning or redesignation of travel lanes (such as two lanes exiting). For purposes of this analysis, therefore, we can assume traffic management overriding existing traffic control at [the] intersection." (LSC 2016, p. 2)

This assumption became a specific issue in the lawsuit filed by Sierra Watch (plaintiffs) against the 2016 EIR and the resulting Ruling. As stated on pages 24 and 25 of the Ruling:

"...Sierra Watch contends the EIR underestimated evacuation times because it wrongly assumed emergency responders would provide traffic control at key intersections. On this point, we agree. In estimating evacuation times, the County's consultant assumed, among other things, that emergency responders would "provide traffic control at key intersections." It did so, the consultant explained, "[p]er direction from" the Fire Department's fire chief. But

the fire chief later wrote that the opposite was true – his department specifically advised the consultant that this assumption was “highly unrealistic” because “[a]ny available public safety personnel would be tasked with much higher priority tasks and even then, the numbers of public safety personnel would likely be inadequate.” The County’s consultant thus, it seems, estimated evacuation times in part based on a miscommunication with the Fire Department. And the upshot of this misunderstanding was that the consultant (and the EIR) underestimated evacuation times in the event of an evacuation.

We find this underestimation to be significant. The County, notably, acknowledged that increased traffic along Squaw Valley Road and State Route 89 could, at some point, significantly interfere with emergency evacuation plans. That consideration led it to conclude that increased traffic from project construction would significantly interfere with emergency evacuation plans – though, for some reason, it found differently when considering increased traffic from project operations (that is, traffic from guests and employees). Its reason for treating increased traffic from project construction and increased traffic from project operations differently is not entirely clear from the record – which is perhaps an issue in itself. But it is clear at least that, at some level of congestion, the County believed increased traffic along Squaw Valley Road and State Route 89 would significantly interfere with the implementation of evacuation plans. And it is also clear that, with the County arguably close to finding that increased traffic from project operations could be significant, the EIR’s accidental misrepresentation of estimated evacuation times prevented the County’s board and the public “from gaining a true perspective on the consequences of approving the project.” (*San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 80.)

Attempting to downplay this issue, respondents note that the Fire Department’s fire chief ultimately supported the evacuation plan prepared for the project (the Evacuation Plan), and so, they suggest, we need not concern ourselves with his objections about the EIR’s calculation of evacuation times. But whether the fire chief accepted the evacuation plan or not, the EIR’s misleading estimation of evacuation times is still that – a misleading estimation of evacuation times that prevented informed decisionmaking. We find the EIR inadequate in this respect as a result.”

As indicated in this excerpt from the Ruling, the core issue is that the traffic modelling done to estimate Olympic Valley evacuation times (LSC 2016) assumed that traffic control at key intersections would be provided by Squaw Valley Fire Department staff (now named the Olympic Valley Fire Department). The Ruling found this assumption flawed, and therefore found that the evacuation traffic modelling provided a “misleading estimation of evacuation times.”

This inadequacy identified in the Ruling with respect to emergency evacuation is corrected below in an updated discussion of Impact 15-4. Information from the 2015 Update to the Placer Operational Area Eastside Emergency Evacuation Plan (Placer County 2015) is incorporated into the impact discussion, which identifies the processes for directing organizations and individuals to provide traffic control at key intersections during an emergency evacuation. The Eastside Emergency Evacuation Plan “...prescribes specific responsibilities for first responders, County staff and other state, federal and non-profit cooperating agencies for conducting an emergency evacuation of one or more communities as part of a larger natural disaster or human caused incident on the east side of Placer County.” As identified in the expanded discussion of Impact 15-4 below, staff would be assigned from various agencies to control traffic at key intersections during an evacuation of Olympic Valley. This information validates the assumption in the 2016 evacuation traffic modelling that personnel would provide traffic control at key intersections during an emergency evacuation, and corrects information regarding the agencies that would provide that traffic control.

This REIR chapter retains the same chapter numbering (i.e., Chapter 15), title, and general organization as 2016 EIR to simplify comparisons across the two documents if desired. However, this chapter only addresses the issues necessary to rectify any inadequacies identified in the Ruling. Therefore, Section 15.1, “Environmental Setting,” only provides information relevant to the discussion of Impact 15-4, “Interference with an adopted emergency evacuation plan.” Where the 2016 EIR included environmental setting information related to hazardous materials, airports, and other topics relevant to a comprehensive CEQA analysis of hazardous materials and hazards, that information is not repeated here because it is not relevant to addressing the content of the Ruling. Similarly, Section 15.2, “Regulatory Setting,” in this Revised EIR only provides information relevant to the discussion of Impact 15-4. Section 15.3, “Impacts,” only includes a discussion of Impact 15-4 as this was the only part of Chapter 15 addressed by the Ruling. The original version of Chapter 15 from the 2016 EIR, as well as all 2016 EIR documents are available at: <https://www.placer.ca.gov/2747/Village-at-Squaw-Valley-Specific-Plan>.

In addition to adding information to this chapter in response to the Ruling, this chapter also provides updated information since completion of the 2016 EIR, where relevant. This chapter also incorporates text that was added in the 2016 Final EIR that supplemented the Draft EIR prepared at that time; that is, revisions to Chapter 15 of the Draft EIR identified in 2016 Final EIR Section 2.3.15, “Revisions to Chapter 15, ‘Hazardous Materials and Hazards’” (available at <https://www.placer.ca.gov/DocumentCenter/View/45765/Chapter-2--Revisions-to-Draft-EIR>) are reflected in this chapter.

15.1 ENVIRONMENTAL SETTING

As stated above, this section only provides environmental setting information relevant to the discussion of Impact 15-4, “Interference with an adopted emergency evacuation plan,” as this is the only portion of this chapter that the Ruling identifies as requiring further analysis. The full environmental setting information supporting the hazards and hazardous materials analysis from the 2016 EIR is available at: <https://www.placer.ca.gov/DocumentCenter/View/8195/Chapter-15--Hazardous-Materials-and-Hazards-PDF>. Where any relevant setting information from the 2016 EIR has been updated since that time, the updated information is provided here. Also, new or additional information that assists in addressing the Ruling may be included.

15.1.1 Regional Setting

WILDLAND FIRE HAZARDS

In Placer County, the wildfire 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. Wildfire risk is predominately associated with the wildland-urban interface (where development is interspersed or adjacent to landscapes that support wildfire) (Placer County 2021b: Annex A-55).

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 may contain substantial forest fire risks and hazards (wildland areas or SRAs); and (2) very high fire hazard severity zones.

Olympic Valley is located in an SRA for management of wildland fire hazards. Most of the project site 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.

Chief Bansen (former chief of the Squaw Valley Fire Department at the time) has stated that, specific to Olympic Valley, the area “is pretty favorable in terms of fuels and topography and the unlikely host event for a large wildfire” (Bansen 2016). Given the distance between more heavily forested fuel sources and development on the valley floor and the presence of ski runs and areas of exposed granite where fire fuels are limited or non-existent, the site-specific wildfire risk may not be as severe as the CAL FIRE maps indicate.

NEARBY FIRE STATION

Olympic Valley Fire Department’s (OVFD’s) (formerly the Squaw Valley Fire Department) Fire Station 21 is located immediately west of the Lake Tahoe Preparatory School (formerly Squaw Valley Academy) (305 Olympic Valley Road) about 0.25-mile west of the Olympic Valley Road and State Route (SR) 89 intersection. The fire station is approximately 1.5 miles from the center of the main Village area.

15.1.2 Existing Site Evacuation Conditions

Implementation of emergency evacuations in Olympic Valley are guided by three plans:

- ▲ The Olympic Valley *Wildland Fire Evacuation Guide* (OVFD 2020);
- ▲ The *Placer Operational Area Eastside Emergency Evacuation Plan* (EEEP or plan) (Placer County 2015); and
- ▲ The Squaw Valley Emergency Preparedness and Evacuation Plan (EPEP) (Squaw Valley Real Estate, LLC 2016).

Each of these plans is discussed further below in Section 15.2, “Regulatory Setting,” in the subsection addressing local plans and regulations.

Access to Tahoe Palisades is limited by the configuration of Olympic Valley and the Truckee River canyon; there is only one means of ingress and egress (Olympic Valley Road), and a single road (SR 89) connects the Olympic Valley to adjoining communities. Therefore, routes for evacuation are limited. *The Wildland Fire Evacuation Guide* (OVFD 2020), which applies to all development in Olympic Valley, includes evacuation protocols, guidance for preparing homes for evacuation, and evacuation routes. The plan states that if evacuating the Valley via Olympic Valley Road or SR 89 is not possible, the Tahoe Palisades Ski Resort parking lot would act as an emergency rally point and shelter in place location.

Chief Bansen (chief of the Squaw Valley Fire Department at the time) reinforced this approach during the August 11, 2016 Placer County Planning Commission Meeting (Bansen 2016). As described above, Chief Bansen said that Olympic Valley was unlikely to support a large wildfire because of the fuels, topography, location of development and other factors. Therefore, Chief Bansen expressed that “a mass evacuation of Squaw Valley is a very, very, very unlikely event. It’s much more likely that it would be a smaller, targeted evacuation with specific portions of a subdivision because of slope, the fuel load, the density of structures and the proximity of structures to fuel. Sheltering in place is going to be a much more likely scenario at Squaw Valley, or a blend of evacuating parts of the residential subdivisions and sheltering employees in the larger commercial core of the Valley.”

15.2 REGULATORY SETTING

As stated above, this section only provides regulatory setting information relevant to the discussion of Impact 15-4: “Interference with an adopted emergency evacuation plan” as this is the only portion of this chapter addressed in the Ruling. The full regulatory setting information supporting the hazards and hazardous materials analysis from the 2016 EIR is available at:

<https://www.placer.ca.gov/DocumentCenter/View/8195/Chapter-15--Hazardous-Materials-and-Hazards-PDF>. Where any regulatory setting information from the 2016 EIR has been updated since that time, the updated information is provided here. Also, new or additional information that assists in addressing the Ruling may be included.

Federal

There are no federal laws or regulations that pertain to the issues addressed in this chapter.

15.2.1 State

WILDFIRE RESPONSIBILITY AREAS/STATE RESPONSIBILITY AREAS

The following repeats the discussion from the 2016 EIR.

CAL FIRE implements statewide laws aimed at reducing wildfire hazards, including in wildland-urban interface areas. The laws apply to SRAs, which are defined as areas in which the state has primary financial responsibility for preventing and suppressing fires, as determined by the State Board of Forestry pursuant to PRC Sections 4125 and 4102. The state provides protection to private, undeveloped land. Fire safe regulations address road standards for fire equipment access, standards for signage, minimum water supply requirements for emergency fire use, and fuel breaks and greenbelts, among others. Fire protection outside SRAs is the responsibility of federal or local jurisdictions. These areas are referred to by CAL FIRE as federal responsibility areas and local responsibility areas.

Public Resources Code (PRC) Section 4290.5 requires the California Board of Forestry and Fire Protection, in consultation with the State Fire Marshal and the local jurisdiction, to identify existing subdivisions with more than 30 dwelling units located in the SRA or Local Responsibility Area (LRA) Very High Fire Hazard Severity Zone without a secondary means of egress that are at significant fire risk. To date, CAL FIRE has not prepared recommendations concerning Olympic Valley; the Office of the State Fire Marshall's Subdivision Review Program website indicates "Report Forthcoming" for Olympic Valley (CAL FIRE 2022a).

GOVERNMENT CODE SECTION 66474.02

The following repeats the discussion from the 2016 EIR.

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.

15.2.2 Local

In the project area fire hazards and emergency evacuations are addressed by various local codes, regulations, agencies, and plans, which are described below.

PLACER COUNTY GENERAL PLAN

The Health and Safety Element of the *Placer County General Plan (2021a)* includes the following policies relevant to evacuation, wildfire, and emergency planning within Placer County.

- ▲ **Policy 8.C.1.1.** The County shall require that new development meet State, County, and local fire district standards for fire protection, including the California Building Standards Code, the International Wildland-Urban Interface Code, and the Placer County Municipal Code as applicable.
- ▲ **Policy 8.C.1.2.** The County shall refer applicants of development projects 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. All development in high fire hazard areas shall be designed and constructed to minimize the risk from fire hazards.
- ▲ **Policy 8.C.1.3.** 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.
- ▲ **Policy 8.C.1.6.** The County shall continue to implement State fire safety standards through enforcement of the applicable standards contained in the Placer County Land Development Manual.
- ▲ **Policy 8.C.1.7.** The County shall require all new development projects with land classified as state responsibility areas (Public Resources Code Section 4102), land classified as very high fire hazard severity zones (VHFHSZs; Section 51177), or within areas defined as a “wildland urban interface” (WUI), to prepare a long-term comprehensive fuel reduction and management program, including provisions for multiple points of ingress and egress to improve evacuation and emergency response access and adequate water infrastructure for water supply and fire flow, and fire equipment access.
- ▲ **Policy 8.C.1.8.** Prior to the approval of all tentative parcel maps and tentative subdivision maps in State Responsibility Areas (SRAs) or VHFHSZs, the County shall require as a condition of approval that the developer provide a Will Serve Requirements Letter (WSRL) form the applicable fire district demonstrating compliance with the SRA Fire Safe Regulations and the Fire Hazard Reduction Around Buildings and Structures Regulations, particularly those regarding road standards for ingress, egress, and fire equipment access.
- ▲ **Policy 8.C.1.9.** For tentative parcel maps and tentative subdivision maps located in a High or Very High Fire Hazard Severity Zone (FHSZ), the County shall require the undergrounding of new electric utilities, except in cases where the undergrounding of such utilities is infeasible or where alternative mitigation is more appropriate or provides the same level of benefit or protection. For all projects located in a Moderate FHSZ, or nonresidential projects in High or Very High FHSZ, the County shall consider all feasible fire preventative measures during environmental review. All projects shall conform to the utility requirements, as specified in applicable Community and Specific Plans, as well as all applicable design standards and guidelines.
- ▲ **Policy 8.C.1.18.** The County shall coordinate with the Placer County Fire Safe Alliance and local Fire Safe Councils to encourage new and existing planned developments in the WUI and other areas with elevated wildfire risk to join the Placer County Firewise Communities program.
- ▲ **Policy 8.C.2.4.** The County shall establish increased fire-safe development standards for all new and existing development in the WUI to minimize property damage and loss of life.

PLACER COUNTY FIRE AND LIFE SAFETY REGULATIONS

The Placer County Code Chapter 9, Article 9.32 identifies specific fire hazard regulations that apply to properties within the county. These regulations define the standards for building setbacks, maintenance of defensible space, storage of explosives and hydrocarbon liquids, and overall fire protection. The Placer County Fire Code has adopted provisions that are included in the California Building Code and Uniform Fire Code, in addition to requirements from PRC 4290, which include road standards for fire equipment access.

PLACER COUNTY OFFICE OF EMERGENCY SERVICES

The Placer County OES is responsible for the administration of the Placer County emergency management program on a day-to-day basis and during disasters. The office is charged with providing the necessary planning, coordination, response support, and communications with all agencies affected by large-scale emergencies or disasters. The Placer County OES works in a cooperative effort with other disciplines such as law enforcement, fire, emergency medical services, state and federal agencies, utilities, private industry, and volunteer groups in order to provide a coordinated response to disasters. In any disaster, the Placer County OES becomes the single focal point for centralized management and coordination of emergency response and recovery operations during a disaster or emergency affecting the County. The Placer County OES is activated when an emergency situation occurs that exceeds local and/or in field capabilities to adequately respond to and mitigate the incident.

OLYMPIC VALLEY FIRE DEPARTMENT'S DEFENSIBLE SPACE PROGRAM

The OVFD has had a defensible space program for over 20 years. This program entails a physical inspection of every property in the district'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 (Placer County 2021b: Annex O-37).

OLYMPIC VALLEY WILDLAND FIRE EVACUATION GUIDE

Access to Olympic 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 Palisades Tahoe to adjoining communities outside of Olympic Valley. Olympic Valley has an established *Wildland Fire Evacuation Guide* (OVFD 2020) that includes evacuation protocols, guidance for preparing homes for evacuation, and evacuation routes. The guide is intended to be used by people residing in the valley, is relatively brief (2 pages) and is a list of bulleted actions. The guide calls for evacuating via Olympic Valley Road to SR 89; or, if it is not possible to leave the Valley, driving to the Palisades Tahoe parking lot. The guide does not address (and is not intended to address) emergency personnel and their actions in the event of evacuation.

PLACER OPERATIONAL AREA EASTSIDE EMERGENCY EVACUATION PLAN

In 2008, Placer County adopted the Placer Operational Area Eastside Emergency Evacuation Plan. In 2015, Placer County approved and adopted the 2015 Update to the Placer Operational Area Eastside Emergency Evacuation Plan (EEEP or plan) (Placer County 2015). The 2015 update replaces the 2008 version. The 2015 EEEP is designed to direct the implementation of a physical evacuation of one or more communities in the unincorporated area on the eastern side of Placer County. For the purposes of EEEP, the "eastern side" comprises all of Placer County from just west of Cisco Grove to the Nevada State line not including the areas within the Tahoe National Forest and the Lake Tahoe Basin Management Unit. However, the plan does address the potential need for evacuations necessitated by incidents that start in the Tahoe National Forest or the Lake Tahoe Basin Management Unit that threaten County areas. The Olympic Valley and evacuation routes out of the Olympic Valley (e.g., SR 89, Interstate 80 [I-80]) fall within the EEEP evacuation area.

The EEEP is intended to respond to a large incident such as a forest fire or flood. The plan prescribes specific responsibilities for first responders, Placer County OES, other County staff, and other state, federal and non-profit cooperating agencies for conducting an emergency evacuation of one or more communities as part of a larger natural disaster or human caused incident on the east side of Placer County. The EEEP coordinates these agencies and resources through a Unified Command methodology where an Incident Command (IC) is established and all agencies and resources supporting the evacuation respond to direction from the IC. One of the first actions of the IC in response to an incident is to establish an Incident Command Post (ICP). All agencies affected, or potentially affected by the incident, and all agencies supporting the incident response, are directed to initiate contact with the ICP. The IC, from the ICP, then directs deployment of fire personnel, law enforcement, emergency medical resources, and others; as well as making decisions to provide evacuation warnings, issue evacuation orders, or provide direction to shelter-in-place.

Once an emergency evacuation is underway, the EEEP identifies the California Highway Patrol (CHP) as having primary responsibility for traffic control on State highways and the Placer County Sheriff's Office and local law enforcement as having primary responsibility for local roadways; however, these agencies and others, such as the Placer County Department of Public Works (DPW) and the California Department of Transportation (Caltrans), can coordinate and assist on an as-needed basis at the direction of the IC. There is also flexibility in the activities and roles performed by each agency to support the most effective maintenance of traffic flow (Placer County 2015; Atkinson, pers. comm., 2022; Long, pers. comm., 2022; Egide, pers. comm., 2022). For example, DPW and Caltrans may provide both traffic control implements (e.g., portable electronic signage) and personnel, and CHP and Placer County Sheriff's Office may both provide traffic control personnel on State highways and local roadways.

During an emergency evacuation the EEEP identifies the primary duties of Fire Protection Districts/Fire Departments as providing Advanced Life Support (ALS) emergency medical services; ALS transport; providing technical fire and geographic area expertise to the IC; and assisting law enforcement with alerts, warnings, and evacuations if personnel are available.

VILLAGE AT SQUAW VALLEY SPECIFIC PLAN EMERGENCY PREPAREDNESS AND EVACUATION PLAN

In 2016, the project applicant prepared the EPEP for the Village at Squaw Valley Specific Plan (VSVSP) (now the Village at Palisades Tahoe Specific Plan or VPTSP) (Squaw Valley Real Estate, LLC 2016). The EPEP addresses the potential risks from wildfire, seismic risks, avalanches, and flooding hazards within the plan area, as well as evacuation. The completed EPEP was submitted to the Board of Supervisors when the Board considered project approval in 2016. It is anticipated that the EPEP will be resubmitted and reconsidered as part of the VPTSP when the Board considers project approval again. It is also anticipated that, at that time, the Board will also consider whether to approve the EPEP. The EPEP is intended to provide a coherent road map to prepare and guide VPTSP staff in the unlikely event of an emergency. In addition to compliance with State, County, and other local laws and regulations, such as the defensible space and fuel maintenance requirements mentioned above, the EPEP includes:

- ▲ Descriptions of existing conditions pertaining to wildfire, seismic hazards, avalanche, and flooding; including a discussion of topography; vegetation; climate; fire history; fire hazard severity zones; and the capabilities of the Olympic Valley Public Services District (OVPSD), OVFD, and other resources that may be called on in response to an emergency.
- ▲ An overview of the regulatory requirements that apply to the VPTSP, including such topics as fuel maintenance, defensible space, structural and infrastructure requirements (e.g., fire flow minimums, emergency access road standards), building code requirements, and the County's ordinances for construction in avalanche zones and flood damage prevention.
- ▲ Emergency planning measures that will be implemented with the VPTSP, including fire prevention measures; wildfire education; measures to protect people and buildings from avalanches, seismic activity and flood damage; and an evacuation plan. The evacuation plan will integrate with the Olympic

Valley Wildland Fire Evacuation Guide (OVFD 2020) as well as the County's EEEP. The EEEP 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. The VPTSP EPEP defines staff roles and responsibilities, including staff responsible for communicating with emergency service providers, and, in case of evacuation, the County's incident command, the managers of hotels and other facilities, staff, and guests. Communication protocols are also included to ensure that staff and guests are provided information about potential emergencies, as well as for notifying staff and guests when there may be a need to take action due to an emergency, up to and including evacuation of the plan area.

- ▲ Identification of rally points and shelter in place locations for various emergency scenarios ranging from evacuations of single buildings, or portions of buildings, on the project site to regional incidents such as large wildfires. The EPEP goes beyond the Olympic Valley Wildland Fire Evacuation Guide (OVFD 2020) by not only providing rally points and shelter in place locations consistent with the Guide, but also designing and constructing specific buildings to function as indoor shelter in place locations (e.g., providing fire resistant construction and air filtration systems that exceed building code requirements).

15.3 IMPACTS

15.3.1 Significance Criteria

As stated in the introduction to this chapter, this chapter only updates the discussion of Impact 15-4: "Interference with an adopted emergency evacuation plan" as this is the only portion of this chapter addressed in the Ruling. Where the 2016 EIR included significance criteria relevant to a comprehensive CEQA analysis of hazardous materials and hazards, only significance criteria relevant to the analysis of Impact 15-4 is provided here. Based on the Placer County CEQA checklist, Appendix G of the State CEQA Guidelines, and the specific focus of this Revised EIR, the proposed project would result in a potentially significant impact related to wildfire evacuation if it would:

- ▲ impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

15.3.2 Methods and Assumptions

POLICIES PROPOSED IN THE SPECIFIC PLAN THAT COULD AFFECT PROJECT IMPACTS

The following policies from *The Village at Squaw Valley Specific Plan* (Squaw Valley Real Estate, LLC 2015) are applicable to the evaluation of wildland fire hazards and evacuation:

Circulation and Parking

- ▲ **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.

Public Services

- ▲ **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-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.

IMPACT ANALYSIS METHODOLOGY

Project plans; available literature, including documents published by regional, State, and federal agencies; applicable evacuation and emergency response plans; and applicable policies of the Placer County General Plan and Squaw Valley General Plan and Land Use Ordinance were reviewed for this analysis. This analysis considers the risk of a wildland fire that may result in the need to implement an emergency evacuation of the VPTSP area, as well as the remainder of the Olympic Valley, and the potential for the VPTSP to impact implementation of that evacuation.

15.3.3 Issues or Potential Impacts Not Discussed Further

The 2016 EIR identified that issues related to potential airport and private airstrip hazards did not warrant further discussion as there were no airports or private airstrips in the vicinity of the project site. This condition has not changed. All other issues and potential impacts relevant to a comprehensive CEQA analysis of hazardous materials and hazards were evaluated in the 2016 EIR (e.g., use, transport, and disposal of hazardous materials; hazardous emissions; existing presence of hazardous materials). However, as stated in the introduction to this chapter, this chapter only updates the discussion of Impact 15-4, “Interference with an adopted emergency evacuation plan,” as this is the only portion of this chapter addressed in the Ruling. Therefore, all other issues and potential impacts considered in the 2016 EIR are not discussed further in this Revised EIR.

15.3.4 Impact Analysis

Impact 15-4: Interference with an adopted emergency evacuation plan.

The existing surface parking lots at the Tahoe Palisades Ski Resort are currently used as the emergency rally point during emergencies and would continue to be used as such during project construction. In the long-term, the new parking structures on Lots 11 and 12 would serve as the emergency rally point as well as potential shelter in place locations. Several project buildings would also be designed to function as rally point/shelter in place locations. The project would integrate with, and not conflict with, local and regional emergency evacuation plans. However, during project construction, temporary roadway or travel lane closures could increase traffic congestion and interfere with implementation of applicable emergency evacuation plans. Although this impact would be temporary and intermittent over the 25-year construction period, this impact would nonetheless be **significant**.

Access to Tahoe Palisades is limited by the configuration of Olympic Valley and the Truckee River canyon; there is only one means of ingress and egress (Olympic Valley Road), and a single road (SR 89) connects the Olympic Valley to adjoining communities. The *Wildland Fire Evacuation Guide* (OVFD 2020), which applies to all development in Olympic Valley, includes evacuation protocols, guidance for preparing homes for evacuation, and evacuation routes. The plan calls for evacuating via Olympic Valley Road to SR 89; or, if it is not possible to leave the Valley, driving to the Tahoe Palisades Ski Resort parking lot as an emergency rally point and shelter in place location. The project includes changes to the parking lots, including the construction of podium (second story) parking structures on Lots 11 and 12. During construction, the surface parking lots would continue to be used as the emergency rally point and/or shelter in place locations, should evacuation be required. After the parking structures are constructed and opened for use, the emergency rally point would be located at the new parking structures which could also be used as

shelter in place locations. Therefore, the VPTSP would continue to support implementation of the *Wildland Fire Evacuation Guide* (OVFD 2020).

The VPTSP is also subject to State and OVFD requirements for managing fuel loads (e.g., dense vegetation) and maintaining “defensible space” within the plan area. These measures would reduce the risk of fire starting or spreading within the plan area.

The applicant has also prepared the EPEP, which addresses the potential risks from wildfire, seismic risks, avalanches, and flooding hazards within the plan area, as well as evacuation (Squaw Valley Real Estate, LLC, 2016). The completed EPEP was submitted to the Board of Supervisors when the Board considered project approval in 2016; the EPEP is anticipated to be resubmitted and reconsidered as part of the VPTSP when the Board considers project approval again, and will be considered by the Board for approval. As stated previously, the EPEP is intended to provide a coherent road map for which to prepare and guide VPTSP staff in the unlikely event of an emergency. A summary description of relevant portions of the EPEP is provided above in Section 15.2, “Regulatory Setting.”

The EPEP addresses evacuation planning for local evacuations as well as out-of-valley evacuations. 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. An out-of-valley evacuation would include the evacuation of all guests, property owners, and employees of the Village out of the valley due to a larger event such as a wildland fire. The EPEP outlines the roles and responsibilities during an evacuation as well as communication protocols for communicating with employees, guests, the Fire Department, and the Placer County Sheriff’s Office. In the event of a hazards event (i.e., fire ignition, fire in progress, avalanche, flood, etc.) is reported, emergency response personnel would be contacted, employees and guests would be notified, shelter-in-place or relocation procedures would be initiated, and communications would be maintained throughout the event until it is considered safe to stand-down the shelter-in-place or relocation. If an evacuation notification or order has been initiated by the Placer County Sheriff’s Office, the Sheriff’s Department would issue the public notifications to evacuate and manage the evacuation process. All appropriate measures for notifying employees and guests will be used, including social media, Nixle or Everbridge, room calls, and message boards. Communication protocols will be updated as new methods become available. For further details about evacuation and communications, see Chapter 5 of the EPEP (Squaw Valley Real Estate, LLC 2016).

The EPEP also addresses the dedicated emergency helipad that would be provided within the main Village area. The helipad would only be used for emergency services. Currently, emergency helicopter landing areas are available on an as-needed basis in parking lots and other open areas on the Valley floor and level areas on the mountain, but these areas are not always available. The proposed helipad is anticipated to be located on a raised structure on the existing Preferred Parking lot (this parking lot is shown on Exhibit 3-8 in Chapter 3, “Project Description,” of the 2016 EIR, which is included in Appendix B of this document). The helipad design and construction would incorporate a dedicated elevator that could accommodate a medical gurney, proper aeronautical markings, and snow clearing operations. Therefore, emergency helicopter access in the main Village area would not be reduced by the proposed project, and could be enhanced by creation of a dedicated helipad.

To better understand the project’s potential effects on an emergency evacuation of the entirety of the Olympic Valley, an analysis of traffic conditions during this type of evacuation scenario was conducted (LSC 2016). The analysis evaluated an example evacuation scenario where:

- ▲ an evacuation is ordered because of a wildfire during the peak summer season;
- ▲ all homes and lodging in Olympic Valley are assumed fully occupied (100 percent occupancy in the entire Valley) and associated employees are present;
- ▲ no “shelter in place” options are exercised;

- ▲ emergency responders provide traffic control at key intersections, but no special roadway lane configurations are used (e.g., coning to create an additional lane in one direction);
- ▲ the direction of the evacuation is towards Truckee;
- ▲ all evacuees exit in the vehicles they used to arrive in Olympic Valley in, no consolidation to shuttle busses or similar measures are used;
- ▲ an average of 1.2 vehicles are assumed for each residential unit, reflecting an assumption that 20 percent of residential units will generate a second vehicle;
- ▲ local roadways are already accommodating peak traffic volumes, simulating an evacuation that incorporates more than just Olympic Valley; and
- ▲ beyond residents, lodging guests, and employees, an additional 200 vehicles are included to represent visitors present in the Valley when the evacuation order is given.

Many of these assumptions are conservative in that they would generate more vehicles than would actually occur. For example, it would be highly unlikely that 100 percent of all homes and lodging in Olympic Valley would be occupied at any one time, particularly outside of the ski season when the risk of wildland fire exits. It is also important to note that in the traffic analysis (LSC 2016), staff from the Squaw Valley Fire Department (now the Olympic Valley Fire Department) are identified as the emergency responders providing traffic control at key intersections. In reality, traffic control at key intersections would be provided primarily by CHP and the Placer County Sheriff's Office, with the EEEP identifying CHP as having responsibility on State highways (e.g., SR 89) and the Placer County Sheriff's Office operating on local roadways (with the flexibility in roles and responsibilities identified above in the description of the EEEP); potential assistance would be provided by the Placer County DPW, Caltrans, and other agencies consistent with the roles and responsibilities described in the EEEP, and with adjustments potentially made for individual incidents at the direction of the IC (Placer County 2015; Atkinson, pers. comm., 2022; Long, pers. comm., 2022; Egede, pers. comm., 2022) (see description of the EEEP above in the discussion of local regulations in Section 15.2, "Regulatory Setting"). Therefore, although the evacuation traffic analysis identifies the incorrect agency for provision of traffic control at key intersection, the overall assumption that personnel would provide traffic control at key intersections during an evacuation is correct.

Based on the analysis and the assumptions used, it is estimated that with existing development in Olympic Valley at the time the analysis was prepared, it would take approximately 2.9 hours for all vehicles to leave the Valley. If the VPTSP were added to existing development, it would take approximately 5.0 hours for all vehicles to exit the Valley (an additional two hours). Under a cumulative condition, with future development throughout the region and the VPTSP in place (i.e., full project buildout at 2040), it was estimated that it would take approximately 6.6 hours for all vehicles to exit the Valley.

Since the evacuation traffic analysis was prepared in 2016, anticipated cumulative development in the Olympic Valley and in the larger Tahoe-Truckee region has changed somewhat. Appendix F provides the cumulative projects table from the 2016 EIR with updates shown in underline and ~~strikethrough~~. Inclusion of the updated information results in 322 more residential units and 205 more hotel units compared to the cumulative development scenario in the 2016 EIR. All of these units are outside Olympic Valley. When considering the total effect of withdrawn projects, new projects, and the absorption of anticipated future development potential by new projects, there is no net increase in Olympic Valley cumulative development projections for residential and resort/hotel/condo units compared to the cumulative development scenario in the 2016 EIR.

The evacuation traffic analysis identifies the limiting factor in implementing an evacuation of Olympic Valley to the north on SR 89 as the capacity of SR 89 (LSC 2016: 3). The capacity of SR 89 under the modelled traffic scenarios is identified as 1,700 passenger cars per hour (LSC 2016: 4). With no net change in the number of residential/resort/hotel/condo units included in the cumulative development scenario for

Olympic Valley, the evacuation times identified in the evacuation traffic analysis would not be changed by any altered conditions in Olympic Valley. However, if all the updated cumulative development identified in Appendix F were considered as part of the cumulative plus project evacuation condition, and each hotel unit was considered a residential unit for purposes of passenger car generation, the estimated evacuation time for Olympic Valley would increase by approximately 22 minutes (527 housing units X 1.2 passenger cars per housing unit/1,700 passenger vehicle capacity on SR 89) as passenger vehicles leaving Olympic Valley share the SR 89 vehicle movement capacity with vehicles from other projects. This is a conservative estimate as some of the additional cumulative projects, such as the Kings Beach Center in Kings Beach (80 residential units and 120 hotel units) would be unlikely to use SR 89 as an evacuation route, instead using more nearby roadways such as SR 267. In addition, hotel units typically generate fewer passenger cars per unit than residences. Therefore, applying the 1.2 passenger cars per unit passenger car generation rate for the 205 additional hotel rooms likely overestimates the vehicle generation for these units. However, based on the calculations above, the estimated evacuation time for Olympic Valley, with the proposed project, and using the updated cumulative development shown in Appendix F, would increase from 6.6 hours to approximately 7.0 hours. An additional 22 minutes (0.37 hour) to evacuate Olympic Valley under the cumulative development scenario is not a substantial increase in evacuation times, especially considering the process for issuing evacuation orders and the availability of shelter in place locations in Olympic Valley as described below.

Special events conducted during the summer months (e.g., Wanderlust, Spartan Race) were also evaluated as part of the 2016 evacuation traffic analysis. Assuming 10,000 persons were present for a special event, and on average there were three persons per vehicle, it would take approximately 3.3 hours to evacuate all event participants under existing conditions, 3.6 hours under existing conditions with the VSVSP, and 4.1 hours under cumulative 2040 conditions with the VSVSP (with the potential for the cumulative 2040 condition timeframe to be longer for the reasons identified above).

The evacuation time for vehicles associated with a special event would be additive to the evacuation time for residents and lodging guests, although it would not be expected that it would be 100 percent additive as it would be anticipated that at least some event participants would use lodging in Olympic Valley and at least some residents would participate in the event. However, taking a worst-case-scenario, assuming an evacuation is ordered during a period of 100 percent occupancy, while a large special event is occurring, and no event participants overlap with residents and lodging guests, at full buildout of the VSVSP and considering other expected cumulative development in Olympic Valley in 2040 (using 2016 data), it was estimated that it could take up to 10.7 hours for every vehicle present to leave the Valley. Considering the updated cumulative project information provided in Appendix F, this evacuation time would increase by approximate 22 minutes to roughly 11.1 hours.

Although the proposed project, or any project that adds people to an area (such as the additional projects identified in Appendix F), would add time to complete an evacuation, this does not necessarily generate a safety risk. Emergency personnel who issue an evacuation order (i.e., the Incident Command identified in the EEEP) take into account the time needed to implement an evacuation when determining when and where to issue evacuation orders. If an evacuation were needed during a peak occupancy period, it would be expected to be ordered sooner than during a low occupancy period to allow sufficient time to implement the evacuation. For events like wildfires, the fires are tracked from the moment of discovery, and risk to nearby development is assessed on a regular basis. Days of lead time are often available to assess risk and make evacuation determinations. During these periods, peak occupancy conditions typically do not occur as drifting smoke, awareness of the risk, or other factors result in people avoiding the area. The cancellation of the 2014 Iron Man event at Palisades Tahoe in response to poor air quality from the King Fire is an example of this phenomenon. Additionally, advancements in technology and meteorology (since the 2016 EIR), including new software, remote cameras, and satellite imagery has and will continue to allow agencies and the public to make early identification and reaction plans based on fires. The evacuation of South Lake Tahoe in 2021 in response to the Caldor Fire, although chaotic, achieved the desired goal of evacuating the affected area before a direct threat of injury or loss of life from wildfire occurred because the evacuation began well before the

wildfire hazard posed an imminent danger (Atkinson, pers. comm., 2022). After 100 percent containment, no fatalities and five injuries (fire personnel and civilians) were attributed to the fire (CAL FIRE 2021a).

CAL FIRE issued numerous status update reports over the course of the Caldor fire; 153 status update reports were issued from August 16, 2021 through September 17, 2021 (CAL FIRE 2021b). These status update reports provide evacuation updates; identify road closures, evacuation shelters, and animal evacuation centers; provide US Forest Service updates; and described the assigned resources, including the cooperating agencies. Multiple agencies provided assistance during the Caldor Fire evacuation. According to CAL FIRE's Caldor Fire Incident webpage, cooperating agencies included El Dorado County Sheriff's Office, Sierra Pacific Industries, Pioneer Fire District, Pacific Gas and Electric Company (PG&E), California Highway Patrol (CHP), El Dorado Irrigation District, El Dorado County, Grizzly Flats Community Service District, Sacramento Municipal Utility District (SMUD), Amador County Sheriff's Office, AT&T, Georgetown Fire Department, California Department of Transportation (Caltrans) Indian Diggins School District, El Dorado County Fire Department, Grizzly Flats Water District, Volcano Telephone, Placerville Fire Department, El Dorado County Department of Transportation, Mosquito Fire Department, Garden Valley Fire Department, California Governor's Office of Emergency Services (Cal OES), El Dorado County Emergency Services Authority, El Dorado County Office of Education, Marshall Medical Center, Shingle Springs Band of Miwok Indians Fire Department, State Water Resources Control Board, Kamps Propane, El Dorado County Department of Agriculture, Barton Health, California Environmental Protection Agency, Lake Valley Fire District, and Verizon (CAL FIRE 2021a). It is reasonable to assume that evacuation of Olympic Valley, if required in response to a wildfire, would be managed in a similar manner as the Caldor Fire, with mutual aid commitments requested by the IC and provided by multiple agencies (including local, state, federal, and non-profit cooperating agencies) as described in the County's EEP and summarized above in Section 15.2, "Regulatory Setting."

The 2022 Mosquito Fire provides a further example of how evacuations are managed in the region. The Mosquito Fire ignited on September 6, 2022, at Mosquito Road adjacent to Oxbow Reservoir, approximately four miles east of Foresthill in Placer County. The fire was brought under control as of October 27, 2022 (CAL FIRE 2022b). The fire spread in a sparsely populated, hilly area surrounding the ignition site. A total of approximately 80,000 acres burned before the fire was brought under control. The burned area straddles the El Dorado and Placer County lines, with the majority of the fire occurring in Placer County. At its closest point, the fire was located approximately 18 miles southwest of Olympic Valley. Unified command was provided by the US Forest Service, working in coordination with CAL FIRE. Cooperating agencies included CHP, El Dorado County Sheriff, Placer County Sheriff, Foresthill Fire Protection District, and the Governor's Office of Emergency Services. With respect to Placer County, the Sheriff's Office provided information regarding mandatory evacuations, road closures, and evacuation warnings. Additionally, CAL FIRE issued numerous status update reports over the course of the Mosquito fire; 89 status update reports were issued from September 7, 2022 through September 23, 2022 (CAL FIRE 2022c). These status update reports provide evacuation updates; identify road closures, evacuation shelters, and animal evacuation centers; provide US Forest Service updates; and described the assigned resources, including the cooperating agencies. Evacuation orders were lifted by September 23, 2022.

The 2021 Caldor Fire and 2022 Mosquito Fire both involved evacuation orders. In both instances, evacuations were conducted by multiple cooperating agencies, in accordance with evacuation orders issued by IC. The evacuations were performed successfully. The experience demonstrates that, because of the IC/Cooperating Agency plans in place, sufficient personnel are available to manage evacuations.

To the extent the 2016 EIR suggests that personnel to manage evacuations from Olympic Valley will be provided solely (or primarily) by the Olympic Valley Public Service District, that suggestion is incorrect. Rather, personnel to manage evacuations is provided by a range of cooperating agencies, under the direction of the IC. As noted in the Eastside Emergency Evacuation Plan, primary responsibility for managing traffic during an evacuation is assigned to the CHP, with assistance from Caltrans. Personnel to manage traffic will also be available from other cooperating agencies, including the Placer County Sheriff's Office. The experience with the Caldor and Mosquito Fire evacuations demonstrates that, with plans in place and

interagency cooperation, personnel to manage traffic during an evacuation will be available. For this reason, the assumption set forth in the estimate of evacuation times is reasonable. Finally, as described above, in the event evacuation times prove to lengthier due to unforeseen circumstances, emergency plans for Palisades and Olympic Valley include providing facilities so that residents and guests can safety shelter in place, thereby obviating the need to evacuate.

The EPEP provides for relocating employees and guests out of the valley before an official evacuation order is issued (see Chapter 5 of the EPEP; Squaw Valley Real Estate, LLC 2016). However, if a wildfire ignited in or near Olympic Valley required a more rapid response, there are shelter in place options (e.g., parking areas, buildings designed for fire resistance, the golf course) that are distant from fire fuels and that can temporarily hold people as an evacuation proceeds. In addition, Olympic Valley is a relatively large area. The Valley floor is over two miles long and 0.25 mile wide. It is highly unlikely that the entire Valley would be at risk simultaneously. The more likely scenario is that evacuation orders would encompass only the parts of the Valley at high risk, and a complete rapid Valley evacuation would not be needed.

This is consistent with oral testimony provided by Chief Bansen (chief of the Squaw Valley Fire Department at the time) during the August 11, 2016 Placer County Planning Commission Meeting (Bansen 2016). The fire chief, by virtue of his position, is considered an expert on this issue. Chief Bansen identified that the Olympic Valley “is pretty favorable in terms of fuels and topography and the unlikely host event for a large wildfire.” Because of the fuels, topography, location of development and other factors, Chief Bansen stated “...my feeling is that a mass evacuation of Squaw Valley is a very, very, very unlikely event. It’s much more likely that it would be a smaller, targeted evacuation with specific portions of a subdivision because of slope, the fuel load, the density of structures and the proximity of structures to fuel. The wind plays into that. The prevailing southwest wind is actually pretty favorable for a fire encroaching Squaw Valley from the west. And because of the slope and that prevailing wind the developed area in terms of a mass evacuation is a pretty unlikely thing. Sheltering in place is going to be a much more likely scenario at Squaw Valley, or a blend of evacuating parts of the residential subdivisions and sheltering employees in the larger commercial core of the Valley.”

For the reasons discussed above, operation of the VPTSP would not interfere with implementation of the Olympic Valley *Wildland Fire Evacuation Guide* (OVFD 2020), the EEEP, or any other adopted emergency evacuation plans.

In addition to emergency evacuation timing, the Ruling also identifies a deficiency regarding the project’s potential interference with emergency evacuation plans during construction (see pages 24 and 25 of the Ruling, which are excerpted above in the introduction to this chapter). As described in the impact analysis above, project operation would not interfere with adopted emergency evacuation plans because adequate emergency access routes and personnel would be available. Project construction, however, could interfere with adopted emergency evacuation plans if roads or travel lanes are temporarily closed or obstructed. This could reduce the capacity of the roadway system to accommodate traffic due to temporary lane closures or other roadway obstructions. Therefore, construction activities, if not properly planned and executed, could interfere with implementation of the EEEP and emergency evacuation by reducing roadway system capacity at certain times. Although this impact would be temporary and intermittent over the 25-year construction period, this impact would nonetheless be **significant**.

Mitigation Measure 15-4: Implement Mitigation Measure 9-8.

The project applicant shall implement Mitigation Measure 9-8 from the 2016 EIR, which requires the preparation of a Construction Traffic Management Plan to, among other objectives, require removing potential traffic obstructions during emergency evacuation events.

Significance after Mitigation

Implementing this mitigation measure would reduce the impact from the potential interference with an adopted emergency evacuation plan to a **less-than-significant** level because the Placer County Department of Public Works would be involved in implementing measures to ensure acceptable traffic flow and reduce the risk of impairment to emergency evacuation routes.

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No references were used in this chapter.

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Appendix A

Court Ruling

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA
THIRD APPELLATE DISTRICT

(Placer)

SIERRA WATCH,

Plaintiff and Appellant,

v.

COUNTY OF PLACER et al.,

Defendants and Respondents;

SQUAW VALLEY REAL ESTATE, LLC,

Real Party in Interest and Respondent.

C088130

(Super. Ct. No. SCV0038777)

In 2016, Placer County (the County) approved a project to develop a resort on about 94 acres in Olympic Valley — the site of the 1960 Winter Olympics. Sierra Watch afterward challenged the County’s approval in two lawsuits, both of which are now on appeal. In one of its suits, it alleged the County approved the project in violation of the Ralph M. Brown Act (Brown Act, Gov. Code, § 54950 et seq.) — an act intended to

facilitate public participation in local government decisions. In another, it alleged the County's environmental review of the project was inadequate.

This appeal concerns Sierra Watch's challenge to the County's environmental review for the project under the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.). CEQA generally requires public agencies, like the County, to consider the environmental consequences of discretionary projects they propose to approve. Per that requirement, the County considered the potential environmental impacts of the proposed development in Olympic Valley before it approved it. But in Sierra Watch's view, the County's analysis fell short. In particular, Sierra Watch maintains, the County (1) failed to sufficiently consider Lake Tahoe in its analysis, (2) insufficiently evaluated the project's impacts on fire evacuation plans for the region, (3) inadequately evaluated and mitigated the project's noise impacts, (4) failed to allow for sufficient public review of the project's climate change impacts, (5) failed to consider appropriate mitigation for the project's climate change impacts, (6) overlooked feasible mitigation options for the project's traffic impacts, and (7) wrongly relied on deferred mitigation to address the project's impacts on regional transit.

The trial court rejected all Sierra Watch's arguments. But because we find some of Sierra Watch's claims have merit, we reverse.

BACKGROUND

In 1983, the County adopted the Squaw Valley General Plan and Land Use Ordinance to "guide development and growth within the [Olympic] Valley area" (formerly known as Squaw Valley) — a 4,700-acre area that lies a few miles northwest of Lake Tahoe in the Sierra Nevada. Three decades later, in 2011, Squaw Valley Real Estate LLC (Squaw) proposed the first specific plan under that general plan, which it called the Village at Squaw Valley Specific Plan.

In 2012, the County began environmental review for the proposed project under CEQA, and three years later, the County released a draft document, called a draft

Environmental Impact Report or draft EIR, analyzing the project's potential impacts. As described in the draft EIR, the proposed project would include two components: an 85-acre parcel called the Village — which would include, among other things, up to 850 lodging units, almost 300,000 square feet of commercial space, and over 3,000 parking spaces — and an 8.8-acre parcel called the East Parcel — which, for the most part, would serve to house up to 300 employees for the project. These two components, the draft EIR explained, would be built over 25 years.

After the County circulated the draft EIR, various individuals, organizations, and governmental bodies commented on the project. Sierra Watch was one of the commenters. According to Sierra Watch, the draft EIR's review of the project's potential environmental impacts was inadequate for several reasons. Among other things, Sierra Watch alleged that the draft EIR failed to sufficiently consider Lake Tahoe in its discussion of the environmental setting for the project and failed to adequately discuss and mitigate the project's impacts on fire evacuation plans for the region, noise levels, climate change, and traffic levels.

In 2016, the County issued the final EIR for the project, which included responses to the comments on the draft EIR. Months later, after receiving additional comments on the final EIR, the County provided additional post-EIR responses about the project. Six days after sharing these additional responses, the County's board of supervisors heard from project opponents and supporters at a public hearing and, at the close of the hearing, the board certified the EIR and approved the project. As part of the approval, the board acknowledged that the project would have some unavoidable significant environmental

impacts but found these impacts would be outweighed by the project's benefits. (See Cal. Code. Regs., tit. 14, § 15092, subd. (b)(2)(B).)¹

A month after the board approved the project, Sierra Watch filed a petition for writ of mandate and complaint, alleging the County and its board had violated CEQA. Raising largely the same issues it raised in its comment letter, Sierra Watch alleged, among other things, that the County failed to sufficiently consider Lake Tahoe in its discussion of the environmental setting and failed to adequately discuss and mitigate the project's impacts on regional fire evacuation plans, noise levels, climate change, and transportation.

Following a hearing, the trial court rejected all Sierra Watch's claims. The court afterward entered a judgment denying Sierra Watch's petition for writ of mandate and complaint.

Sierra Watch timely appealed.²

DISCUSSION

I

CEQA Background

CEQA serves "to ensure that public agencies will consider the environmental consequences of discretionary projects they propose to carry out or approve." (*Stockton Citizens for Sensible Planning v. City of Stockton* (2010) 48 Cal.4th 481, 488.) To that

¹ California Code of Regulations, title 14, sections 15000 to 15387 are ordinarily referred to as the CEQA Guidelines. We will use that shorthand to refer to these regulations going forward.

² Shortly after it filed its CEQA action, Sierra Watch also filed a related action challenging the County's conduct under the Brown Act. In that case too, the court rejected all Sierra Watch's claims. Sierra Watch afterward appealed the court's decision, which we considered in the separate case of *Sierra Watch v. Placer County et al.* (Aug. 24, 2021, C087892) [nonpub. opn.].

end, absent an exemption, an agency proposing to carry out or approve a project generally must conduct an initial study to determine “if the project may have a significant effect on the environment.” (CEQA Guidelines, § 15063, subd. (a).)

Depending on the initial study’s findings, the agency must then prepare either an EIR, a mitigated negative declaration, or a negative declaration. If “there is no substantial evidence that the project or any of its aspects may cause a significant effect on the environment,” the agency need only prepare a negative declaration that “briefly describ[es] the reasons that a proposed project . . . will not have a significant effect on the environment.” (CEQA Guidelines, §§ 15063, subd. (b)(2), 15371.) If substantial evidence shows the project may in fact have a significant environmental effect, but the project applicant agrees to changes that would avoid or mitigate them, then the agency may instead prepare a mitigated negative declaration. (CEQA Guidelines, § 15070, subd. (b).) And if substantial evidence shows the project may have a significant environmental effect and a mitigated negative declaration is inappropriate, as is true in this case, then the agency must prepare an EIR providing detailed information about the project’s potential environmental impacts. (Pub. Resources Code, §§ 21100 [state agency requirements], 21151 [local agency requirements], 21061 [defining an EIR].)

An EIR, as courts have often said, is “ “ ‘the heart of CEQA.’ ” ” (*Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 511.) It serves to “(1) inform the government and public about a proposed activity’s potential environmental impacts; (2) identify ways to reduce, or avoid, those impacts; (3) require project changes through alternatives or mitigation measures when feasible; and (4) disclose the government’s rationale for approving a project.” (*Protecting Our Water & Environmental Resources v. County of Stanislaus* (2020) 10 Cal.5th 479, 488.) To fulfill these purposes, an “EIR ‘must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.’ ” (*Cleveland National Forest Foundation*, at p. 511.) But that

does not mean an EIR must be exhaustive on all topics. Courts look “ ‘not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.’ [Citation.]” (*In re Bay-Delta etc.* (2008) 43 Cal.4th 1143, 1175.)

In reviewing an agency’s compliance with CEQA, courts review for abuse of discretion. (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 512 (*Sierra Club*)). Courts will find an agency abused its discretion if it either failed to proceed in a manner required by law or reached a decision not supported by substantial evidence. (*Ibid.*) “ ‘Judicial review of these two types of error differs significantly: While we determine de novo whether the agency has employed the correct procedures, “scrupulously enforc[ing] all legislatively mandated CEQA requirements” [citation], we accord greater deference to the agency’s substantive factual conclusions. In reviewing for substantial evidence, the reviewing court “may not set aside an agency’s approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable,” for, on factual questions, our task is “not to weigh conflicting evidence and determine who has the better argument.” [Citation.]’ [Citation.]” (*Ibid.*)

This distinction between de novo review and substantial evidence review is often straightforward. A contention that an agency has, for example, provided an insufficient amount of time for public comment is subject to de novo review. And a contention that an agency’s factual findings are wrong, as a different example, is subject to substantial evidence review. But questions about the relevant standard of review are not always so clear. “This is especially so when the issue is whether an EIR’s discussion of environmental impacts is adequate, that is, whether the discussion sufficiently performs the function of facilitating ‘informed agency decisionmaking and informed public participation.’ [Citation.]” (*Sierra Club, supra*, 6 Cal.5th at p. 513.) Those types of “inquir[ies] present[] a mixed question of law and fact” and are “generally subject to independent review.” (*Id.* at p. 516; see *id.* at p. 514 [“whether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of

the impact is not a substantial evidence question”].) But if “factual questions predominate, a more deferential standard is warranted.” (*Ibid.*)

With those principles in mind, we turn to Sierra Watch’s arguments.

II

The Lake Tahoe Basin

A. Description of the Environmental Setting

Sierra Watch’s first argument concerns the EIR’s discussion of the project’s “environmental setting.”

An agency must, in its EIR, “include a description of the physical environmental conditions in the vicinity of the project,” which is referred to as the project’s “environmental setting.” (CEQA Guidelines, § 15125, subd. (a).) This description of the environmental setting often focuses on the existing environmental conditions in the immediate vicinity of the project. But because “[k]nowledge of the regional setting is critical to the assessment of environmental impacts,” this description should also place “[s]pecial emphasis . . . on environmental resources that are rare or unique to that region and would be affected by the project.” (CEQA Guidelines, § 15125, subd. (c).) The agency must normally then use this description of the existing environmental setting as the “ ‘baseline’ against which predicted effects [of the project] can be described and quantified.” (*Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 447; see CEQA Guidelines, § 15125, subd. (a) [“This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.”].)

In Sierra Watch’s view, the EIR’s discussion of the environmental setting was inadequate because it failed to “meaningfully address[] the [Lake] Tahoe Basin.” In particular, Sierra Watch alleges, “the chapters on water quality and air quality setting, where readers would expect this information, barely touch on the subject.” We agree in part.

1. *Lake Tahoe and the EIR's Discussion of Water Quality*

We start with the EIR's discussion of Lake Tahoe and water quality. All parties appear to accept that Lake Tahoe is a unique and significant environmental resource that would be affected by the project. It is, as the United States Supreme Court has noted, “‘uniquely beautiful’ ” and a “ ‘national treasure’ ” famous for its water's “exceptional clarity.” (*Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency* (2002) 535 U.S. 302, 307.) It is also, as all parties here acknowledge, a resource that would be affected by traffic generated by the project — though the parties disagree on the extent of that effect. Because of these considerations, the CEQA Guidelines instruct, the County should have placed “[s]pecial emphasis” on Lake Tahoe in its discussion of the environmental setting. (CEQA Guidelines, § 15125, subd. (c) [“Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project.”].)

But, as Sierra Watch argues, the County's EIR never meaningfully discussed Lake Tahoe in its description of the environmental setting. In its discussion of the environmental setting for “Hydrology and Water Quality,” the draft EIR offered only one parenthetical reference to Lake Tahoe, stating: “The plan area is located within the low elevation portion of the approximately eight square mile Squaw Creek watershed, a tributary to the middle reach of the Truckee River (downstream of Lake Tahoe).” Nowhere in this sentence, or elsewhere, did the draft EIR discuss the importance of Lake Tahoe, its characteristics, or its current condition.

After Sierra Watch commented about the draft EIR's “fail[ure] to adequately describe the Tahoe regional setting,” the final EIR, in response, directed Sierra Watch to “[s]ee the Master Response regarding TRPA Thresholds.” TRPA is the Tahoe Regional Planning Agency and is “the agency assigned ‘to coordinate and regulate development in the [Lake Tahoe] Basin and to conserve its natural resources.’ [Citation.]” (*Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency, supra*, 535 U.S. at

p. 309.) According to the final EIR's "Master Response regarding TRPA Thresholds," TRPA tracks vehicle miles traveled (VMT) in the Lake Tahoe Basin and has established a cumulative "VMT threshold of 2,067,600" for the basin. And, the final EIR went on, although cumulative VMT in the basin is nearing this threshold, estimated to be 1,984,600 VMT in the summer of 2010 (or at about 96% capacity), the project's anticipated contribution to VMT in the basin (23,842 VMT on busy summer days) would not cause an exceedance of TRPA's cumulative threshold.

But little in that discussion addressed the shortcomings in the draft EIR. Like the draft EIR, the final EIR still never discussed the importance of Lake Tahoe or its current condition. It instead largely appeared to presume that Lake Tahoe needed no introduction, and so little needed to be said about it. And although the final EIR at least offered some figures about current and anticipated VMT around Lake Tahoe, it never clearly explained how all these figures related to the lake. The County instead only acknowledged the connection between VMT and Lake Tahoe's clarity after the final EIR was prepared, revealing six days before the board of supervisors approved the project that increased "VMT and its related effects — tailpipe emissions and crushed abrasives — have a direct role in lake clarity." But none of that was disclosed in the EIR. And so when the final EIR acknowledged the project would significantly increase traffic in the basin — adding, again, an estimated 23,842 VMT in the basin on busy days — the public had little if any ability to evaluate the relevance of that change to Lake Tahoe. That was improper. (See *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 954-955 [finding inadequate an EIR that only superficially described the existing condition of several lakes that would be impacted by a project; the EIR's discussion, which focused only on lake levels, undermined the agency's ability "to assess the impacts of the proposed project"]; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1122 [finding inadequate an EIR that omitted a meaningful discussion of the regionally important vineyards and wineries that

surrounded a project; “[d]ue to the inadequate description of the environmental setting for the project, a proper analysis of project impacts was impossible”].)

The County, its board, Squaw, and Squaw Valley Resort LLC (collectively, respondents), attempting to address these shortcomings, assert that the draft EIR’s “Hydrology and Water Quality chapter . . . noted that Lake Tahoe is a significant geographical feature in the region.” But that chapter of the EIR, again, said only this about Lake Tahoe: “The plan area is located within the low elevation portion of the approximately eight square mile Squaw Creek watershed, a tributary to the middle reach of the Truckee River (downstream of Lake Tahoe).” No reader of that language could reasonably interpret it to “note[] that Lake Tahoe is a significant geographical feature in the region.” Respondents’ contrary position, like the EIR’s analysis, simply appears to presume that Lake Tahoe is a known quantity and so the mere mention of the lake is sufficient to convey all that is necessary. It is not.

Respondents also challenge the need for a more robust discussion of Lake Tahoe in the environmental setting. No additional discussion was required, they reason, because “[t]he Project did not propose development in the Tahoe Basin . . . and would not result in stormwater runoff or other pollutants draining into the lake.” But respondents’ first point about the location of the development ignores the “critical” importance of the regional setting. Again, as the CEQA Guidelines instruct, “[k]nowledge of the regional setting is critical to the assessment of environmental impacts.” (CEQA Guidelines, § 15125, subd. (c); see *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 575 (*Citizens of Goleta Valley*) [“an EIR may not ignore the regional impacts of a project proposal, including those impacts that occur outside of its borders; on the contrary, a regional perspective is required”].) Respondents’ second point is less persuasive still. They argue the project “would not result in stormwater runoff or other pollutants draining into the lake,” but their own post-EIR responses suggest otherwise. In these responses, the County plainly demonstrated that increased VMT resulting from the

project would increase the amount of pollutants draining into Lake Tahoe. The County noted, for example, that “abrasives” applied to roads around Lake Tahoe “can be crushed by tires and washed into the lake by stormwater runoff.” And in part for that reason, the County explained, increased VMT in the basin has a “direct role in lake clarity” because it is associated with an increased amount of these abrasives (which are pollutants) washing into the lake. (See *People v. Ramsey* (2000) 79 Cal.App.4th 621, 629 [“Concrete, rebar, sand, and similar waste materials are pollutants” under state and federal water law].)

Respondents lastly, on the topic of VMT, contend “the EIR addressed the issue at length.” To make this showing, respondents cite two parts of the EIR. One part noted that “TRPA maintains several environmental carrying capacities pertaining to traffic,” including one concerning VMT “for the entire basin.” (See Gov. Code, § 66801, subd. (b) [TRPA has “the power to establish environmental threshold carrying capacities and to adopt and enforce a regional plan and implementing ordinances that will achieve and maintain such capacities. . .”].) Another part, which we have discussed, noted that VMT in the summer of 2010 was estimated to be 1,984,600 per day in the basin, the project would add an estimated 23,842 VMT per day, and, putting these two figures together, total daily VMT under project conditions would be 2,008,442 VMT and thus lower than TRPA’s cumulative threshold of 2,067,600 VMT. But neither of these portions of the EIR discussed or even intimated any relationship between VMT and Lake Tahoe’s clarity and water quality. Nor did either of these portions of the EIR supply any description of the lake. And so, again, when the final EIR acknowledged the project would significantly increase traffic in the basin, the public had little if any ability to evaluate the relevance of that change to Lake Tahoe. We find the EIR was inadequate as a result. (See *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, *supra*, 60 Cal.App.4th at p. 1122; see also *Sierra Club*, *supra*, 6 Cal.5th at p. 521 [finding inadequate an EIR that “ma[de] it impossible for the public to translate the bare numbers

provided into adverse health impacts or to understand why such translation is not possible at this time (and what limited translation is, in fact, possible)”.)]

2. The Lake Tahoe Basin and the EIR’s Discussion of Air Quality

We turn next to the EIR’s discussion of the Lake Tahoe Basin and air quality.

The draft EIR’s discussion of baseline air quality conditions was a little more substantial. Among other things, it noted that the federal Environmental Protection Agency and state Air Resources Board have established air quality standards for six so-called “criteria air pollutants”: ozone, carbon monoxide, nitrogen oxides, sulfur oxides, lead, and particulate matter (of which there are two relevant types: respirable particulate matter (or PM₁₀), which has a diameter of 10 micrometers or less, and fine particulate matter (or PM_{2.5}), which has a diameter of 2.5 micrometers or less). It also explained that concentrations of these pollutants “are used as indicators of ambient air quality conditions,” noted that vehicle traffic is one of the main sources for many of these pollutants, and then summarized air quality data from 2011 to 2013 from four monitoring stations in and around the Lake Tahoe Basin. The final EIR later added, as we have discussed, that the project is expected to result in increased vehicle traffic in the Lake Tahoe Basin (with an estimated daily addition of 23,842 VMT on busy days), supplied data about existing vehicle traffic from the summer of 2010 (estimated daily VMT of 1,984,600), and noted TRPA’s cumulative threshold for VMT in the basin (2,067,600 VMT).

Sierra Watch challenges this discussion for several reasons, principally faulting the draft EIR for not discussing the “bi-state regulatory regime that governs the Basin,” the basin’s “environmental carrying capacity,” or “VMT in the Basin.” But all these objections appear to have been resolved in the County’s responses in the final EIR. In these responses, the County discussed the agency with “jurisdiction over all development within the Basin in both California and Nevada” (namely, TRPA), described TRPA’s “environmental carrying capacity” for vehicle traffic (namely, its cumulative threshold of

2,067,600 VMT), and noted current daily VMT in the basin and anticipated daily cumulative VMT with the project. Sierra Watch never, in its opening brief, explains why these responses were insufficient. It instead waits until its reply brief to complete its argument, saying there that the new information in the final EIR “came too late in the administrative process” and was insufficient to understand the project’s impacts on the basin’s air quality. But because Sierra Watch raises these arguments for the first time in its reply brief, we find them forfeited. (*Neighbours v. Buzz Oates Enterprises* (1990) 217 Cal.App.3d 325, 335, fn. 8.)

Sierra Watch also contends the draft EIR’s discussion of the environmental setting failed to “describe the current air quality conditions” in the basin and instead “merely references data from two monitoring stations in the Basin.” But Sierra Watch never explains why the County’s summary of data about the basin’s air quality conditions (which came from three, not two, monitoring stations in the basin) failed to sufficiently “describe the current air quality conditions.” Perhaps Sierra Watch had a reasonable point to make here, but because it failed to explain itself, we treat the point as forfeited. (*Badie v. Bank of America* (1998) 67 Cal.App.4th 779, 784-785 (*Badie*) [“When an appellant . . . asserts [a point] but fails to support it with reasoned argument and citations to authority, we treat the point as waived”].)

Finally, in terms of the environmental setting, Sierra Watch asserts that more information was required to supply “complete information on this environmental setting.” But it never identifies the type of information it believes is lacking and, in any event, it asks for too much in seeking “complete information.” As courts have long made clear, an EIR “ ‘ ‘need not include all information available on a subject.’ ” (*North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors* (2013) 216 Cal.App.4th 614, 639; see also *In re Bay-Delta, supra*, 43 Cal.4th at p. 1175 [courts look “ ‘not for perfection but for adequacy, completeness, and a good faith effort at full disclosure’ ”].)

B. *Consideration of Impacts*

Sierra Watch next, still on the topic of Lake Tahoe Basin, contends the EIR failed to “meaningfully assess[] the Project’s [traffic] impacts on” Lake Tahoe and the basin’s air quality. We agree.

The EIR provided mixed messages on the project’s potential impacts to Lake Tahoe and the basin from increased traffic. On the one hand, it said the project would not result in an exceedance of TRPA’s cumulative VMT threshold for the Lake Tahoe Basin. But on the other hand, it showed the project would likely exceed TRPA’s project-level threshold of significance for traffic in the basin. The EIR noted that TRPA has not consistently applied any particular threshold when evaluating project-level impacts, but, after reviewing several EIRs from TRPA, it found two “used a daily trip generation threshold of 200 trips as a significance threshold,” one “used a criterion of 1,150 VMT as a significance threshold,” and another used a flexible significance criterion that considered whether an increase in VMT would be “substantial in relation to the [cumulative] VMT threshold standard.” Under the first two thresholds of significance — the VMT and daily-trip thresholds — the project here would plainly have a significant impact. It would result in daily VMT over 2,000 percent above the 1,150-VMT threshold and daily trips over 500 percent above the 200-daily-trip threshold.³ But under the third described threshold of significance, which eschewed a numerical threshold in favor of a more flexible standard focused on “substantial” increases in VMT, the significance of the project’s impacts is less straightforward. We can note, however, that the project would

³ The EIR, at one point, said the project would generate about 1,353 daily trips into the basin. But later on, it suggested the trips into the basin would actually be somewhat lower because a measure intended to address transit impacts would expand transit services. It never, however, estimated the potential reduction in daily trips resulting from this mitigation measure.

increase daily VMT in the basin by about 1.2 percent and would reduce the available VMT capacity under TRPA's cumulative threshold by about 28.7 percent.⁴

Rather than follow one of TRPA's approaches, however, the EIR simply declared that TRPA's thresholds were inapplicable because the project is not located in the basin. But if TRPA standards were inapplicable, what standards did apply? The EIR never answered the question. Nor did it supply any meaningful information to evaluate the significance of a daily addition of 23,842 VMT on Lake Tahoe's water quality and the basin's air quality. Nor did it even offer any clear conclusion on whether this additional traffic would significantly impact Lake Tahoe and the basin. It instead simply supplied some discussion about TRPA's thresholds of significance and then said "the TRPA thresholds are not used as standards of significance in this EIR."

We find this discussion inadequate. The EIR needed to determine whether the project's impacts on Lake Tahoe and the basin were potentially significant — not simply summarize, and then declare inapplicable, another agency's framework for evaluating these types of issues. Even supposing the EIR actually reached a conclusion about the project's impacts, we would still find it defective. Under CEQA, an agency's conclusion as to whether a given impact is significant is not enough; "there must [also] be a disclosure of the 'analytic route the . . . agency traveled from evidence to action' " — something that never occurred in the EIR here. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 404.)

Making matters worse, the EIR's offered figures on VMT underestimated expected cumulative VMT in the basin. The final EIR, again, said that cumulative VMT

⁴ Absent the project, TRPA's cumulative threshold allowed room for 83,000 additional VMT (2,067,600 VMT - 1,984,600 VMT = 83,000 VMT). But with the project, which would add 23,842 VMT, that capacity would fall to 59,158 VMT — or by about 28.7 percent.

in the summer of 2010 were 1,984,600 and the addition of the project's estimated VMT would push that cumulative figure to 2,008,442 in the future. But in reaching these figures, the EIR improperly ignored the expected addition of VMT from other anticipated projects, including another large development the County was itself considering approving. (See CEQA Guidelines, § 15065, subd. (a)(3) [in determining whether a project's impacts are "cumulatively considerable," agencies must consider "the incremental effects of an individual project . . . in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects"].)

Although the County eventually, after the final EIR was prepared, recognized its failure to account for the expected addition of VMT from other projects and acknowledged the "important" connection between VMT and Lake Tahoe, its belated discussion of these issues came too late. Six days before the County's board of supervisors certified the EIR, and several months after the preparation of the final EIR, the County provided additional information about the project's impact on Lake Tahoe's water quality. In these post-EIR responses, the County acknowledged for the first time that "[t]he connection between VMT and Lake clarity is important, as vehicle emissions and roadway fires are known contributors to loss of clarity." It also acknowledged the connection between VMT and air quality, explaining that TRPA has historically "linked higher VMT to," among other things, "increased airborne concentrations of particulate matter that could affect regional and subregional visibility and human health." And, at least implicitly, it acknowledged too that the EIR's calculation of expected cumulative VMT in the basin should not have ignored the expected VMT from other anticipated projects.

After acknowledging these issues and updating its VMT estimates, the County then explained why, in its view, the increased traffic resulting from the project would not adversely impact Lake Tahoe or the basin. To start, the County wrote, "a direct link

between a specific number of VMT and attainment of Lake clarity goals has not been established,” and, as a result, even TRPA has acknowledged the need to further evaluate the relationship between the two. In addition, based on its review of an EIR prepared for a different project, the County opined that technological advances emphasize the need for further evaluation of TRPA’s standards. According to the County, improvements in technology since TRPA established its VMT thresholds — including improvements in limiting stormwater runoff into the lake and reducing tailpipe emissions — could mean that TRPA’s thresholds, which were initially developed decades ago, are now outdated. Given these considerations, the County concluded, because “the relationship between a specific VMT and lake clarity is not well understood,” and because the “addition of the project’s VMT to existing Tahoe Basin VMT would not be significant even if the [arguably outdated] TRPA VMT threshold was used as a threshold of significance for project impacts,” the final “EIR conclusion is accurate and supported by evidence in the record.”⁵

All this information, however, came far too late in the CEQA process. CEQA requires agencies to discuss a project’s potentially significant impacts in the draft EIR and final EIR. (CEQA Guidelines, § 15120, subd. (c); see also *id.*, §§ 15125, 15126.2.) And to the extent an agency omits an adequate discussion of a project’s potential impacts in its EIR, it cannot afterward “make up for the lack of analysis in the EIR” through post-EIR analysis. (*Save our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 130 [project information revealed in an “[e]rrata” shortly

⁵ On this logic, a project that added 82,999 daily VMT to the basin would have an insignificant impact because total estimated VMT (which would now be 2,067,599) would remain one VMT below the cumulative threshold of 2,067,600 VMT; yet the next project, even if it added only 10 daily VMT to the basin, would result in an exceedance of the cumulative threshold and thus have a significant impact. Perhaps that is a supportable conclusion. Perhaps not. We need not address this issue here.

before project approval “d[id] not make up for the lack of analysis in the EIR”].) To find otherwise, after all, would deny the public “an ‘opportunity to test, assess, and evaluate the [newly revealed information] and make an informed judgment as to the validity of the conclusions to be drawn therefrom.’ [Citation.]” (*Id.* at p. 131; see also *Cleveland National Forest Foundation v. San Diego Assn. of Governments*, *supra*, 3 Cal.5th at p. 511 [an EIR must itself “ ‘include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project’ ”].)

Respondents never appear to argue otherwise on this last point. They instead contend the County’s post-EIR responses only “elaborated on and confirmed” information in the EIR. But we find differently. Again, in these post-EIR responses, the County acknowledged and analyzed, apparently for the first time, the potential impacts from the project’s generation of an additional 23,842 VMT per day in the Lake Tahoe Basin. In this way, these responses did not merely elaborate on and confirm the EIR’s conclusions; they instead supplied critical analysis and conclusions that were initially absent from the EIR.

Sierra Watch, apart from challenging the County’s ability to rely on these late responses, also contends these post-EIR responses were substantively flawed for several reasons. But the alleged inadequacy of the County’s post-EIR comments are beside the point under CEQA, as “the inadequacy of [an agency’s] responses to . . . comments [on the final EIR] is not sufficient to render approval of the CEQA Project ineffective or contrary to law.” (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1111.) And so, although we agree the EIR’s analysis was flawed, we will not separately address the alleged inadequacy of these post-EIR comments.

III

Wildfire Impacts

Turning to wildfire impacts, Sierra Watch, for eight reasons, contends the EIR failed to “adequately analyze the obvious fire risks created by the Project.” We agree with one of its arguments.

Agencies performing review under CEQA must, relevant here, analyze “any potentially significant direct, indirect, or cumulative environmental impacts of locating development in areas susceptible” to “wildfire” and other “hazardous conditions.” (CEQA Guidelines, § 15126.2, subd. (a).) In performing this review, the CEQA Guidelines instruct, agencies may consider among other topics whether the project would “[i]mpair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.” (CEQA Guidelines, § 15063, subd. (f); *id.*, Appendix G, VIII, g.)

To comply with this requirement, the draft EIR here considered, among other things, whether the project would impair implementation of an emergency evacuation plan. It found it would. The fire evacuation protocol applicable to all development in Olympic Valley, the draft EIR noted, “calls for evacuating via Squaw Valley Road to [State Route (SR)] 89; or, if it is not possible to leave the Valley, driving to the Squaw Valley Ski Resort parking lot.” But, the draft EIR said, lane closures and increased traffic expected during project construction “could cause or contribute to temporary increases in traffic levels” and could, as a result, “interfere” with this evacuation protocol. To address this potentially significant impact, the draft EIR required the preparation of a “Construction Traffic Management Plan” as mitigation.

After commenters faulted the draft EIR for failing to evaluate an evacuation scenario under peak traffic conditions, the County offered further analysis in the final EIR. It commissioned a consultant that found the project would, under conservative estimates and peak traffic conditions, increase the time it took for all vehicles to leave

Olympic Valley from 2.9 hours to 5 hours — an increase of over 70 percent. And considering other expected development in the region, the consultant found the time for evacuation would increase to 6.6 hours and, in a worst-case scenario, to 10.7 hours. But the final EIR discounted the likelihood of this occurring, saying the time estimates were based on several “highly unlikely” assumptions, including “that 100 percent of all homes and lodging in Olympic Valley would be occupied at any one time” and “that the entire Valley would be at risk simultaneously.” It then noted that several considerations should allow for a more orderly evacuation in the event a large-scale evacuation were necessary. First, the EIR said, authorities could often be expected to order the evacuation well before the fire neared Olympic Valley because “[d]ays of lead time are often available to assess risk and make evacuation determinations.” And second, it added, even “[i]f a wildfire ignited in or near Olympic Valley required a more rapid response, there are shelter in place options (e.g., parking areas, buildings designed for fire resistance, the golf course) that are distant from fire fuels and that can temporarily hold people as an evacuation proceeds.” But, the EIR went on, a large-scale evacuation with “the entire Valley . . . at risk simultaneously” was “highly unlikely”; “[t]he more likely scenario is that evacuation orders would encompass only the parts of the Valley at high risk, and a complete rapid Valley evacuation would not be needed.”

Sierra Watch challenges the County’s analysis on several grounds. First, it contends the County’s estimation of “a 5- to 10.7-evacuation time by itself constitutes evidence of a significant impact, given the ability of a wind-driven fire to consume the Project area in just a few hours.” In support, it references a 2014 fire that, according to the fire chief for the Squaw Valley Fire Department (the Fire Department), made a “10 mile northward run during the course of a few hours one night.” We reject the argument. Even if the referenced 2014 fire traveled 10 miles over one night, nothing in the record shows that this fire occurred in an area comparable to the project area or Olympic Valley. The 2014 fire, notably, never reached Olympic Valley. And although the location of that

fire was perhaps conducive to rapid spread, the record contains substantial evidence about the difficulty of a fire to spread in Olympic Valley. According to the Fire Department's fire chief, for example, "[Olympic] Valley is pretty favorable in terms of fuels and topography and the unlikely host event for a large wildland fire." He explained that, surrounding the developed area, "fuels are pretty discontinuous," "large areas . . . are basically open rock," and "lots of ski runs that are relatively low, grassy vegetation give us an opportunity to interrupt the fire[']s . . . progress and try to control it before it reaches the developed area." He added that, in most of the developed area and immediately surrounding it, "there is a significant amount of clearance between the forested area, the heaviest fuel loads[,] and the areas that are developed for commercial use." "So because of that," he concluded, "my feeling is that a mass evacuation of [Olympic] Valley is a very, very, very unlikely event."

Considering this evidence, together with our deferential review of an agency's factual findings and its established thresholds of significance, we decline to conclude that the EIR's estimation of "evacuation time by itself" required the County to find the project's potential impacts significant. (See *Sierra Club, supra*, 6 Cal.5th at p. 512 [a "reviewing court "may not set aside an agency's approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable," for, on factual questions, our task is "not to weigh conflicting evidence and determine who has the better argument" ' ']; *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068 ["CEQA grants agencies discretion to develop their own thresholds of significance"].)

Second, Sierra Watch contends the EIR is internally inconsistent in finding "the Project would cause significant traffic during non-emergency conditions" but would not "do so during an emergency evacuation." We disagree here too. The EIR, in its discussion of transportation-related issues, said project-generated traffic would lead to more traffic delays and higher traffic volumes in certain areas during "summer Friday

p.m. peak hour” conditions. And it found these changes were enough to be considered significant traffic impacts. But this conclusion, in a part of the EIR discussing transportation-related issues, did not obligate the County to also find, in a separate part of the EIR discussing fire-related issues, that impacts to emergency evacuation plans would also be significant. Whether a given impact is significant depends on the context. An agency, for example, might find a traffic delay of 2.5 seconds significant in some contexts when considering impacts to traffic conditions (as the County did here), and, without being fatally inconsistent, also find a similar delay insignificant when considering impacts to emergency evacuation plans. Or to put it differently, as the EIR here indicated, an agency might find *time* the sole relevant consideration when evaluating impacts to traffic conditions, but then find *public safety* the guiding consideration when evaluating impacts to emergency evacuation plans. Again, the context matters. And Sierra Watch has not shown the County abused its discretion merely because its thresholds of significance for fire-related impacts were not equivalent to its thresholds of significance for transportation-related impacts. (*Save Cuyama Valley v. County of Santa Barbara, supra*, 213 Cal.App.4th at p. 1068 [“CEQA grants agencies discretion to develop their own thresholds of significance”].)

Sierra Watch’s one cited case in support of its position, *East Sacramento Partnerships for a Livable City v. City of Sacramento* (2016) 5 Cal.App.5th 281, 300 (*East Sacramento Partnerships*), does not say differently. In Sierra Watch’s telling, we held there “that a finding of traffic significance outside a city’s core area belies a finding of insignificance inside the core area under similar conditions.” But our holding was more complicated than that. The EIR there was not defective simply because it treated traffic impacts outside and inside the city’s core area differently. Indeed, as we noted, “‘the significance of an activity may vary with the setting.’ [Citation.]” (*Id.* at p. 302.) The EIR was defective, instead, because it presumed that impacts permitted under the city’s general plan were necessarily insignificant impacts. According to the EIR, because

the city’s general plan permitted “ ‘stop and go’ ” traffic in the city’s core area, a project that increased traffic to stop-and-go levels in that area would not have a significant impact — no matter what the other evidence showed. (*Id.* at pp. 300, 302.) But, as we explained, that a general plan allows certain impacts does not relieve an agency of its obligation to consider substantial evidence indicating that these impacts may still be significant. (*Id.* at pp. 302-303; see also CEQA Guidelines, § 15064, subd. (b)(2).) None of this reasoning, however, furthers Sierra Watch’s argument here. Unlike in *East Sacramento Partnerships*, the County here did not conflate permissible impacts under a general plan with insignificant impacts. And the County was not, as discussed, required to apply the same thresholds of significance when considering two very different types of issues.

Third, Sierra Watch asserts the County failed to disclose two “crucial” documents. The first is a memorandum from one of the County’s consultants that provided the estimated evacuation times discussed above. According to Sierra Watch, the County neither provided the memorandum nor offered “a comprehensive summary of its underlying assumptions or data.” But we find no inadequacies here. First, an agency need not provide copies of all sources it relies upon in its EIR. (CEQA Guidelines, § 15148.) And second, although Sierra Watch claims the County withheld relevant assumptions or data from the memorandum, it never explains why it believes that to be the case. We thus treat the point as forfeited. (See *Badie, supra*, 67 Cal.App.4th at pp. 784-785 [“When an appellant . . . asserts [a point] but fails to support it with reasoned argument and citations to authority, we treat the point as waived”].)

Sierra Watch similarly contends the final EIR is inadequate because it noted that Squaw was preparing an “Emergency Preparedness and Evacuation Plan” (Evacuation Plan) but did not include a copy of the plan. It reasons that, under CEQA, “information essential to the environmental analysis must appear in the EIR itself.” But the EIR summarized the type of information that would be included in the Evacuation Plan and,

in the end, much of the information included in the Evacuation Plan about evacuation procedures was in fact included in the EIR. Both the EIR and the Evacuation Plan, for example, discussed procedures for exiting Olympic Valley during an evacuation and both, in the event evacuation was not possible, said guests could shelter in place in parking areas and buildings designed for fire resistance. The Evacuation Plan, we acknowledge, includes more information on evacuation than the EIR. But Sierra Watch never explains why the additional information included in the Evacuation Plan was, as it alleges, “information essential to the environmental analysis” in the EIR. Nor does it allege that the EIR even relied on the Evacuation Plan in its environmental analysis. It instead asserts only that the final “[EIR notes that [Squaw] ‘is preparing’ an Emergency Preparedness and Evacuation Plan.” But that is not enough to show error.

Fourth, Sierra Watch contends the EIR underestimated evacuation times because it wrongly assumed emergency responders would provide traffic control at key intersections. On this point, we agree. In estimating evacuation times, the County’s consultant assumed, among other things, that emergency responders would “provide traffic control at key intersections.” It did so, the consultant explained, “[p]er direction from” the Fire Department’s fire chief. But the fire chief later wrote that the opposite was true — his department specifically advised the consultant that this assumption was “highly unrealistic” because “[a]ny available public safety personnel would be tasked with much higher priority tasks and even then, the numbers of public safety personnel would likely be inadequate.” The County’s consultant thus, it seems, estimated evacuation times in part based on a miscommunication with the Fire Department. And the upshot of this misunderstanding was that the consultant (and the EIR) underestimated evacuation times in the event of an evacuation.

We find this underestimation to be significant. The County, notably, acknowledged that increased traffic along Squaw Valley Road and State Route 89 could, at some point, significantly interfere with emergency evacuation plans. That

consideration led it to conclude that increased traffic from project construction would significantly interfere with emergency evacuation plans — though, for some reason, it found differently when considering increased traffic from project operations (that is, traffic from guests and employees). Its reason for treating increased traffic from project construction and increased traffic from project operations differently is not entirely clear from the record — which is perhaps an issue in itself. But it is clear at least that, at some level of congestion, the County believed increased traffic along Squaw Valley Road and State Route 89 would significantly interfere with the implementation of evacuation plans. And it is also clear that, with the County arguably close to finding that increased traffic from project operations could be significant, the EIR’s accidental misrepresentation of estimated evacuation times prevented the County’s board and the public “from gaining a true perspective on the consequences of approving the[] project[.]” (*San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 80.)

Attempting to downplay this issue, respondents note that the Fire Department’s fire chief ultimately supported the evacuation plan prepared for the project (the Evacuation Plan), and so, they suggest, we need not concern ourselves with his objections about the EIR’s calculation of evacuation times. But whether the fire chief accepted the evacuation plan or not, the EIR’s misleading estimation of evacuation times is still that — a misleading estimation of evacuation times that prevented informed decisionmaking. We find the EIR inadequate in this respect as a result.

Fifth, Sierra Watch asserts that the EIR, in estimating evacuation times, wrongly considered only the time necessary to reach State Route 89. In its view, the EIR should have also considered the time necessary to reach the intersection of State Route 89 and Interstate 80, about nine miles north of Olympic Valley, because these nine miles of State Route 89 are “regularly gridlocked” and lie “in a heavily forested canyon that is also a high fire severity zone.” But Sierra Watch cites little in the record to support its argument. It neither shows that the relevant portion of State Route 89 lies “in a heavily

forested canyon” nor shows that this area, apart from a small portion of State Route 89 that borders the project, is a “high fire severity zone.” We reject its largely unsupported argument as a result.

Sixth, Sierra Watch faults the EIR for “fail[ing] to estimate response times for emergency personnel to access the Project site during a wildfire evacuation” — information it deems “essential” to evaluate the project’s impacts. We reject the argument. The EIR noted that emergency personnel currently provide services to Olympic Valley, including during peak traffic levels, and it found that “the proposed project [would] cause[] little change from the existing condition.” It reasoned that “[r]oadway emergency access would . . . continue to be ensured through various methods, such as emergency vehicles driving on the road shoulder as needed, or traffic control personnel (typically present during peak traffic periods) moving cars to the edge of the roadway ahead of the emergency vehicle.” A new fire substation on the west end of Olympic Valley, the EIR went on, would further minimize any potential impediment to emergency vehicle access. One of the mitigation measures for the project requires this substation to be operational once 50 percent of the project’s “condo hotel units” are completed, and, according to the EIR, this substation would “provide the opportunity to have emergency response personnel and equipment in the west end of the Valley, reducing the potential for traffic on Squaw Valley Road to influence emergency response.”

Considering these findings, which Sierra Watch never even acknowledges in its opening brief, we decline to find it was “essential” for the County to estimate response times for emergency personnel. Quantitative analyses are often helpful and at times necessary, to be sure; but Sierra Watch has not shown a quantitative analysis was necessary here. As our high court has explained, “[a] project opponent or reviewing court can always imagine some additional study or analysis that might provide helpful information.” (*Laurel Heights Improvement Assn. v. Regents of University of California*,

supra, 47 Cal.3d at p. 415.) But “[i]t is not for them to design the EIR” and “[t]hat further study . . . might be helpful does not make it necessary.” (*Ibid.*)

Seventh, Sierra Watch contends the EIR’s conclusions relied on the improper assumption “that evacuations would proceed in an orderly fashion and often have ‘[d]ays of lead time.’ ” Its objection relates to the EIR’s statement that emergency personnel often have “[d]ays of lead time” after learning of a potential fire risk and so often could, if appropriate, issue early evacuation orders. As Sierra Watch notes, the Fire Department’s fire chief debated that conclusion in a written comment. According to his letter, although “it might be semantically accurate to say that there are ‘days of lead time’ available to assess risk and model potential fire behavior and evacuation scenarios, evacuation of a community is rarely the calm, orderly picture that [the EIR supposes]. People are reluctant to leave and tend to do so at the last minute when emotions are high and conditions are terrible.” But although, as these comments show, the fire chief initially challenged the EIR’s findings, he later warmed up to them. On the day of the hearing for the project, he again said people often deny the risk from fire initially and then leave at the last minute. But he then expressed confidence in his department’s ability to better communicate fire risks in the future to address this problem. Considering the whole of the fire chief’s comments, we decline to find that they show the EIR’s conclusions to be improper.

Finally, Sierra Watch attacks the EIR’s reliance on shelter-in-place options during a fire, asserting that “[s]heltering in place during a wildfire in a ‘very high fire severity zone’ unquestionably exposes people to serious safety risks.” We reject the argument. According to the EIR, several shelter-in-place options for the project — including “buildings designed for fire resistance” — would allow people to stay “distant from fire fuels” and thus distant from any fire. Squaw’s consultant added that these buildings would be designed “to serve that function, not just for our guests, but for others in the Valley in the event that ever becomes necessary.” And the Fire Department’s fire chief,

expressing support for sheltering in place, said “sheltering in place is a very, very favorable way of approaching the situation in [Olympic] Valley.” This favorable view of sheltering in place is presumably why this tactic was, even before the County approved the project, a central component of the “established *Wildland Fire Evacuation Plan*” that “applies to all development in [Olympic] Valley.”

Attempting to counter these findings, Sierra Watch suggests that those sheltering in place could be exposed to “poor air quality” during a fire and then faults the EIR for failing to analyze this potential impact. But many of the shelter-in-place options described in the EIR are, again, buildings designed for fire resistance, and Sierra Watch cites nothing in the record suggesting that poor air quality following a fire could adversely affect those sheltering in these buildings. Nor does it allege or suggest that these buildings would have insufficient capacity to house those sheltering in place in the event of a fire. Nor does it acknowledge that sheltering in place was a central part of the evacuation plan in place for Olympic Valley even before the project. Nor, finally, does it show that this issue was even raised at the administrative level. It instead simply presumes that “[s]heltering in place during a wildfire in a ‘very high fire severity zone’ unquestionably exposes people to serious safety risks,” like exposure to poor air quality. But because Sierra Watch has not made a sufficient showing of this alleged risk for the project area, we decline to find the EIR inadequate in this respect. (See *Friends of Riverside’s Hills v. City of Riverside* (2018) 26 Cal.App.5th 1137, 1152 [“evidence of environmental impacts must be founded upon *facts* in the administrative record, it cannot be based on ‘. . . speculation’ ”].)

IV

Noise Impacts

Sierra Watch next contends the EIR failed to adequately analyze and mitigate construction noise impacts. Although we reject most of its arguments, we agree the EIR’s analysis and mitigation of construction noise impacts are inadequate.

A. Analysis of Impacts

We start with Sierra Watch's several arguments concerning the EIR's analysis of construction noise impacts.

First, Sierra Watch asserts, "the EIR does not disclose the duration of construction noise at any specific location" and is improper for that reason. We reject the argument. To begin, the EIR did disclose the duration of construction noise for at least part of the project. It estimated that construction time for the East Parcel, a relatively small part of the project where employees would be housed, would take between 24 and 30 months. But that said, it is at least true that the EIR did not estimate the duration of construction noise for the Village, which involved the bulk of the project.

Even so, we decline to find the EIR inadequate for that reason. The EIR sufficiently demonstrated why specific detail about the duration of construction noise at each specific location in the Village was not possible. The project would be constructed over 25 years. It included no specific plan on where buildings would be located, opting instead for "flexibility regarding the placement and design of individual buildings." It included no "specific construction schedule" because the "sequence and pace for constructing various land uses and facilities would be market driven." And it emphasized the potentially sporadic pace of development, noting that some years may have no construction and other years, in contrast, may involve simultaneous construction of several "elements" of the project. For these types of reasons, the EIR explained, "it would not be practical, and would require a great deal of speculation, to identify specific noise levels for every single receptor."

Sierra Watch appears to acknowledge, without objection, that these considerations make the sequence and pace of construction largely unknown, but it maintains that the EIR at least should have described the duration of construction for each part of the project. We find differently. The County perhaps could have speculated how long construction noise would occur over the next 25 years at each specific location in the

Village. Perhaps, for example, it could have presumed where buildings would ultimately be located in the Village, and then assumed that all buildings in any given part of the Village would be constructed at the same time — resulting in a shorter period of construction noise. Or perhaps it could have assumed something else altogether. But any estimate, as far as we can tell, would entail a fair bit of speculation. As the EIR explained, the “sequence and pace for constructing various land uses and facilities” would depend on market considerations over decades. And as it further explained, even the specific location of the project’s buildings is not yet clear. So while Sierra Watch may have preferred detailed estimates about construction duration in each specific location in the Village, the EIR was not required to supply speculative estimates. A lead agency, after all, need not speculate about project impacts (see CEQA Guidelines, § 15145) and instead may discuss potential project impacts at a “level of specificity . . . determined by the nature of the project and the rule of reason” (*Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 234 Cal.App.4th 214, 233; see also CEQA Guidelines, § 15146).

Given these considerations, we decline to find that the absence of estimates of construction duration for the Village is fatal to the EIR. And we find that true even though the EIR offered an estimate for the East Parcel of 24 to 30 months. On that last point, Sierra Watch maintains that because the County provided an estimate of construction time for the East Parcel, it also needed to provide an estimate of construction time for the Village. But the East Parcel and the Village, as the EIR made clear, were not comparable. The EIR noted that the Village consisted of two general areas (the “Village Core” and the “Village Neighborhood”), said that the location of the buildings in each area was “flexib[le],” and explained that the assigned building density for lots within each area could change up to 25 percent, as the project allowed “for transfer of density” up to 25 percent “between lots within each planning area (i.e., Village Core or the Village Neighborhoods).” All those features, the EIR indicated, tended to make estimating

construction noise in any given part of the Village problematic — far more so than for the smaller and more predictable East Parcel, which would be about a tenth of the size of the Village. Considering these distinctions, that the County could estimate construction times for the East Parcel does not necessarily mean it could also estimate construction times for the Village.

Sierra Watch next asserts that “the EIR does not analyze the Project’s full geographic range of noise impacts, for it ignores activities occurring farther than 50 feet from sensitive receptors.” We agree on this point. The EIR discussed noise impacts to “sensitive receptors” lying within 50 feet of expected construction activity. It explained that, “at 50 feet from the acoustical center of the construction site,” daytime “construction-related activities . . . could result in noise levels of up to 94 dBA L_{eq} and 98 dBA L_{max} ” — louder than a gas lawn mower at three feet.⁶ It added that, “at 50 feet from the construction site,” “[n]ighttime construction activities could result in noise levels of up to 79 dB[A] L_{eq} and 84 dB[A] L_{max} ” — about as loud as a garbage disposal at three feet. Based on these considerations, the EIR concluded that these daytime and nighttime noise levels could significantly disturb certain “sensitive receptors” sitting at or within 50 feet of expected construction activity. But, with one exception for a boarding school, the

⁶ The terms dB, dBA, L_{eq} , and L_{max} are shorthand for decibels (dB), A-weighted decibels (dBA), A-weighted equivalent sound level (L_{eq}), and A-weighted maximum sound level (L_{max}). Because these terms are probably unfamiliar to most, we will briefly summarize the meaning of each. Decibels are the units of measurement for sound intensity. Because knowing a sound’s decibel level does not in itself adequately characterize how humans perceive the sound, the sound is often described in terms of A-weighted decibels — which, unlike unweighted decibels, account for the human ear’s varying sensitivity to different frequencies. To account for varying sound levels over time, the sound is also often described in terms of the A-weighted equivalent sound level — which represents the average sound level over a specified period — and in terms of the A-weighted maximum sound level — which represents the highest sound level over a specified period.

EIR never considered impacts to sensitive receptors lying outside this 50-foot zone. Nor did it discuss its reasons for not doing so. As a result, while the EIR would acknowledge significant impacts to a receptor sitting 50 feet from expected construction activity, it would altogether ignore potential impacts to a receptor sitting an inch more distant — even though the noise levels at these two distances would presumably be the same.

We find the EIR fell short with this arbitrary line drawing. A lead agency cannot ignore a project's expected impacts merely because they occur, as Sierra Watch puts it, "outside an arbitrary radius." Our Supreme Court has long demonstrated as much, explaining, for example, "that an EIR may not ignore the regional impacts of a project proposal, including those impacts that occur outside of its borders." (*Citizens of Goleta, supra*, 52 Cal.3d at p. 575.) And if an EIR cannot ignore a project's impacts on the surrounding region, it certainly cannot ignore its impacts on sensitive areas sitting only a little over 50 feet from the project. That is particularly true here, as the EIR itself acknowledged that sound impacts may be significant even beyond 50 feet. In particular, in discussing the boarding school, the EIR acknowledged the school would experience noise levels up to 85 decibels, even at a distance of 250 feet from construction activity. And it acknowledged also that these noise levels would cause a significant impact. But without any apparent explanation, it declined to consider potential noise impacts to other receptors sitting at a similar distance from planned construction activities. That was improper.

Attempting to address this issue, respondents contend it is "standard" to "focus[] on receptors located within 50 feet of construction activities." But even assuming that is true, respondents have not shown it is standard, or appropriate, to ignore evidence of noise disturbance outside this radius. Nor have they shown, as they allege, that this is "a methodological issue" for which they are "entitled to deference." An agency, to be sure, "may" be entitled to deference in its "decision as to which methodologies to employ for analyzing an environmental effect." (*Sierra Club, supra*, 6 Cal.5th at p. 516.) But it

cannot employ a methodological approach in a manner that entirely forecloses consideration of evidence showing impacts to the neighboring region, impacts beyond a project's boundaries, or, as occurred in this case, impacts to areas sitting beyond 50 feet from construction activities. (See *Citizens of Goleta Valley*, *supra*. 52 Cal.3d at p. 575 [“an EIR may not ignore the regional impacts of a project proposal, including those impacts that occur outside of its borders”]; cf. *East Sacramento Partnerships*, *supra*, 5 Cal.App.5th at p. 303 [“ ‘a threshold of significance cannot be applied in a way that would foreclose the consideration of other substantial evidence tending to show the environmental effect to which the threshold relates might be significant’ ”].)

Third, Sierra Watch contends “the EIR never describes the nature of the noise impact, i.e., how noise could affect residents’ living patterns, speech, sleep, and health.” But, contra Sierra Watch’s claim, the EIR specifically acknowledged that construction activities could “result in increased annoyance,” cause “potential sleep disruption,” and “cause speech disruption” for occupants of nearby residences. It explained that daytime “construction-related activities . . . could result in noise levels of up to 94 dBA L_{eq} and 98 dBA L_{max} ” and “[n]ighttime construction activities could result in noise levels of up to 79 dB[A] L_{eq} and 84 dB[A] L_{max} .” It further explained that, “with typical noise attenuation of 25 dBA by walls and windows, interior noise levels could be as high as 69 dBA L_{eq} /73 dBA L_{max} during the day (high enough to cause speech disruption), and 54 dBA L_{eq} /61 dBA L_{max} at night during nighttime construction (which may cause sleep disruption).” And it also explained the significance of those figures, noting that 69 to 73 dBA is about as loud as a noisy urban area and 54 to 61 dBA is about as loud as, on the high end, a commercial area and, on the low end, a quiet urban area in the daytime. Based on these considerations, the EIR included mitigation to address noise impacts but, “despite this,” still found noise impacts would be “significant and unavoidable.” Considering this discussion, we reject Sierra Watch’s contention that the EIR “never” described “how noise could affect residents’ living patterns, speech, sleep, and health.”

Before turning to Sierra Watch’s contentions concerning the EIR’s mitigation measures for noise impacts, we briefly consider a County ordinance that exempts daytime construction noises from its typical noise standards. Both parties briefly mention the ordinance. Respondents, for example, note “the County could have found daytime construction noise exempt and therefore insignificant” — though they then quickly add that the County declined to take that approach. Respondents’ claim is a questionable one. Although the County’s ordinance may have exempted daytime construction noise from the County’s typical noise requirements, that does not necessarily mean the County could have relied on this ordinance to prevent consideration of evidence of noise impacts under CEQA. (See *Berkeley Keep Jets Over the Bay Com v. Board of Port Comrs* (2001) 91 Cal.App.4th 1344, 1380 [CEQA did not define “significant noise impacts simply in terms of whether a project would violate applicable local, state, or federal noise standards”]; see also *East Sacramento Partnerships, supra*, 5 Cal.App.5th at p. 303 [“ ‘a threshold of significance cannot be applied in a way that would foreclose the consideration of other substantial evidence tending to show the environmental effect to which the threshold relates might be significant’ ”].) In any event, because the County disclaims reliance on the ordinance in the EIR and in the briefing, we need not discuss the issue further.

B. *Mitigation*

We consider next Sierra Watch’s challenge to the EIR’s mitigation measures for noise impacts.

First, it argues, “because the EIR fail[ed] to adequately analyze the Project’s construction-noise impacts, the County never effectively mitigated them.” Sierra Watch raises the point prematurely. Although we agree the EIR improperly ignored noise-related impacts beyond a certain radius, we cannot, at this stage, say those unconsidered impacts were insufficiently mitigated. Perhaps the EIR’s existing mitigation measures sufficiently mitigated these impacts. Perhaps not. Because these impacts have yet to be considered, we will not prematurely speculate on the topic.

Next, Sierra Watch alleges the EIR arbitrarily applied some of its mitigation measures to benefit only certain sensitive receptors — an argument that focuses on the EIR’s different treatment of the school and other nearby buildings. To mitigate impacts to the school, the EIR included the following mitigation: “Construction on the East Parcel shall be designed to avoid intrusive noise, defined as an interior noise level of 45 dBA L_{eq} /65 dBA L_{max} or greater, during the time when classroom activities take place at the [school].” The EIR also described potential methods to achieve those noise levels, including by replacing windows and increasing insulation at the school. But the EIR included no similar measure to protect other sensitive receptors, and Sierra Watch contends the EIR is faulty as a result. We disagree. The County noted it would be “infeasible” to provide similar protections for all affected receptors, and it explained why it provided this measure for the school in particular — “it would protect the primary function of [the school]: educating students during daytime classes when construction activities would typically take place.” Sierra Watch contends this “rationale arbitrarily refuses to protect the primary functions of other equally sensitive receptors, like residences and churches.” But given the absence of any information about these “residences and churches” and “other equally sensitive receptors” in Sierra Watch’s briefing, we do not find the County acted improperly in including additional protections for the school, a receptor found to be particularly sensitive to daytime noise, but not these other receptors.

Lastly, Sierra Watch alleges the EIR includes “no performance standards” for most of its mitigation measures, and so “never assures that the measures would actually avoid noise impacts.” Sierra Watch focuses on two mitigation measures in particular: one that requires construction equipment to be “properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers’ recommendations,” and another that requires “operations and techniques” to “be replaced with quieter procedures (e.g., using welding instead of riveting, mixing

concrete off-site instead of on-site) where feasible and consistent with building codes and other applicable laws and regulations.” Both measures, Sierra Watch alleges, are too vague.⁷

We reject Sierra Watch’s challenge to the first measure. That measure, again, requires construction equipment to be “properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers’ recommendations.” In our view, this measure establishes two concrete requirements: (1) equipment must be maintained in accordance with the manufacturer’s recommendations, and (2) equipment must be fitted with specified noise-reducing technologies. Although Sierra Watch maintains the measure is nonetheless too vague, it never explains why that is so. We reject the argument.

But we agree the second challenged mitigation measure falls short. That measure, again, requires “operations and techniques” to “be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete off-site instead of on-site) where feasible and consistent with building codes and other applicable laws and regulations.” The measure is specific in terms of its examples — construction contractors must weld instead of rivet and mix concrete off-site instead of on-site. But it is otherwise entirely vague — “operations and techniques shall be replaced with quieter procedures . . . where feasible.” This language, in effect, only tells construction contractors to be quieter than normal when they can. Although that may be good neighborly advice, it is not sufficient as a mitigation measure. It defers until later the determination of which construction procedures can feasibly be changed and how these procedures can be modified to be quieter. And it offers no instruction on how either of these determinations are to be

⁷ Sierra Watch suggests that other mitigation measures are also inadequate, but it never discusses those other measures and so we will not consider them. (*Badie, supra*, 67 Cal.App.4th at pp. 784-785.)

made. It is inadequate as a result. (See *Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal.App.5th 467, 520 [finding inadequate a mitigation measure that set a “generalized goal” for reducing emissions and then, to achieve that goal, relied on “unspecified and undefined” protocols]; *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 [finding inadequate a mitigation measure that required the future approval of a habitat management plan but did not “describe the actions anticipated for active management” or “specify performance standards or provide other guidelines for the active management requirement”]; see also CEQA Guidelines, § 15126.4, subd. (a)(1)(B).)

V

Climate Change Impacts

Sierra Watch also, for several reasons, challenges the County’s discussion of climate change impacts.

Before turning to its specific contentions, we provide some background on the EIR’s evolving evaluation of climate change impacts. In evaluating climate change impacts, the draft EIR distinguished between emissions occurring by 2020 and emissions occurring after 2020. Focusing first on emissions occurring by 2020, the draft EIR said the project’s impacts would be less than significant if its emissions (1) would be no more than 1,100 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year or (2) if above 1,100 MTCO_{2e} per year, would at least be consistent with statewide greenhouse gas (GHG) emissions targets described in the California Air Resources Board’s 2008 Climate Change Scoping Plan (the Scoping Plan). The Scoping Plan, as revised in 2011, established a 2020 emissions target that was about 21.7 percent below emissions levels projected under a business-as-usual scenario — meaning, a scenario that assumes no conservation or regulatory efforts would be taken to help achieve a reduction in greenhouse gases. According to the draft EIR, so long as the project’s emissions by 2020 would be at least 21.7 percent below business as usual, the project would be consistent

with the Scoping Plan’s 2020 emissions target. With this framework in mind, the draft EIR then estimated projects emissions to be 46,994 MTCO_{2e} per year under a full-buildout scenario in 2020 and 62,931 MTCO_{2e} per year under a business-as-usual full-buildout scenario in 2020 — though the EIR labeled both these scenarios purely “hypothetical” “because full buildout . . . would occur no sooner than 2037.” Because 46,994 MTCO_{2e} is over 21.7 percent below 62,931 MTCO_{2e}, even though well above 1,100 MTCO_{2e}, the draft EIR said the project would at least be consistent with 2020 emissions targets and so would have less than a significant impact when viewed from that perspective.

Turning next to emissions occurring after 2020, the draft EIR applied a similar framework for evaluating project impacts. First, as when analyzing emissions under a “hypothetical” 2020 full-buildout scenario, the draft EIR said emissions under a 2037 full-buildout scenario would well exceed 1,100 MTCO_{2e} per year. In particular, it estimated these emissions to be 45,403 MTCO_{2e} per year — an estimate that was, the draft EIR explained, slightly lower than the 2020 full-buildout estimate “because a certain percentage of older vehicles projected to be on the road in 2020 would” not be on the road in 2037. But it found it impossible to determine whether these emissions would be consistent with post-2020 emissions targets, as “the ability of the project to meet GHG targets beyond 2020 is unknown, and cannot be known because these targets have not been established.” And so, the draft EIR said, “[b]ecause the project would generate substantial GHG emissions” (i.e., emissions “well above” 1,100 MTCO_{2e} per year), “and because it is not known if the project would be consistent with future GHG reduction targets, the impact would be potentially significant.”

Shortly after the County shared its draft EIR, the California Supreme Court rejected the type of analysis that the draft EIR had, in part, followed. Again, according to the draft EIR, if the project’s emissions by 2020 would be at least 21.7 percent below business as usual, it would not conflict with the Scoping Plan’s stated goal of reducing

emissions by about 21.7 percent compared to business as usual. But in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th 204 (*Center for Biological Diversity*), the court rejected that type of logic. It reasoned that a *project-level* reduction in emissions of, say, 25 percent compared to business as usual is not necessarily consistent with achieving a *statewide* reduction in emissions of 21.7 percent compared to business as usual. (*Id.* at pp. 225-226.) It is more complicated than that. Achieving a statewide reduction in emissions of 21.7 percent, the court explained, would presumably demand different levels of reduction from different projects. New projects, for example, may very well need to achieve a greater level of reduction relative to the state as a whole to account for the lesser degree of reduction possible for older structures and systems. (*Id.* at p. 226.) And so although a reduction of 25 percent may be enough for some projects, it may not be enough for others. Those types of considerations in mind, the court found an agency could not simply assume a project-level reduction of at least 21.7 percent would necessarily be consistent with the Scoping Plan's stated goal of a statewide reduction of 21.7 percent. (*Id.* at pp. 226-227.)⁸

In response to this decision, the County later modified its climate change analysis in the final EIR. No longer attempting to determine whether the project's emissions would be consistent with the Scoping Plan, the County simply concluded that project emissions, whether before 2020 or after, would be significant if they exceeded 1,100 MTCO_{2e} per year. And because they would, the final EIR said the project's climate change impact would be potentially significant.

⁸ The court described the Scoping Plan as setting a goal of reducing emissions by 29 percent, not 21.7 percent. (*Center for Biological Diversity, supra*, 62 Cal.4th at p. 216.) That higher percentage reflects the Scoping Plan's initial estimate in 2008 concerning the percentage reduction required to meet the statewide emissions target. An updated Scoping Plan, based on more recent data from 2011, revised this percentage downward to about 21.7 percent.

With that factual background, we now turn to Sierra Watch's arguments.

A. Recirculation

Sierra Watch first contends the County's changes in the final EIR required it to recirculate the EIR for further public review and comment. That is so, it reasons, because the final EIR's "revamped analysis" revealed "far more severe climate change impacts than disclosed in the" draft EIR. We reject the claim.

CEQA requires a lead agency to recirculate an EIR when "significant new information" is added to the EIR after the draft EIR has been released to the public for review and before certification. (Pub. Resources Code, § 21092.1.) An EIR includes "significant new information" if, among other things, it (1) reveals "[a] new significant environmental impact [that] would result from the project," (2) reveals "[a] substantial increase in the severity of an environmental impact [that] would result unless mitigation measures are adopted that reduce the impact to a level of insignificance," or (3) shows that "[t]he draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." (CEQA Guidelines, § 15088.5, subd. (a).)

In evaluating whether the EIR here revealed "significant new information," we first note, as Sierra Watch points out, that the County relied in part on different standards for reviewing the project's impacts in the draft EIR and the final EIR. The draft EIR supplied two approaches for reviewing impacts — one based on emissions occurring by 2020 and another based on emissions occurring after 2020. In terms of emissions occurring by 2020, the draft EIR said the project's impacts would be less than significant because, if the project were completed in 2020, project emissions would be at least 21.7 percent below a projected business-as-usual scenario — which, it said, showed the project would be consistent with the Scoping Plan. But in terms of emissions occurring after 2020, it said the project's impacts would be potentially significant "[b]ecause the project would generate substantial GHG emissions" (i.e., emissions "well above" 1,100

MTCO₂e per year), “and because it is not known if the project would be consistent with future GHG reduction targets.” The final EIR, however, took a somewhat different approach. Finding it impossible to determine whether the project’s emissions would be consistent with emissions targets, whether those set for 2020 or after, the final EIR simply said the project’s impacts would be significant if emissions exceeded 1,100 MTCO₂e per year. This, we agree, was a change from the draft EIR.

But we reject Sierra Watch’s contention that this change revealed “far more severe climate change impacts.” Sierra Watch reasons it did so because the project’s emissions would “vastly exceed[]” the final EIR’s “new” standard for evaluating significance — whether emissions would exceed 1,100 MTCO₂e per year. But the County’s purportedly “new” standard in the final EIR was also its main standard in the draft EIR. True, in the draft EIR, the County applied a somewhat different standard when evaluating impacts under a scenario involving full project buildout by 2020. In that discussion, again, the County considered whether the project’s emissions would be consistent with the Scoping Plan’s 21.7 percent target. But the County labeled that scenario “unrealistic” and merely “hypothetical” because “full buildout . . . would occur no sooner than 2037.” And in considering the emissions targets realistically applicable to the project — that is, post-2020 emissions targets — the County effectively applied the same standard that Sierra Watch contends was newly added in the final EIR: it considered whether emissions would exceed 1,100 MTCO₂e per year. And because they would well exceed that amount, and because the EIR found it impossible to determine consistency with post-2020 emission targets, the County found the project’s impacts would be potentially significant. So although Sierra Watch is right to say the project’s expected emissions would vastly exceed the 1,100 MTCO₂e threshold, it is wrong in saying this exceedance was revealed for the first time in the final EIR.

Attempting to counter this point, Sierra Watch expresses concern that the project’s emissions could “vastly exceed” the 1,100 MTCO₂e threshold even before full project

buildout, perhaps even by 2020; and so, it suggests, recirculation is still required based on the draft EIR's flawed discussion of the project's consistency with 2020 emissions targets. In support of its contention that significant emissions could occur by 2020, Sierra Watch states that 20 percent of the project could, per the EIR, be constructed in one year, even if full project buildout would take 25 years. That is true, and perhaps this shows that, at one point in time, emissions could have "vastly exceed[ed]" the 1,100 MTCO_{2e} threshold by 2020. But that is no longer the case. Because of the length of this litigation, the project no longer has the potential to result in any operational emissions by 2020. For this reason, our focus is on the EIR's discussion of the project's impacts under post-2020 emissions targets. And on that topic, again, the draft EIR and the final EIR were consistent: Because the project's emissions would vastly exceed 1,100 MTCO_{2e} per year, and because it would be impossible to determine whether these emissions would be consistent with post-2020 targets, these emissions would be potentially significant.

In its reply brief, Sierra Watch also attacks the EIR's discussion of these post-2020 emissions targets, alleging it is inadequate "because, like the 2020 analysis, it depends on statewide targets not linked to the Project." But we do not fault the County for failing to "link[]" the project's emissions to statewide targets that were not even developed at the time of the EIR. We may expect a certain degree of thoroughness, but we do not expect the impossible. In any event, Sierra Watch forfeited this argument by raising it for the first time in its reply brief. (See *Neighbours v. Buzz Oates Enterprises, supra*, 217 Cal.App.3d at p. 335, fn. 8 [claims raised for the first time in a reply brief, without good cause, are forfeited].)

B. *Mitigation*

Sierra Watch next faults the County for failing to "reconsider the [draft] []EIR's climate mitigation in light of the [final] []EIR's new analysis." In particular, it appears to argue that the final EIR, unlike the draft EIR, recognized the project could result in

potentially significant impacts by 2020 but then wrongly failed to reconsider mitigation following this new finding. We reject this argument too.

To start, the County did reconsider its mitigation measures in the final EIR. It was in fact explicit on the point, stating in the final EIR that it was “revis[ing]” one of its mitigation measures “[i]n response to the recent California Supreme Court decision” in *Center for Biological Diversity*. In its revision, the County appeared to acknowledge that project impacts could be significant even by 2020. And so unlike the draft EIR, which only required mitigation for certain actions “after December 31, 2020,” the final EIR required mitigation even for actions occurring on or before 2020. In particular, “for all subdivision maps submitted for approval,” no matter when submitted, the final EIR required Squaw (1) to determine whether the operation of the subdivision would be consistent with statewide emissions targets and (2) if it would not, to incorporate certain mitigation measures into the subdivision to reduce greenhouse gas emissions.

Apart from neglecting to acknowledge the final EIR’s reconsideration of its mitigation measure, Sierra Watch’s argument also falls short for a more basic reason. Its argument, again, appears to be premised on its view that the County failed to reconsider its mitigation following “newly revealed significant impacts” that could occur by 2020. But as we have discussed, although the project may at one point have resulted in emissions above the 1,100 MTCO_{2e} threshold by 2020, that is no longer true. That in mind, we will not require the County to reconsider mitigation for impacts that now have no prospect of occurring.

Sierra Watch also challenges the County’s EIR for two additional reasons, but we find both these arguments forfeited. First, because the EIR’s mitigation measure is triggered only if the project is inconsistent with post-2020 emissions targets that have yet to be established, Sierra Watch contends the EIR’s mitigation measure is “illusory.” But Sierra Watch offers this argument in a section of its brief that, according to the heading, concerns an entirely different topic — namely, the County’s alleged failure to

“[re]examine feasible mitigation measures in light of the [final] [EIR’s] new climate change analysis.” According to this heading, all that follows would concern the final EIR’s “new . . . analysis” of the project’s consistency with 2020 emissions targets in light of the *Center for Biological Diversity* decision. But under this heading, Sierra Watch also raised an altogether different issue concerning the final EIR’s analysis of the project’s consistency with *post-2020* emissions targets — which, again, was unaffected by the *Center for Biological Diversity* decision. It erred in doing so. Sierra Watch needed to raise its distinct argument concerning the EIR’s allegedly improper reliance on *post-2020* emissions targets “under a separate heading or subheading summarizing the point,” as required under California Rules of Court, rule 8.204(a)(1)(A). Because it failed to do so, the argument is forfeited. (*Opdyk v. California Horse Racing Bd.* (1995) 34 Cal.App.4th 1826, 1831, fn. 4.)

Second, Sierra Watch contends the County “ignor[ed] feasible mitigation measures that were available.” But it never describes the mitigation measures that the County allegedly ignored. Nor does it explain how these alleged measures are feasible. It simply states its conclusion and then cites to various parts of the record. We find Sierra’s Watch’s undeveloped argument forfeited as a result. Courts, after all, “‘are not bound to develop appellants’ arguments for them.’ [Citation.]” (*City of Monterey v. Carrnshimba* (2013) 215 Cal.App.4th 1068, 1099.)

VI

Traffic Impacts

Finally, for two reasons, Sierra Watch contends “the EIR fail[ed] to properly identify mitigation for the project’s significant transportation impacts.” First, it asserts the “EIR overlook[ed] feasible mitigation for the project’s significant traffic impacts.” And second, it contends the “EIR improperly relie[d] on deferred mitigation to address transit impacts.” We agree with the second point.

A. Mitigation for Traffic Impacts

We consider first Sierra Watch's contention that the EIR "overlook[ed] feasible mitigation."

In the draft EIR, the County proposed several measures to mitigate traffic impacts, including, among other things, measures requiring Squaw to develop a traffic management plan, install a new traffic signal, and develop a website and a smartphone app that would show real-time information about available parking spaces and average travel speed on Squaw Valley Road. The draft EIR found these measures would reduce traffic impacts but, in the end, concluded that impacts in some areas would remain significant even after mitigation.

Sierra Watch afterward encouraged the County to require Squaw to implement additional measures that the draft EIR had mentioned, but had not required, in its discussion of air quality impacts. The draft EIR there required Squaw to limit certain emissions below a specified level and mentioned various measures that Squaw could implement to ensure compliance with this requirement. But rather than requiring Squaw to implement any of the mentioned measures, the draft EIR instead gave Squaw flexibility in terms of the tools it used to limit project emissions. Believing these same measures could also help address traffic impacts, Sierra Watch asked the County to consider imposing them as mitigation for traffic impacts. In particular, it encouraged the County to require Squaw to provide (1) "free or discounted transportation service between the Village and the Amtrak station in Truckee to all overnight visitors who arrive by train," (2) "discounted overnight accommodations, meals, activities, or other incentives to visitors who arrive by train to the Amtrak station in Truckee and/or to groups who arrive by bus or some other emissions-efficient vehicle type," (3) "free, shared, or discount rental bicycles to all visitors staying in the hotel or resort residential units," (4) "shuttle service to other key destinations in the region (e.g., North/West Shore of Lake Tahoe, casinos, Truckee) to serve guests who want to tour regional offerings,"

(5) “a covered bicycle parking area near [the] entrance of all commercial establishments,” (6) “parking for and subsidi[es] [for] a car-sharing service for resort employees and/or patrons,” (7) “ ‘end-of-trip’ facilities for employees who bike to their work sites from outside of [Olympic] Valley, including showers, secure weather-protected bicycle lockers, storage lockers for other gear, and changing spaces,” (8) “free transit passes or reimburse[ment] [for] the transit costs of employees who commute from outside Olympic Valley using Tahoe Area Regional Transit or another transit service,” (9) “adequate secure weather-protected bicycle lockers or storage area for employees living at the East Parcel,” and (10) “virtual and/or real bulletin boards in common areas of employee housing units and other areas where employees congregate to foster the development of carpools and other ride sharing opportunities.”

But the County declined these requests. The final EIR “acknowledged that implementation of a combination of these measures would serve a dual purpose of reducing air quality as well as transportation impacts.” But for several reasons, it declined to require Squaw to implement these measures. First, it stated that “some of these measures may be more effective in reducing air quality emissions than traffic.” Offering one example, it said encouraging use of Amtrak through a shuttle service might reduce air emissions by reducing a few longer vehicle trips, but it “would likely have limited [traffic] benefit” because “there is very limited train service (currently only one stop per day from Sacramento at Truckee, for example)” and the shuttle would itself add to local traffic. The EIR also appeared to express doubt that many people would be persuaded by a shuttle service, suggesting that most people would still drive anyway because “the train typically takes far longer to transport people from Sacramento and the Bay Area than cars.”

Second, the EIR said the project already included some “transportation elements” similar to Sierra Watch’s proposals, including preferred parking for carpoolers, a centrally located transit center, a shuttle service for transportation in the Village, bicycle

parking at all “major activity centers,” and transit service “between the Village area and other key lodging and residential areas” within Olympic Valley. Also, the EIR added, Squaw would consider installing a real-time traffic communications system around the Village and would consider providing access to bicycles for guests and visitors, activities to “encourage day skiers to linger in the Village until after exiting traffic volumes recede,” incentives to encourage more overnight stays and reduce the proportion of day skiers, and a multipurpose path linking the East Parcel to the Village.

Finally, in rejecting Sierra Watch’s proposed measures, the EIR said these measures would only have a “speculative” benefit. On that point, it noted, even for those similar features that were incorporated into the project, it could not confirm that they would result in any trip reductions; data simply “did not exist to justify specific trip decreases.”

Sierra Watch challenges the EIR’s response for several reasons. It first contends the County “ignored” most of Sierra Watch’s proposed measures. Had it done so, we would agree that the County acted inappropriately. CEQA, after all, requires agencies to “respond to comments raising significant environmental issues” in “good faith” and with “reasoned analysis.” (CEQA Guidelines, § 15088.) And courts have recognized that this requirement obligates agencies to “ ‘respond to specific suggestions for mitigating a significant environmental impact unless the suggested mitigation is facially infeasible.’ [Citation.]” (*Covington v. Great Basin Unified Air Pollution Control Dist.* (2019) 43 Cal.App.5th 867, 879.) But the final EIR did not, as Sierra Watch claims, ignore the suggested mitigation measures. The final EIR, for example, said one proposed measure (concerning shuttle service to and from the Amtrak station) “would likely have limited benefit,” and it said the remaining measures would only have a “speculative” benefit. Although true the EIR did not call out all the proposed measures individually — it did not, for example, say the first proposed measure would have a speculative benefit, the second proposed measure would have a speculative benefit, and so on — we cannot say

the EIR entirely “ignored” these measures for that reason. In taking a contrary position, Sierra Watch appears to be led astray by an incomplete understanding of the EIR’s response. Although it acknowledges, for example, that the EIR found one of its proposed measures would likely have limited benefit, it never acknowledges that the EIR also found the remaining proposed measures would have a speculative benefit. And so it never acknowledges that the EIR did respond, albeit briefly, to the entirety of its comment.

Sierra Watch next asserts that the final EIR, in addition to ignoring some of its proposed measures, “only vaguely responded to, or partially implemented, the others.” But we find neither contention persuasive. First, to the extent the EIR only partially implemented Sierra Watch’s proposed measures, it explained why it did so: These measures would only have a “speculative” benefit — an explanation that Sierra Watch never challenges. Second, on the topic of vagueness, we find the final EIR’s response was specific, not vague. It rejected the proposed measures, again, because one proposal concerning shuttle service to Amtrak “would likely have limited benefit,” offering several reasons as to why, and the others would only have a “speculative” benefit. It also noted the project already included several features similar to some, though not all, of the measures Sierra Watch proposed. But even for those features — which included preferred parking for carpoolers, a shuttle service, transit service, and bicycle parking — the EIR noted that they too would have only a speculative benefit “because data did not exist” showing they would reduce trips by any specific amount. Whatever the potential shortcomings of this response, we do not find vagueness to be one of them.

B. Mitigation for Transit Impacts

Lastly, we consider Sierra Watch’s contention that the EIR improperly relied on deferred mitigation to address transit impacts.

The draft EIR said the project would increase demand on the existing public transit system (known as Tahoe Area Regional Transit or TART) and would, as a result,

have a potentially significant impact on transit. But it said Squaw’s commitment either to provide “fair share funding” to TART or to form a “Community Service Area (CSA) or a Community Facilities District (CFD) to fund the costs of increased transit services” would mitigate this impact to a less-than-significant level. It then noted how transit services could potentially be increased, stating that “[i]ncreased service may consist of more frequent headways, longer hours of operations, and/or different routes.” The final EIR added little new, though it did include some detail on how the “fair share funding” would be calculated: “The fair share would be based on an engineer’s report and would establish the project’s financial contribution to additional transit services.”

We agree this measure wrongly defers the details of mitigation. Agencies, in general, should not defer the specific details of a mitigation measure until after project approval. But they may do so “when it is impractical or infeasible to include those details during the project’s environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will [be] considered, analyzed, and potentially incorporated in the mitigation measure.” (CEQA Guidelines, § 15126.4, subd. (a)(1)(B).)

But as Sierra Watch notes, the EIR’s mitigation measure for transit impacts includes no performance standard at all. Nor does it provide any analysis supporting its conclusion that the project’s impacts on transit would be rendered less than significant. Rather than supply this analysis, the EIR simply requires Squaw to provide an unspecified amount of funding to increase transit service by an unspecified amount in the future, and then, without any analysis, says this vague offer to increase transit service would reduce impacts to a less-than-significant level. That, however, is not good enough to satisfy CEQA. (See *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 855, 857-858 [finding inadequate a mitigation measure that required the project applicant to “increase” the use of “produced water” and “reduce” the use of

“municipal and industrial quality” water “to the extent feasible”; the terms “increase” and “reduce,” even when modified by the phrase “to the extent feasible,” are not specific performance standards]; *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 79-80 [finding inadequate a mitigation measure that required a project applicant to expand a city’s busing “capacity by paying an unspecified amount of money at an unspecified time in compliance with an as yet unenforced or unspecified transit funding mechanism”].)

Respondents counter that “the only open issue is the final funding amount” and that agreeing to pay fees to increase transit service “is appropriate mitigation.” We find both contentions unpersuasive. First, beyond leaving the funding amount unresolved, the EIR also never clearly explained how that funding would be used — something respondents acknowledged at trial, stating “[t]he EIR declined to speculate on how TART will expand service.”

Second, although “[m]itigation fee programs *may* constitute adequate mitigation to address the adverse effects of a project,” we find the fee program here falls short. (*California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 199.) To be adequate, fair-share mitigation fees must be “part of a reasonable, enforceable plan or program that is sufficiently tied to the *actual mitigation* of the traffic impacts at issue.” (*Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1189, italics added.) But here, we cannot say the required fair-share fee satisfies those conditions. The EIR neither estimates the amount of the fair-share contribution, nor specifies how this contribution will be used, nor reasonably explains why this undefined contribution can be expected to reduce expected impacts to a less-than-significant level. Instead, it does little more than note that the required fees would “increase[] transit service.” But a vague offer to increase transit service in the future is not a specific performance standard. (See CEQA Guidelines, § 15126.4, subd. (a)(1)(B); *King & Gardiner Farms, LLC v. County of Kern, supra*, 45 Cal.App.5th at p. 858 [“[t]he

term[] ‘increase’ . . . — even though preceded by the mandatory term ‘shall’ . . . — [is] not [a] specific performance standard[.]”). It is instead “the sort[] of speculative mitigation measure[] that do[es] not comply with CEQA.” (*California Clean Energy Committee, supra*, 225 Cal.App.4th at p. 198 [finding inadequate fair-share mitigation requirements that “d[id] not estimate how much the mitigation measures . . . w[ould] cost or how they might be implemented”]; see also *Gray v. County of Madera, supra*, 167 Cal.App.4th at p. 1122 [finding inadequate a mitigation measure that required the applicant “to ‘[c]ontribute an equitable share of the cost of construction of future [highway] improvements’ ” but included no definite commitment to make improvements that would mitigate the project’s impacts].)

DISPOSITION

The judgment is reversed. The trial court is instructed to enter, consistent with this opinion, a new judgment granting the petition for writ of mandate and specifying those actions the County must take to comply with CEQA. Sierra Watch is entitled to recover its costs on appeal. (Cal. Rules of Court, rule 8.278(a).)

/s/
BLEASE, J.

We concur:

/s/
RAYE, P. J.

/s/
DUARTE, J.

CERTIFIED FOR PARTIAL PUBLICATION*

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA
THIRD APPELLATE DISTRICT

(Placer)

SIERRA WATCH,

Plaintiff and Appellant,

v.

COUNTY OF PLACER et al.,

Defendants and Respondents;

SQUAW VALLEY REAL ESTATE, LLC,

Real Party in Interest and Respondent.

C088130

(Super. Ct. No. SCV0038777)

ORDER CERTIFYING
OPINION FOR
PUBLICATION

THE COURT:

The opinion in the above-entitled matter filed August 24, 2021, was not certified for publication in the Official Reports. For good cause it appears now that the opinion should be published in the Official Reports and it is so ordered.

* Pursuant to California Rules of Court, rules 8.1105 and 8.1110, this opinion is certified for publication with the exception of parts III, V, and VI of the Discussion.

EDITORIAL LISTING

APPEAL from a judgment of the Superior Court of Placer County, Michael W. Jones, Judge. Reversed.

Shute, Mihaly & Weinberger, Amy J. Bricker, Laura D. Beaton, Rachel B. Hooper; and Daniel P. Selmi for Plaintiff and Appellant.

Office of the Placer County Counsel and Clayton T. Cook for Defendants and Respondents County of Placer and Placer County Board of Supervisors.

Remy Moose Manley, Whitman F. Manely, Andrea K. Leisy and Nathan O. George for Real Party in Interest and Respondent Squaw Valley Real Estate, LLC.

BY THE COURT:

_____/s/
RAYE, P. J.

_____/s/
BLEASE, J.

_____/s/
DUARTE, J.

Appendix B

Project Description

Appendix B1

2016 Draft EIR Project Description

3 PROJECT DESCRIPTION

Squaw Valley Real Estate, LLC (project applicant) is requesting approval of various discretionary entitlements in support of the proposed Village at Squaw Valley Specific Plan (VSVSP) project (also referred to as the proposed project or project), located in Squaw Valley.

The Specific Plan envisions a world-class, recreation-based, all-season resort community. Development would be focused primarily on previously disturbed/developed areas around the existing Village, and would integrate with and support existing mountain ski operations. Building designs would draw from traditional mountain architecture with rustic treatments, ample use of wood and stone, visible timbers and rafters, and broad sheltering roofs. Natural resources in Olympic Valley would be protected and enhanced, including habitat restoration within Squaw Creek to enhance the creek's natural functions. The mixed-use development would include hotel, resort residential, commercial, and recreation uses. A wide range of destination resort services and amenities would be provided for guests and residents to create a resort experience on par with peer world class North American ski destinations.

The following project description is based, in part, on information included in the VSVSP which is available at: <http://www.placer.ca.gov/departments/communitydevelopment/planning/villageatsquawvalleyspecificplan>.

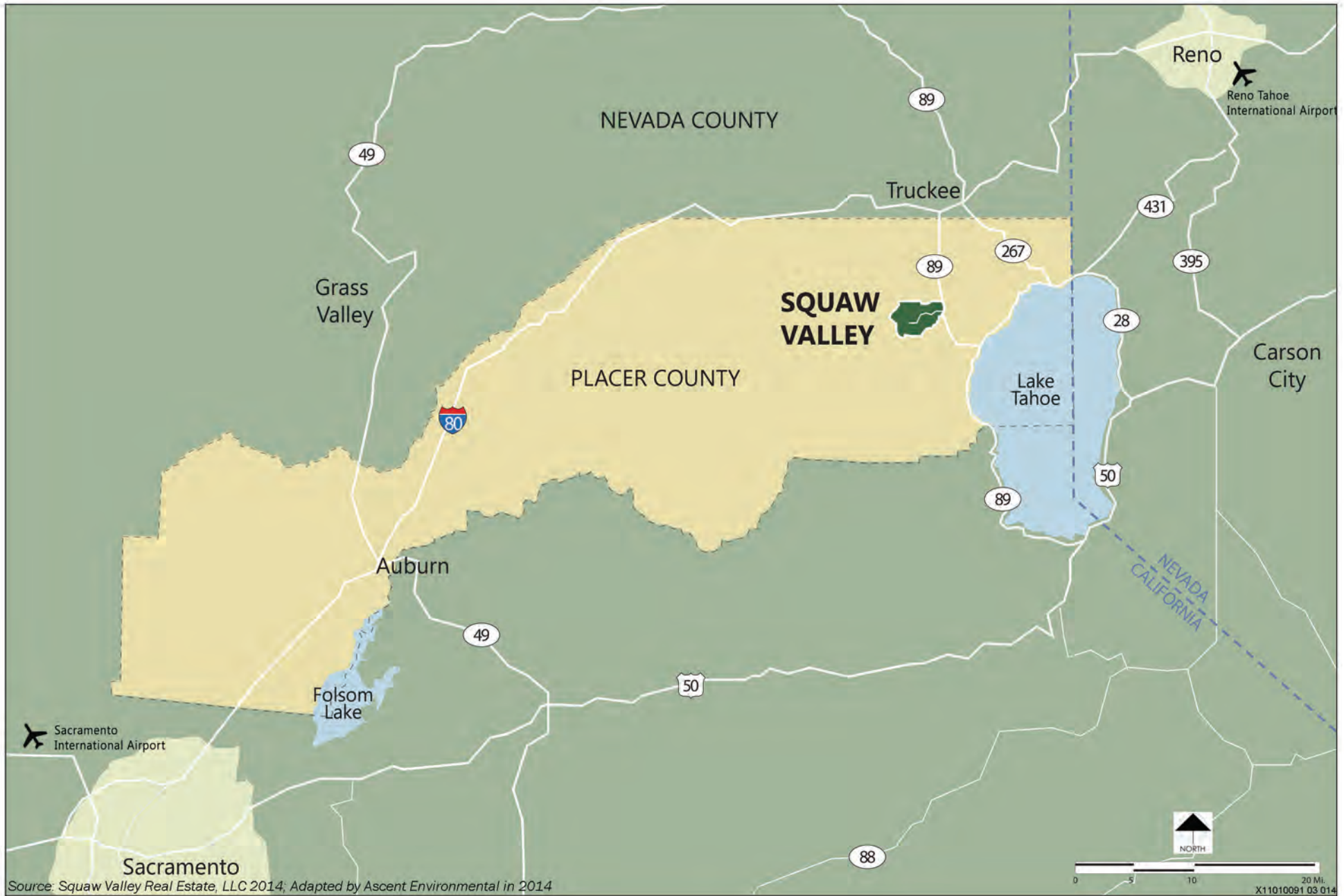
3.1 PROJECT LOCATION

The project site is located within the 4,700-acre Squaw Valley (also known as Olympic Valley) in northeastern Placer County (Exhibit 3-1) and within the Sierra Nevada. For purposes of this EIR, the project site includes (a) the Specific Plan area (plan area), described below (boundary of the plan area is shown in Exhibit 3-2), as well as (b) utility infrastructure, trails, and other activities outside the plan area boundary (Exhibit 3-3; however, the exhibit does not reflect trails improvements being considered upslope from the plan area. Trails are discussed below in Section 3.4.3, "Public Services and Utilities").

Portions of the plan area are located in both the west and east sides of Squaw Valley. 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 and Lake Tahoe, but outside of the Lake Tahoe Basin. The plan area encompasses a total of approximately 94 acres, including approximately 85 acres in the main Village area on the west side of the valley and an approximately 8.8-acre area referred to as the East Parcel, located approximately 1.3 miles east of the main Village area and 0.3 mile west of the intersection of SR 89 and Squaw Valley Road, across the street from the Squaw Valley Public Service District (SVPSD) offices and fire station (Exhibit 3-2).

Most of the plan area has been previously developed or disturbed. The main Village area is located predominantly, but not entirely, in a paved parking lot that is generally bounded by Squaw Valley Road and residential development to the north; ski lifts and related ski operations to the south; lodging, single-family residences, and undisturbed areas to the west; and a meadow and golf course to the east. Additionally, the main Village area borders some existing developments on three sides, including the Squaw Valley Lodge and Olympic Village Inn. The East Parcel is bounded by Squaw Valley Road on the south, Squaw Creek and existing residences to the north, existing residences to the west, and the Olympic Estates Subdivision to the east, which has recently constructed project-serving improvements. No residences have been constructed.

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 internal private roads and parking areas within the main Village area. The East Parcel is located immediately adjacent to Squaw Valley Road.



Source: Squaw Valley Real Estate, LLC 2014; Adapted by Ascent Environmental in 2014

Exhibit 3-1

Regional Location



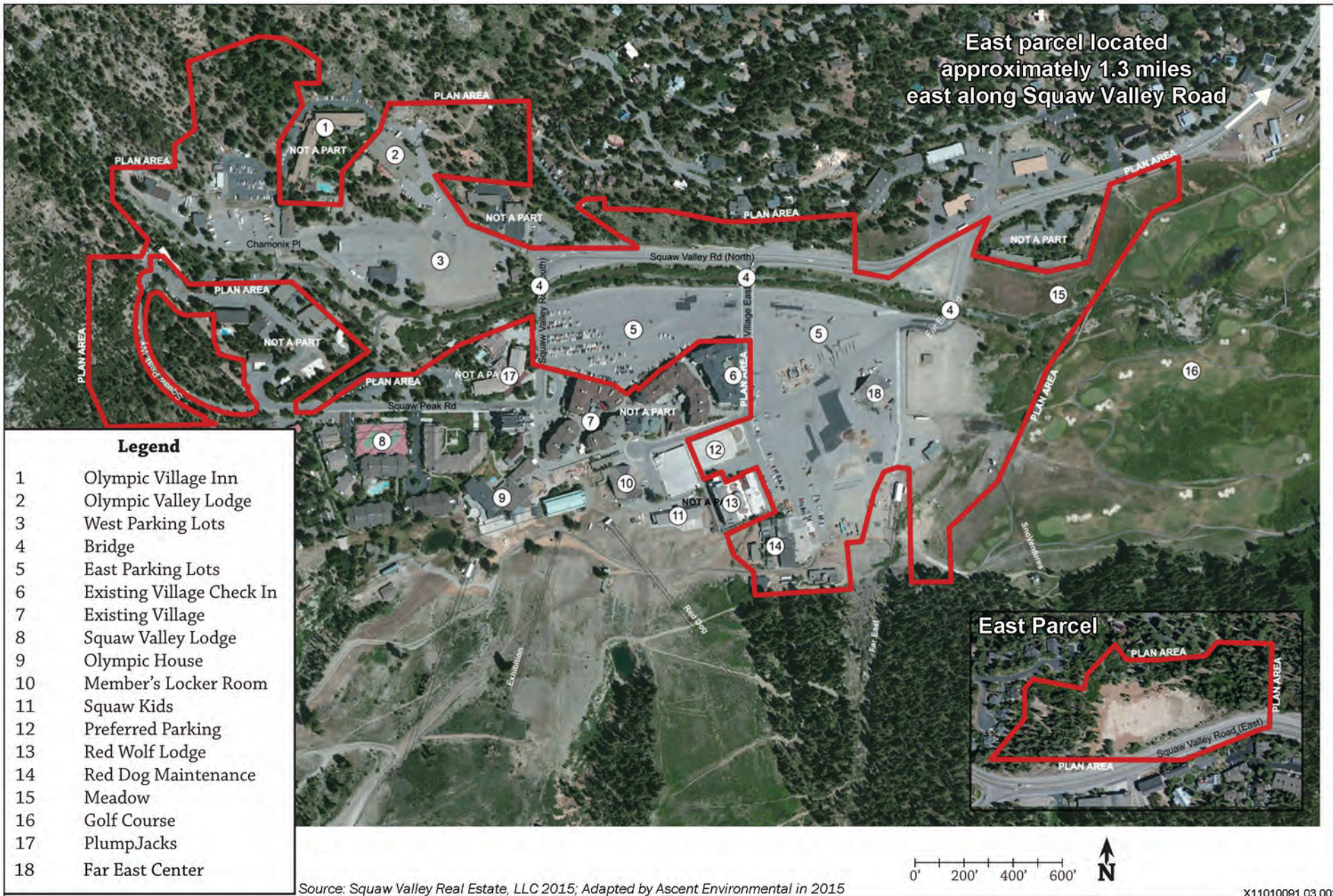


Exhibit 3-2

Plan Area Existing Conditions



3.2 STUDY AREA CHARACTERISTICS

3.2.1 Property Ownership

The plan area consists of all or part of 22 parcels (i.e., Assessors Parcels), 20 of which are entirely owned or controlled by Squaw Valley Real Estate, LLC and Squaw Valley Resort, LLC. The two remaining parcels are owned by the Squaw Valley Mutual Water Company (0.03 acre within the main Village) and Poulsen Commercial Properties, LP (8.82 acres, the entire East Parcel). Utility infrastructure and other project elements outside the plan area boundary cross lands with a variety of both private and public ownership.

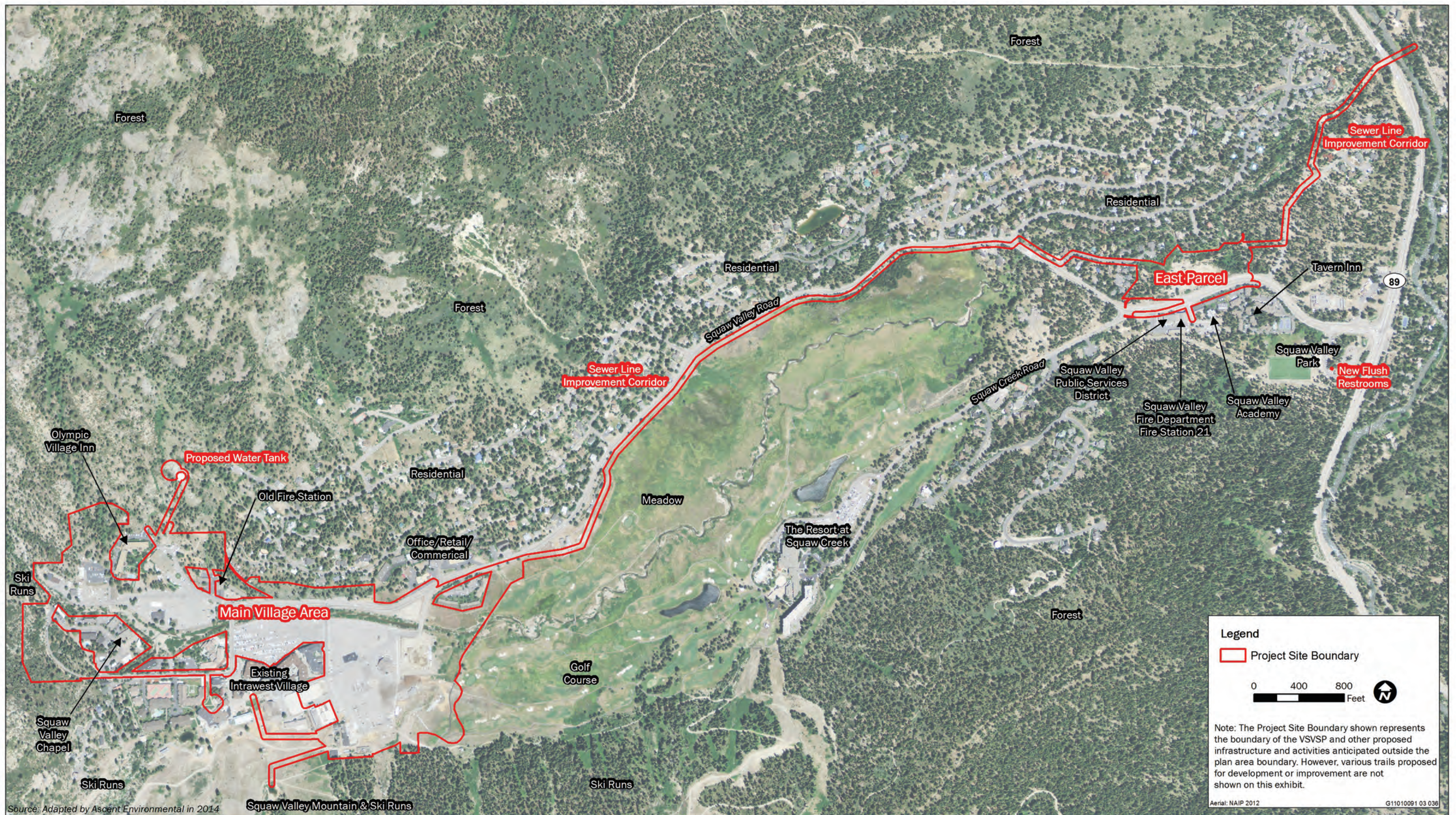
3.2.2 Existing Land Uses

The plan area has been historically used for winter sport and resident resort facilities ranging from development supporting the Winter Olympic Games in 1960 to current skier services, parking, lodging, and commercial uses. Most of the plan area has been previously developed or disturbed. Existing buildings and improvements within the main Village area include recreational facilities, ski lifts, lodging, skier services, residential, parking lots, and maintenance facilities. The East Parcel has historically been used for off-site winter snow storage and temporary equipment storage.

The topography of the main Village area is a west-to-east generally flat but sloping plain, with approximately 70 feet of elevation change from the highest to the lowest point on the site. The main Village area is generally surrounded by steep slopes that are part of the ski resort and that rise about 2,000 feet to the north and south and almost 3,000 feet to the west. The East Parcel is generally flat, with a slight slope towards Squaw Creek to the north.

The plan area drains into Squaw Creek. The Creek runs west to east through Squaw Valley, passing through the main Village area primarily in an engineered trapezoidal shaped channel before flowing into a meadow area/golf course (Resort at Squaw Creek Golf Course) to the east of the main Village area. Squaw Creek runs just to the north of the East Parcel, but is not within the parcel boundary. Most of the existing trees within the main Village area are located along the westernmost portion of Squaw Creek. The remaining trees are scattered throughout the main Village area and on the outward edges as the developed portions of the Village transition to surrounding forested areas. Trees on the East Parcel border the area previously graded for snow storage to the east, west, and north, with Squaw Valley Road bordering the southern end of the site (Exhibit 3-3).

Some infrastructure and utility improvements extend beyond the plan area boundary, typically encompassing the planned footprints for utility and infrastructure improvements identified to support plan area development (Exhibit 3-3). Many of these utility and infrastructure improvements do not extend far from the plan area boundary and are located in existing developed areas with the same land uses as the plan area itself. However, plan development may require improvement to an existing sewer line connecting the existing Village area and other development in Squaw Valley to a Tahoe Truckee Sanitation Agency (T-TSA) line along SR 89. The corridor for this potential line improvement generally parallels Squaw Valley Road, passing through the edge of the meadow area, then passing through residential and forested land where it veers north of the East Parcel (Exhibit 3-3). The project also includes construction of a new water storage tank and pipeline adjacent to an existing water storage tank in a forested area north of the main Village area, and the addition of facilities to the existing Squaw Valley Park at the intersection of Squaw Valley Road and SR 89. As part of the proposed project, the applicant proposes to fund and/or implement improvements to existing hiking trails and construction of new hiking trails in forested lands west and south of the plan area. These utility and recreation facilities are described further below in Section 3.4.3, "Public Services and Utilities."



Source: Adapted by Ascent Environmental in 2014

Squaw Valley Mountain & Ski Runs

3.2.3 Surrounding Land Uses

Exhibits 3-2 and 3-3 depict the existing land uses on and surrounding the project site. Existing land uses surrounding the main Village area include single-family residences, small offices, condominiums, and retail/commercial uses located across Squaw Valley Road to the northeast; the PlumpJack restaurant and hotel located to the south and west; the Intrawest Village to the south and west; forest to the northwest; single-family residences off Granite Chief Road to the southwest; Squaw Valley Mountain and ski runs and undisturbed areas to the west and south; and the meadow and golf course to the east. The Resort at Squaw Creek is located beyond the golf course to the east. In addition, the Olympic Village Inn is located immediately adjacent to the northwest portion of the plan area and Specific Plan development would abut it on three sides. The Squaw Valley Lodge is located near the project area at 201 Squaw Peak Road, and the Squaw Valley Chapel is located adjacent to the plan area at 444 Squaw Peak Road.

The East Parcel is bordered by trees to the north, east, and west; with the area beyond the trees to the west and north containing single-family residences and the trees to the east bordering a single-family residential subdivision (the Olympic Estate Subdivision), which has not yet built out. Squaw Valley Road provides the southern boundary for the East Parcel and on the other side of the road is the following: Squaw Valley Academy (a boarding and day school), the SVPSD offices and Fire Station 21, and the Tavern Inn (a condominium lodging complex). Project elements outside the plan area generally consist of small facilities or linear corridors where the surrounding land uses are the same as, or similar to the land uses in the facility footprint, described in Section 3.2.2, “Existing Land Uses.”

3.3 PROJECT OBJECTIVES

CEQA requires that an EIR include a statement of objectives for the project, and that the objectives include the underlying purpose of the project. These objectives help the lead agency determine the alternatives to evaluate in the EIR (see CEQA Guidelines Section 15124[a]). The fundamental underlying purpose of the VSVSP is to develop a year-round destination resort that is on par with peer world class North American ski destinations. The following is a list of objectives for the VSVSP that supports the fundamental underlying purpose:

1. Realize a year-round destination resort, consistent with the vision and objectives of the Squaw Valley General Plan Land Use Ordinance (SVGPLUO). As stated in the SVGPLUO, that vision is to “ensure that Squaw Valley is developed into a top quality, year-round, destination resort,” “without adversely impacting the unique aesthetic and environmental assets of Squaw Valley.” (Placer County 1983:4)
2. Create a resort facility that provides a wide range of destination resort services and amenities to guests and residents on site.
3. Focus resort related development in proximity to the existing Village and mountain ski area.
4. Provide resort facilities that integrate with and support mountain operations.
5. Focus project development primarily on previously disturbed/developed areas.
6. Protect and enhance natural resources in Olympic Valley, including habitat restoration in Squaw Creek within the plan area.
7. Provide a compact development that minimizes the overall resort footprint.
8. Provide a connected, walkable, tourist-serving mixed-use development.
9. Provide a level of development compatible with existing uses and development practices.

10. Provide a cohesive building design and circulation patterns that integrate project elements with each other, existing development, and the mountain/ski facilities.
11. Provide a comprehensive multi-modal circulation, transit, and parking plan that minimizes reliance on the automobile for movement in and out of the plan area and within the plan area.
12. Provide a specific plan that has sufficient flexibility to be responsive to future market conditions.
13. Provide a resort with sufficient size and services to be on par with peer world class North American ski destinations and that is economically sustainable.
14. Provide a resort that can fund infrastructure improvements, public services improvements, and other municipal costs.

3.4 DESCRIPTION OF THE PROPOSED PROJECT

3.4.1 Proposed Land Uses

The Specific Plan would allow for development of resort hotel, residential, commercial, retail, and recreational uses similar to uses currently allowed under the SVGPLUO, including lodging, skier services, retail shopping, restaurants and bars, entertainment, and public and private recreational facilities (see Chapter 4, “Land Use and Forest Resources,” for a discussion of the existing land use designations identified for the plan area in the SVGPLUO).

The plan area would consist of two main zones within the main Village area: the Village Core, consisting of a wide mix of uses and activities concentrated in close proximity to the ski slopes and the existing Village, with higher density lodging, the Mountain Adventure Camp (described below), and a variety of retail and restaurant spaces along with pedestrian-friendly paths and gathering spaces; and the Village Neighborhoods, consisting of medium-density resort residential neighborhoods and smaller-scale neighborhood-serving commercial uses. In addition, the plan area would include the approximately 8.8-acre East Parcel, which is planned for employee housing, off-site parking, a community market, and activities that are ancillary to the Village, such as shipping, receiving, and distribution.

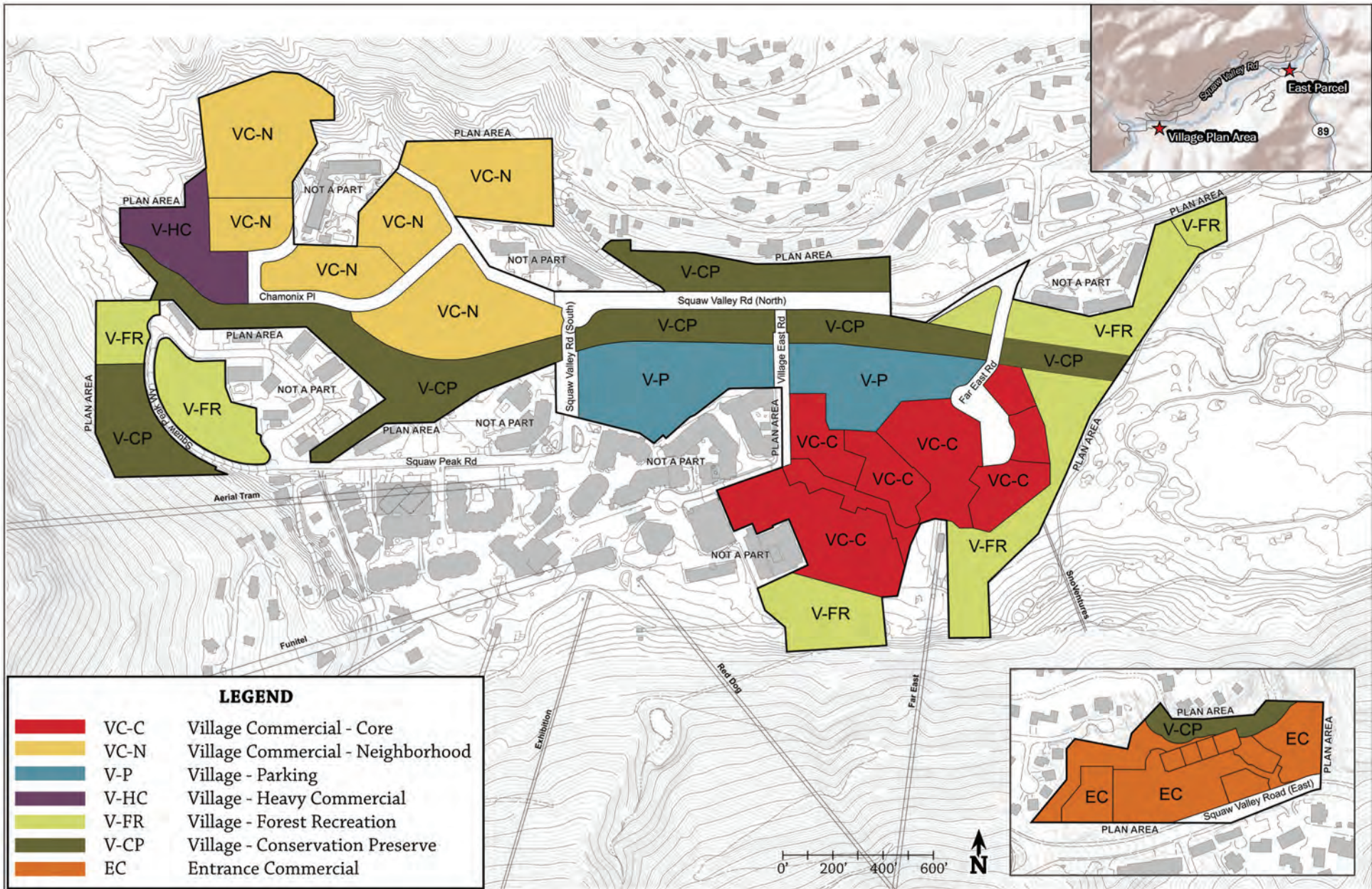
Exhibit 3-4 presents the proposed land use plan. Table 3-1 identifies the development types that would be permitted in the plan area by land use designation. As noted in Table 3-1, the Specific Plan allows for a maximum of 850 units (with a maximum of 1,493 bedrooms) in the main Village area and up to 50 units to accommodate a maximum of 300 employees on the East Parcel.

A complete list of the specific uses allowed within each zone is provided in Table 3-2 of the Specific Plan.

DESIGN CONCEPT

The Specific Plan envisions an interconnected, pedestrian-friendly mountain village established through architecture and landscaping that celebrates and connects with the unique Sierra Nevada setting. The natural landscape would be extended into the Village, creating a strong sense of place. The development pattern and placement of buildings within the plan area would be designed with the intent to preserve principle views of surrounding mountain peaks from most areas within and adjacent to the project to the extent practical. In locations where unobstructed views of the mountains are not possible, the location of buildings in the Specific Plan would be designed with the intent to provide view corridors of the prominent mountain peaks from areas within the project and from areas adjacent to the project. The Village environment would be a coherent mix of building masses, heights (see more detail below), and materials that create a vibrant pedestrian experience.

The developed character of properties in the plan area would reflect design concepts and details of traditional North American mountain architecture and utilize locally-available building materials (see



Source: Squaw Valley Real Estate, LLC 2014; Adapted by Ascent Environmental in 2014

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Table 3-1 Proposed Land Uses								
Land Use	Area (acres)	Maximum Units	Maximum Bedrooms	Maximum Density (br/acre)	Average Density (br/acre)	Maximum Commercial (sf) ^a	Existing Commercial to be Removed (sf)	Percent of Plan Area
Main Village Area								
Village Commercial – Core (VC-C)	13.66	517	883	125	85	223,369	54,937	14.6%
Village Commercial – Neighborhood (VC-N)	18.47	333	610	71	39	40,364	36,585	19.8%
Village – Parking (V-P)	8.79	-	-	-	-	-	-	9.4%
Village – Heavy Commercial (V-HC)	2.85	-	-	-	-	10,000	-	3.1%
Developed Area Subtotal	43.77	850	1,493	-	-	273,733	91,522	46.9%
Village – Forest Recreation (V-FR)	15.40	-	-	-	-	-	-	16.5%
Village – Conservation Preserve (V-CP)	17.78	-	-	-	-	-	-	19.1%
Undeveloped Area Subtotal	33.18	-	-	-	-	-	-	35.6%
Roads	7.58	-	-	-	-	-	-	8.1%
Total Main Village Area	84.53	-	-	-	-	273,733	91,522	90.5%
East Parcel								
Max. Employees								
Entrance Commercial (EC) ^b	7.01	50 ^b	150 ^b	300 ^b	-	20,000 ^c	-	7.5%
Village – Conservation Preserve (V-CP)	1.03	-	-	-	-	-	-	1.1%
Roads	0.76	-	-	-	-	-	-	0.8%
Total East Parcel	8.8	50	150	-	-	20,000	-	9.4%
Total	93.33	900^d	1,643	-	-	297,733^b	91,522	100.0%
Notes: br/acre = bedroom per acre; sf = square feet								
^a Includes replacement of existing commercial uses and maintenance facilities. The square footage includes hotel common areas, conference rooms, and similar uses beyond the traditional retail, restaurant, and similar commercial uses.								
^b Employee housing is included in the Entrance Commercial land use area in the East Parcel. The maximum number of employees that would be housed on the East Parcel would be 300. The actual number of bedrooms may be much smaller than 150, because the housing or “beds” could ultimately be provided in a variety of private room, shared room, and dormitory configurations. These beds could also be contained in a variety of different building or “unit” configurations. Given these conditions, it is not appropriate to convey employee housing capacity in the same unit and bedroom metrics used to describe other housing in the plan area.								
^c Includes 15,000 sf of shipping/receiving and 5,000 sf of market.								
^d Total development within the plan area shall not exceed the maximum units and commercial square footage shown.								
Source: Squaw Valley Real Estate, LLC 2015								

Appendix B of the VSVSP which includes the proposed development standards and design guidelines for the proposed project). The maximum height of buildings in the main Village area would range from 20 to 108 feet tall, including podium parking levels. (By comparison, the buildings at the adjacent existing Intrawest Village are about 65 to 83 feet tall and the tallest buildings at the Resort at Squaw Creek are approximately 108 feet above grade when viewing the east entrance and approximately 130 feet above grade when viewed from the west.) The maximum height of podium parking would be 14 feet above grade, providing for one level of parking. In the western portions of the plan area with a low water table, podiums may be completely sub-grade to a maximum depth of 16 feet. The tallest buildings, up to 108 feet tall, would include six stories of lodging and commercial over one level of podium parking or seven stories of lodging and commercial with no podium parking below.

The parking structures on Lots 11 and 12 and the East Parcel would consist of one level of structured parking over surface parking; the deck height of the structured parking would be approximately 14 feet, with railings and architectural elements extending to 20 feet and 30 feet, respectively.

On the East Parcel, the maximum height would be 35 feet for the housing structures, the shipping and receiving building, and the retail/market building. The parking structure would have a maximum height of 20 feet.

Exhibit 3-5 illustrates one scenario of how the Specific Plan could be implemented based on the zoning and design standards set forth in the Specific Plan. As noted on the exhibit's footnote, this is an illustrative concept plan intended to show a representative site plan. The Specific Plan provides flexibility regarding building design and layout so the project can respond to market demands. Ultimately, the proposed project could differ from the development shown in Exhibit 3-5; however, the maximum building heights as well as number of units, beds/bedrooms, densities, and commercial square footage to be constructed and removed, which are identified in Table 3-1, would not be exceeded. For purposes of this DEIR, the maximum development presented in Table 3-1 was assumed to identify potential environmental impacts. Exhibit 3-5 along with the proposed Development Standards and Design Guidelines (Appendix B of the VSVSP) was used to understand the maximum building heights and permitted land uses on each lot within the plan area. The visual simulations prepared for the project (see Chapter 8, "Visual Resources") were the primary tool used to identify the project's potential visual impacts.

RESIDENTIAL AREAS

Within the main Village area, the Specific Plan allows for a maximum of up to 850 units (with up to 1,493 bedrooms), as shown in Table 3-1. The units would include a mixture of hotel, condo hotel, fractional ownership, and timeshare units. Up to 517 of these units would be in areas zoned as Village Commercial – Core (VC-C), encompassing approximately 14 acres with an average density of 85 bedrooms per acre. The remaining up to 333 units would be in areas zoned as Village Commercial – Neighborhood (VC-N), encompassing approximately 18 acres with an average density of 39 bedrooms per acre.

The overall lodging options in the plan area would range from more modest and "family-friendly" hotels, timeshares, and fractional ownership units to luxury accommodations. The Specific Plan provides for condominium-hotels where one or more rooms in a multi-room condominium unit could be "locked off"; allowing a room for the owners to remain private and the remainder of the condominium to be used as one or more hotel rooms (depending on the number of rooms in the overall condominium) rented to guests when the owners are not present.

EMPLOYEE HOUSING (EAST PARCEL)

The project is expected to generate an additional 574 new full-time equivalent (FTE) employees annually. The *Placer County General Plan* requires that new development in the Sierra Nevada provide housing for a minimum of 50 percent of the FTE employees generated by a development project, through a variety of mechanisms including development of on-site or off-site housing, payment of in-lieu fees, or dedication of land needed for units. Therefore, the project would be required to ensure that housing is provided for 50 percent of its FTE employees, which could be up to 287 employees at plan area buildout. In addition, the



Note: The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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project includes removal of existing structures in the main Village area that currently provide seasonal employee housing for 99 staff (Courtside and Hostel). With the removal of these existing employee housing facilities, the project would need to provide housing for as many as 386 employees at plan area buildout.

Under the Specific Plan, 7.01 acres of the 8.8-acre East Parcel would be zoned Entrance Commercial (EC) and would be developed with employee housing, employee recreational facilities, employee parking facilities, and a shipping and receiving facility. Up to 50 employee housing units, accommodating a maximum of 300 employees, would be constructed on the East Parcel (Exhibit 3-6). These units would be developed on five proposed lots that range in size from 0.11 acre to 0.33 acre. Some outdoor amenities for employee use would be included around the Employee Housing complex such as barbeque areas, picnic tables, a passive park setting, and/or horseshoe pits.

In addition to providing employee housing on the East Parcel, the project would employ other methods to meet the County employee housing standards. Options include providing off-site employee housing (including outside of Olympic Valley), dedication of land for needed units, and/or payment of an in-lieu fee to the County.

COMMERCIAL AREAS

Within the plan area, a total of approximately 297,733 square feet of tourist-serving commercial space is proposed. This square footage estimate includes hotel common areas, conference rooms, retail, restaurant, and similar commercial uses. Additionally, approximately 91,522 square feet of existing commercial space within the main Village area is proposed to be removed as a result of Plan development. Additional detail is provided below.

Within the Village Core, in areas zoned as VC-C, approximately 223,369 square feet of commercial space is proposed. The Village Core would include higher density lodging (described above), the Mountain Adventure Camp (described below), and a variety of retail and restaurant space. Approximately 54,937 square feet of existing commercial space would be removed in this area (see Table 3-2).

Within the Village Neighborhoods, approximately 40,364 square feet of commercial space is proposed. The Village Neighborhoods would include medium density resort residential neighborhoods (described above) and smaller-scale neighborhood-serving commercial uses, such as spas, health care services, skier services, and recreational and resort-based facilities. Approximately 36,585 square feet of existing commercial space would be removed in this area (see Table 3-2).

Approximately 10,000 square feet of commercial space is proposed in the main Village area, in an area zoned as Village – Heavy Commercial (V-HC). This area is intended for uses related to ski resort and related operations, and would provide space for heavy equipment maintenance, storage, and construction-related shop space. Additionally, this area could include offices, mountain maintenance facilities, and parking.

Approximately 20,000 square feet of commercial space is proposed on the East Parcel, in an area zoned as EC. Anticipated commercial uses include 15,000 square feet for shipping and receiving and a small market (5,000 square feet). The remainder of the parcel would be used for employee housing (described above) and parking.

OTHER SPECIFIC PLAN COMPONENTS

Snow Beach

The existing slopeside “beach” (snow beach) along the southeastern side of the existing Village at Squaw Valley (see Exhibit 3-5) would be enhanced and protected. The snow beach would be the main gathering spot where multiple recreational, entertainment, and cultural activities would occur. Grading would be conducted in much of the snow beach area to provide a more level surface and to improve drainage.

Mountain Adventure Camp

The 90,000-square-foot Mountain Adventure Camp, proposed in the main Village area (see Exhibit 3-5), would offer an extensive indoor/outdoor pool system including water slides and other water based recreation. The facility would provide additional entertainment options that could include indoor rock



Note: Employee housing will be located immediately adjacent to or above parking. The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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climbing, a movie theater (maximum 300 seats), a bowling alley (maximum 30 lanes), and a multi-generational arcade. Additionally, the Mountain Adventure Camp could include up to a maximum of 15,000 square feet of food and beverage facilities and up to a maximum of 12,000 square feet of group meeting venues.

Potential Relocation of Squaw Kids

As indicated in the legend for Exhibit 3-5, the Specific Plan includes the potential to relocate the existing Squaw Kids ski lesson program to the new Building 9. If this were to occur, the building currently housing Squaw Kids would be used for other skier services and mountain operations such as ski patrol.

Outdoor Winter Ice Skating Rink/Summer Performance Area

An outdoor winter ice skating rink is proposed in the Village Core adjacent to the Funitel Plaza and surrounded by a pedestrian plaza/commercial level. In the summer, the area could be used as an outdoor concert/performance area.

Removal of Existing Buildings

Although much of the plan area encompasses locations currently used for parking or locations without existing development, there are some portions of the plan area where existing structures would be removed to accommodate planned new development. Existing facilities proposed to be removed are presented in Table 3-2. Much of the material generated by the demolition of existing facilities will be reclaimed and incorporated into the development of the project. Material from demolition that is not suitable for reclamation would be hauled off-site to an appropriate disposal facility.

Table 3-2 Existing Facilities to be Removed/Demolished			
Location	Building/Facility	Use(s)	Square Footage
Village Commercial – Core (VC-C)	Medical Clinic	Clinic	1,519
	Far East Building	Shipping/Receiving, Dining, Ski Services	10,523
	Snow Ventures	Children’s activities	2,360
	Red Dog Maintenance	Building Services, Vehicle Maintenance, Groomers, Carpenter Shop, Uniforms, Ski Patrol, Storage Race Services, Terrain Park Locker rooms and offices, Dispatch, Race Team lockers and office, etc.	40,535
VC-C Subtotal			54,937
Village Commercial – Neighborhood (VC-N)	Clock Tower	Offices	2,593
	Olympic Valley Lodge	Offices, Conference/Events Room	20,120
	Courtside Employee Housing	Employee Housing	6,960
	Hostel Employee Housing	Employee Housing	6,912
VC-N Subtotal			36,585
Total			91,522

Source: Information provided by Squaw Valley Real Estate, LLC in 2014 and 2015

3.4.2 Circulation and Parking

The Specific Plan’s roadway hierarchy and parking system would be designed to be pedestrian oriented, allowing arriving resort visitors to park quickly and stay at the resort without the need for a car. The proposed circulation plan is presented in Exhibit 3-7.

ROADWAY SYSTEM IMPROVEMENTS

Beginning at its intersection with Far East Road, Squaw Valley Road would be striped with two 12-foot travel lanes, a 12-foot two-way left-turn lane, and 10-foot shoulders on both sides (plus 3-foot curb and gutter

sections). The two-way left-turn lane would be utilized as a left turn lane at Village East Road and would provide an acceleration lane for westbound turn movements from Village East Road onto Squaw Valley Road. Squaw Valley Road would then continue southward from the intersection with Chamonix Place, going into the Village resort core as a two-lane road.

Far East Road, Village East Road, and Chamonix Place would be designated primary roads within the plan area. Each primary road would have two vehicle lanes and associated improvements. Far East Road would include curb and gutter, a bike shoulder, and pedestrian walkways. Village East Road would include a bike shoulder traveling in both directions, walkways, and curb and gutter. Chamonix Place would include bike lanes, curb and gutter, and walkways on both sides of the street.

Three existing bridges would continue to provide access across Squaw Creek to the Village Core area. The existing Squaw Valley Road bridge (the most westerly bridge) currently provides two 12-foot travel lanes, a 7-foot shoulder, and an 8-foot sidewalk in each direction. The bridge would be widened to provide a 10-foot sidewalk on the both sides of the road. The existing Village East Road bridge (center bridge) would be preserved in its current configuration. This bridge provides two 12-foot travel lanes, two 8-foot shoulders, a 7-foot sidewalk on the west side of the structure, and a 5-foot path on the east side. The third bridge, located near the northeasterly corner of the plan area, is the existing Far East Road crossing. This bridge would be kept in its current location and reconfigured into two 12-foot travel lanes, with 8-foot sidewalks in each direction. It will also have a 7-foot shoulder/bike path, and curb and gutter.

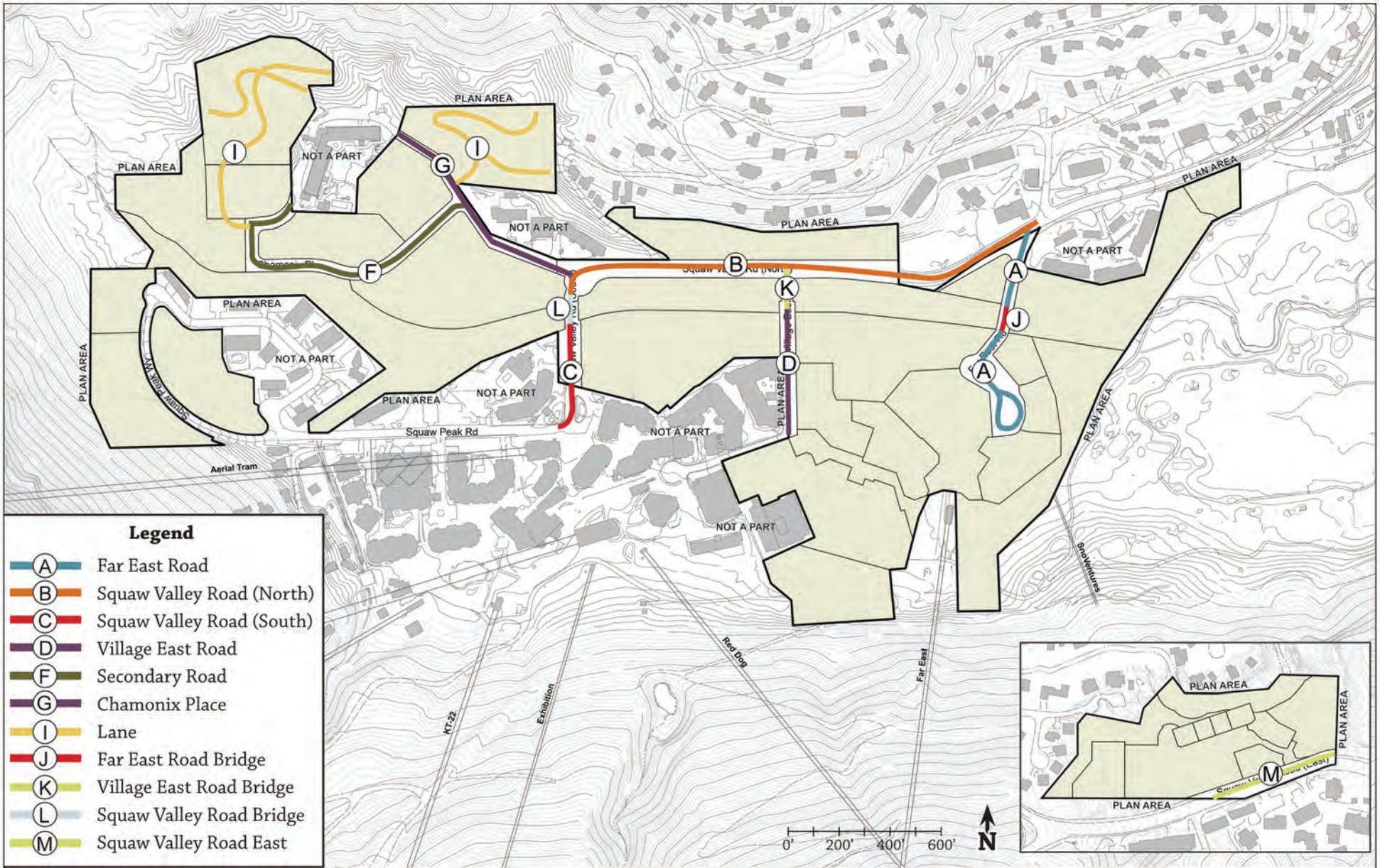
PARKING

Parking would be provided as follows:

- ▲ **Below-grade and podium parking** would be constructed beneath the majority of lodging and resort-residential buildings primarily for guests/owners. Operational vehicles and employees could be accommodated under certain circumstances on a space-available basis.
- ▲ **Surface and structured parking lots** on the north side of the Village Core would provide parking for day skiers, visitors, and guests of nearby lodging/resort-residential properties. The surface parking lots (on Lots 11 and 12) would be converted to one level of structured parking over grade (14 feet maximum parking deck height with railings and architectural elements extending to 20 feet and 30 feet, respectively) at a later time, as parking needs increase.
- ▲ **Parking outside the main Village area** would be provided for employees and day skiers. The East Parcel would serve as the key parking location outside the main Village area, providing a parking structure with one level of structured parking over grade with a maximum parking deck height of 14 feet with railings and architectural elements extending to 20 feet and 30 feet, respectively. The East Parcel would serve as both employee parking and overflow day skier parking as the plan area builds out and would be flexibly managed to meet total project parking demand.

Additional off-site parking areas may be provided on an as-needed basis and would primarily be used for employees and day skiers. Temporary parking outside the Olympic Valley may be considered, but no specific sites have been identified.

Surface parking and structured parking facilities would be developed in phases as the plan area builds out. Each project phase would be required to demonstrate parking would be developed to serve all of the project-phase generated parking demand and that no fewer than 3,100 day skier parking spaces would be provided. Parking demand rates have been developed based on existing code, observed parking needs in similar resort areas, and detailed surveys of parking patterns in Squaw Valley. Parking facilities would be managed flexibly in response to changes in parking demands, and to accommodate project parking needs on-site on all but the busiest four days of the ski season. The overall parking supply is proposed to accommodate at least 10,663 daily skiers in any ski day, through all phases of development. In total, 3,297 parking spaces would be provided in separate parking structures at full project buildout (Exhibit 3-8). It is anticipated that up to approximately 1,800 additional spaces would be provided in podium parking under new buildings in the plan area.



Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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Parking Summary	
Parking Area	Spaces
Lot 11	1,000
Lot 12	1,067
East Parcel	524
IntraWest P2	360
Preferred Parking	346
Total	3,297

Note: The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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The Specific Plan also indicates that parking areas outside of the Valley could be pursued, if needed, in the future with preference given to lots in a regional park-and-ride program or where parking can be shared with other facilities (such as schools and marinas) that have space available on peak ski days. No such parking areas are proposed at this time, and out-of-valley parking is not needed to satisfy County and/or Specific Plan requirements for parking based on the current conceptual plan. If and when out-of-valley parking areas are proposed to be used, they would be subject to the County or Town of Truckee (if located in Truckee) approval processes and CEQA review.

EMERGENCY VEHICLE ACCESS

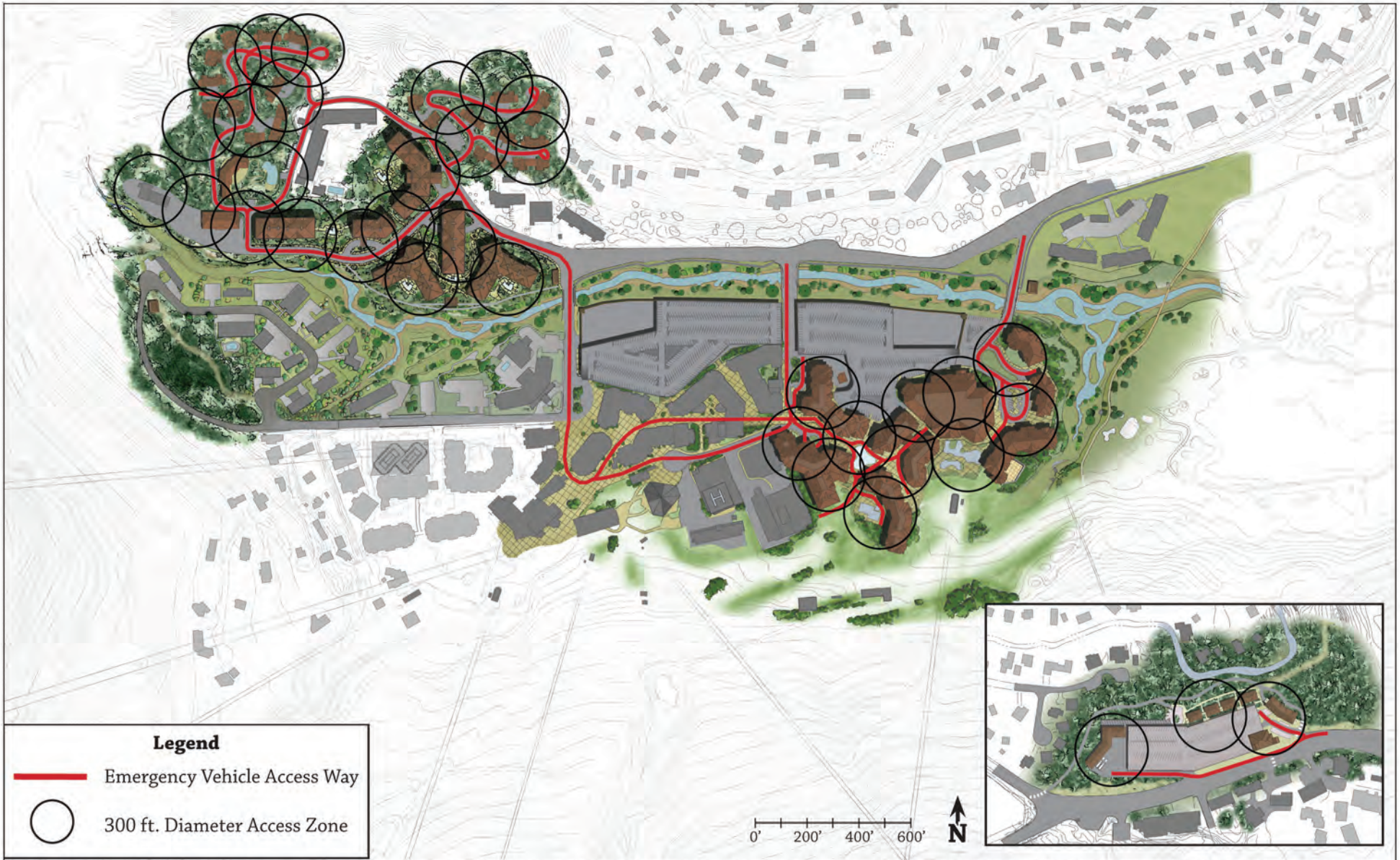
Emergency vehicle access routes to and within the plan area as shown in Exhibit 3-9 would provide secondary access when needed. Emergency vehicle access routes would be 24 feet wide with a minimum pavement width of 20 feet and 2-foot shoulders as shown on Exhibit 3-9. The project would not include widening of the existing main road. In addition to emergency vehicle access routes, Exhibit 3-9 shows that all buildings would be within 300 feet of an emergency vehicle all weather access route.

In support of advanced emergency medical services, a dedicated helipad for patient evacuation to regional emergency care providers would be established within the main Village area. Under current conditions, helicopters land at various locations when a medical evacuation is needed. The fire department and ski patrol coordinate to locate sufficient landing areas in the Squaw Valley Ski Resort parking lot (if sufficient area is available) or at different locations on the mountain. A dedicated helipad would not increase helicopter flights, but would provide a more predictable and secure landing location. The helipad would be a maximum of 120 feet by 120 feet. It would be conveniently located to assure timely access by ambulances and other emergency vehicles with the intent of minimizing the impact of noise and rotor wash to nearby buildings, residents, and guests. It is anticipated that the helipad would be a raised structure over the Preferred Parking lot adjacent to the Member's Locker Room and Squaw Kids' current building; however, it may be developed in another location that meets the minimum requirements of the State Aeronautics Act (California Public Utilities Code [PUC] Section 21002 et seq.). The helipad design and construction would incorporate a dedicated elevator that could accommodate a medical gurney, snow clearing operations, and proper aeronautical markings.

The helipad would be considered an emergency medical services (EMS) landing site pursuant to the California Code of Regulations (CCR), Title 21, Sections 3525 through 3560 (Airports and Heliports). Emergency medical services landing sites are designated and authorized by a public safety agency (i.e., any city, county, state agency, or special purpose district authorized to arrange for emergency medical services) for the landing and taking off of an emergency services helicopter (PUC Section 2166.1). By definition, these sites are used an average of six times per month or less over a 12-month period, are not marked as a permitted heliport, and are used only for emergency medical purposes. Emergency services landing sites are exempt from the permitting requirements of Title 21 of the CCR pursuant to PUC 21661.

BICYCLE FACILITIES

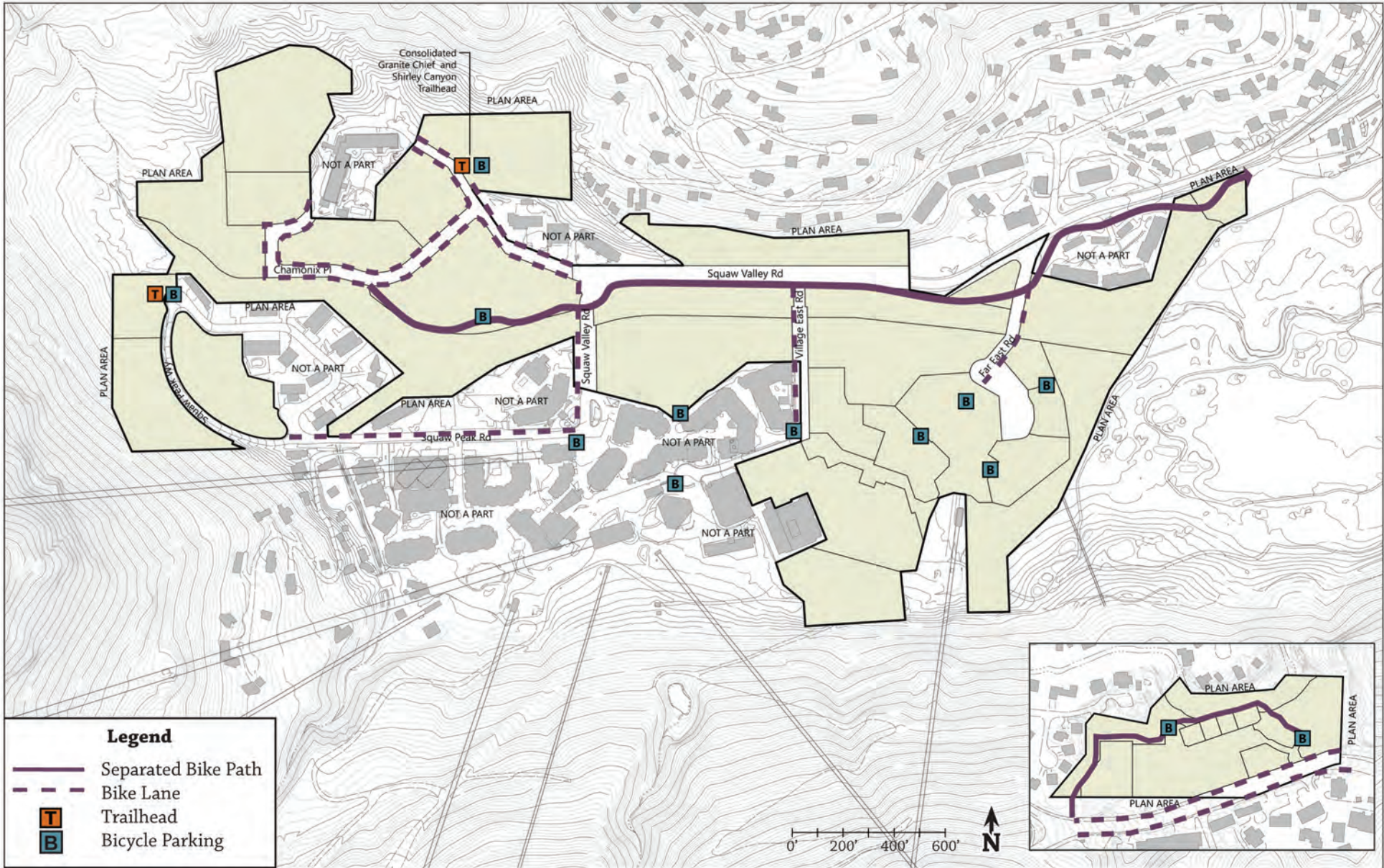
The proposed bicycle facilities are presented in Exhibit 3-10. The existing Class I bicycle path located on the southern side of Squaw Valley Road east of Far East Road would be extended westward through the Village along the north side of the restored Squaw Creek (Squaw Creek restoration is described in Section 3.4.5, "Squaw Creek Restoration," below). The extended Class I bicycle path would provide a non-vehicular route with gathering spots, interpretive signage, and informational graphics on restoration areas. Multiple pedestrian and bicycle connections would be provided into the Village Core and linked to the Granite Chief and Shirley Canyon trailheads. From the Village, a series of radiating pedestrian thoroughfares and Class II bicycle paths would link the easternmost snow beach with the westernmost Village Neighborhoods and the major valley-wide bike path. Bicycle lanes would be provided on all primary roads, and bicycle racks would be provided at locations throughout the Village, as well as at the Granite Chief and Shirley Canyon trailheads, and at all major lodging properties.



Note: This plan will comply with Squaw Valley Fire Department EVA Standards. The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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Exhibit 3-10

Proposed Bicycle Network



The material used for the bicycle and pedestrian trails/paths will be suitable for snow plowing, making them accessible during the winter. Snow removal service on the paths will be funded through a maintenance agreement, or as part of an agreement with the SVPSD. Trails and paths will use pervious pavement/concrete material, where feasible.

TRANSIT CENTER

A new Transit Center, located within the main Village area along Squaw Valley Road (see Exhibit 3-5), would provide a convenient transit hub for both public and private transit services. It would be designed as a drop-off/pick-up facility with the capacity to accommodate up to two buses at a time.

3.4.3 Public Services and Utilities

The VSVSP would require the provision of public services and utilities to provide necessary services to the plan area. Law enforcement would continue to be provided by the Placer County Sheriff's Department and the California Highway Patrol in the same manner as under existing conditions. Solid waste removal would continue to be provided by the Tahoe Truckee Sierra Disposal employing the same systems and methods as currently used. For the following public services and utilities some element of the infrastructure or systems providing these services would be modified under the proposed project and each are discussed in more detail below: water supply, wastewater (collection, treatment, and disposal), storm drainage, electrical power, propane, fire protection, snow removal, and recreational facilities.

WATER SUPPLY

Potable and irrigation water is proposed to be provided either by the SVPSD or by a mutual water company that would be established as part of this project. A Water Supply Assessment was prepared to evaluate water demand from the project relative to available supply (see Appendix C).

Water would be provided from the local groundwater basin through a series of existing and new wells, with an overall well field designed to serve existing, project, and other planned uses. Water would be delivered to the plan area from strategically placed wells that would work in concert with existing wells in the Valley. Existing wells would be utilized where feasible. Existing wells that cannot be incorporated into the system would be abandoned per State and County standards. The number and location of new wells may be influenced by whether a mutual water company is established as part of the project (which could require more new wells). It is possible that treatment of some well water for minerals or other constituents may be required. Land is reserved in the project site for these facilities (Exhibit 3-11). Treatment is planned to be provided via centralized treatment facilities located in either new or existing buildings.

Water would be distributed within the main Village area via looped pipelines generally located within the roadway system and pedestrian network. The East Parcel would be served by a new water line that would be extended from an existing line along Squaw Valley Road. Existing pipelines would be relocated as needed, and if any existing lines are no longer necessary to support the water system, they would be removed or abandoned as needed per State and County standards. The project is also anticipated to include a new 0.7 million gallon water storage tank on approximately 0.5 acre located adjacent to an existing 1.0 million gallon tank just north of the Village Neighborhoods area (Exhibit 3-11). These two tanks are anticipated to provide sufficient pressure via gravity flow and capacity to store water for peak day demand plus fire flows for the plan area and existing development currently served by the 1.0 million gallon tank.

WASTEWATER

The SVPSD owns and operates the wastewater collection system that serves Squaw Valley. New gravity wastewater lines would be installed within the roadway network to serve the plan area (Exhibit 3-12). These pipelines would generally flow from west to east, and would tie into the SVPSD main trunk sewer system, which extends from the plan area, crosses under SR 89 and the Truckee River, and discharges into the T-TSA Truckee River Interceptor located along the Truckee River. The T-TSA would provide wastewater

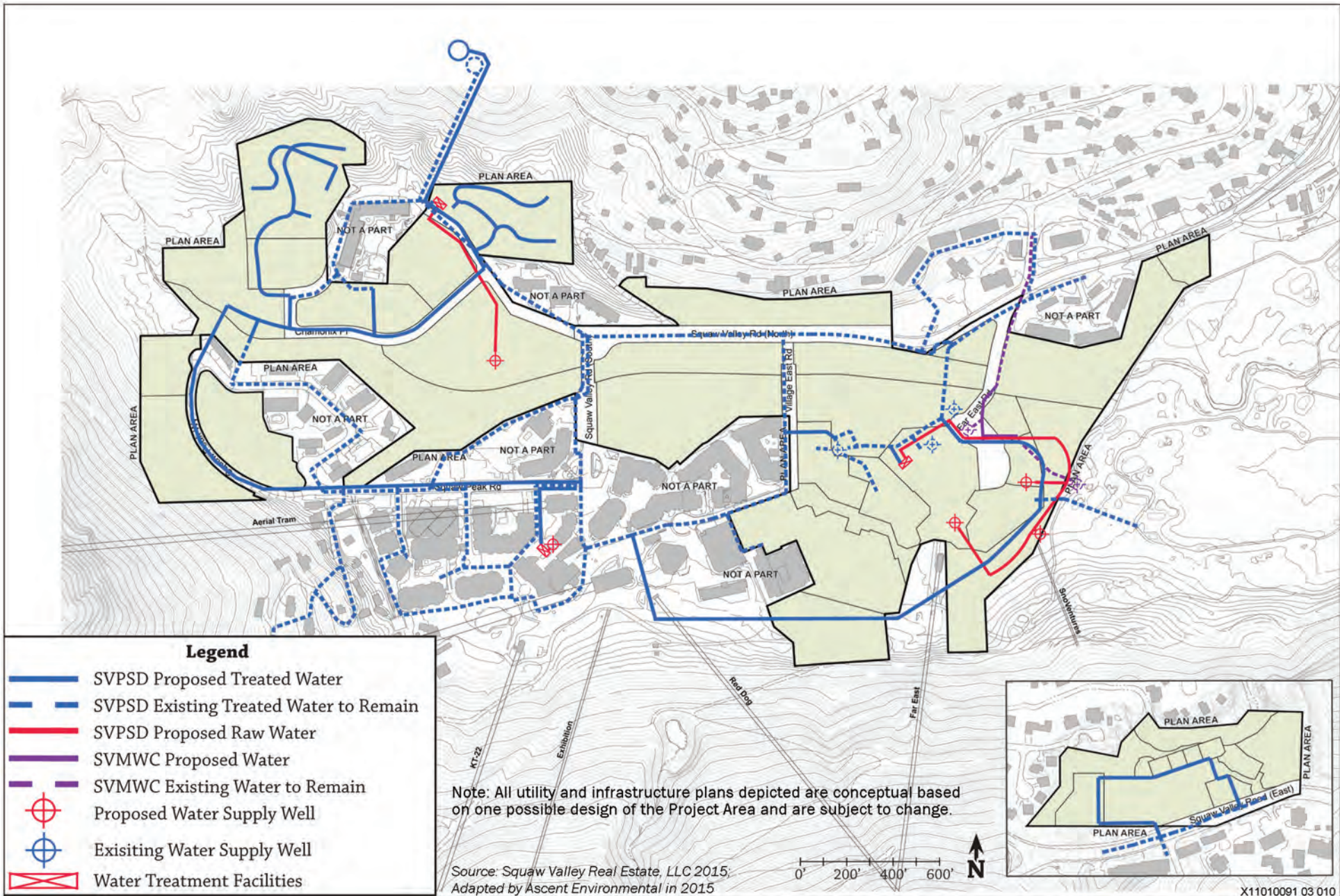
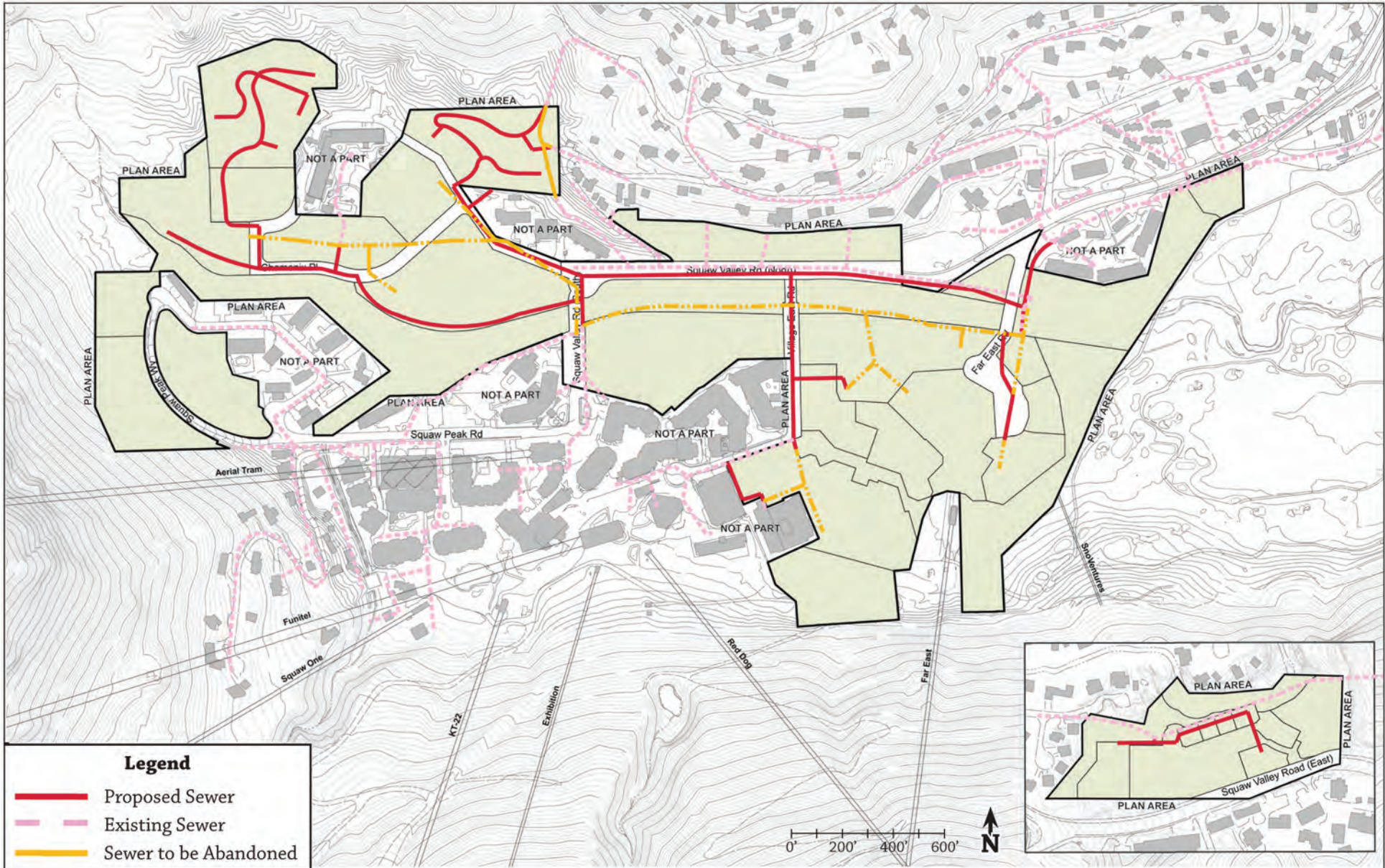


Exhibit 3-11

Proposed Utilities Plan – Water





Note: All utility and infrastructure plans depicted are conceptual based on one possible design of the Project Area and are subject to change.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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treatment at its existing water reclamation plant, located in Nevada County along the Truckee River. Existing wastewater lines in the plan area that cannot be incorporated into the system would be abandoned per State and County standards.

As part of development of the wastewater collection and transfer system, the 15-inch trunk line adjacent to the Far East Road Bridge would be replaced, and the 15-inch trunk line south of Squaw Creek would be relocated to the alignment of Squaw Valley Road (Exhibit 3-12). In addition, the existing off-site sewer trunk line (which runs between the eastern boundary of the Main Village Area on the north side of Squaw Creek and along the northern boundary of the East Parcel to the TTSA interceptor at SR 89) is anticipated to require upgrading along all, or a portion of, the alignment. This upgrade is included as part of the proposed project and the entirety of the sewer line corridor is included as part of the project site (Exhibit 3-3). A new sanitary sewer line would also be installed on the East Parcel, and would connect to an existing line that crosses through the northern portion of the parcel.

The T-TSA is currently studying the capacity of the Truckee River Interceptor to confirm whether it could accommodate peak flows from the VSVSP along with other development and flows. If the study concludes that the Interceptor cannot accommodate peak flows, wastewater detention facilities would be incorporated into the Specific Plan, such as enlarged pipes, vaults, or tanks. These facilities would be located in the plan area and will be underground or otherwise incorporated into project's development footprint (e.g., incorporated into a building podium). They would temporarily hold wastewater during peak generation periods (e.g., parts of the day during regional high occupancy weekends) and release the wastewater during lower flow, non-peak periods, when there is available capacity in the Truckee River Interceptor.

STORM DRAINAGE

On-site drainage improvements would consist of a combination of conventional subsurface and surface drainage systems and construction of pipe and open channel conveyance systems. Stormwater from the main Village area would be discharged at or near existing outfalls into the Squaw Creek corridor. Stormwater from the East Parcel would also be discharged to Squaw Creek via new outfalls. Vegetated swales, soft armoring, mechanical storm filters, structural interceptors, and other best management practices and/or low impact development (LID) features would be utilized for water quality management and to minimize potential impacts. Anticipated locations for many of these facilities are shown in Exhibit 3-13.

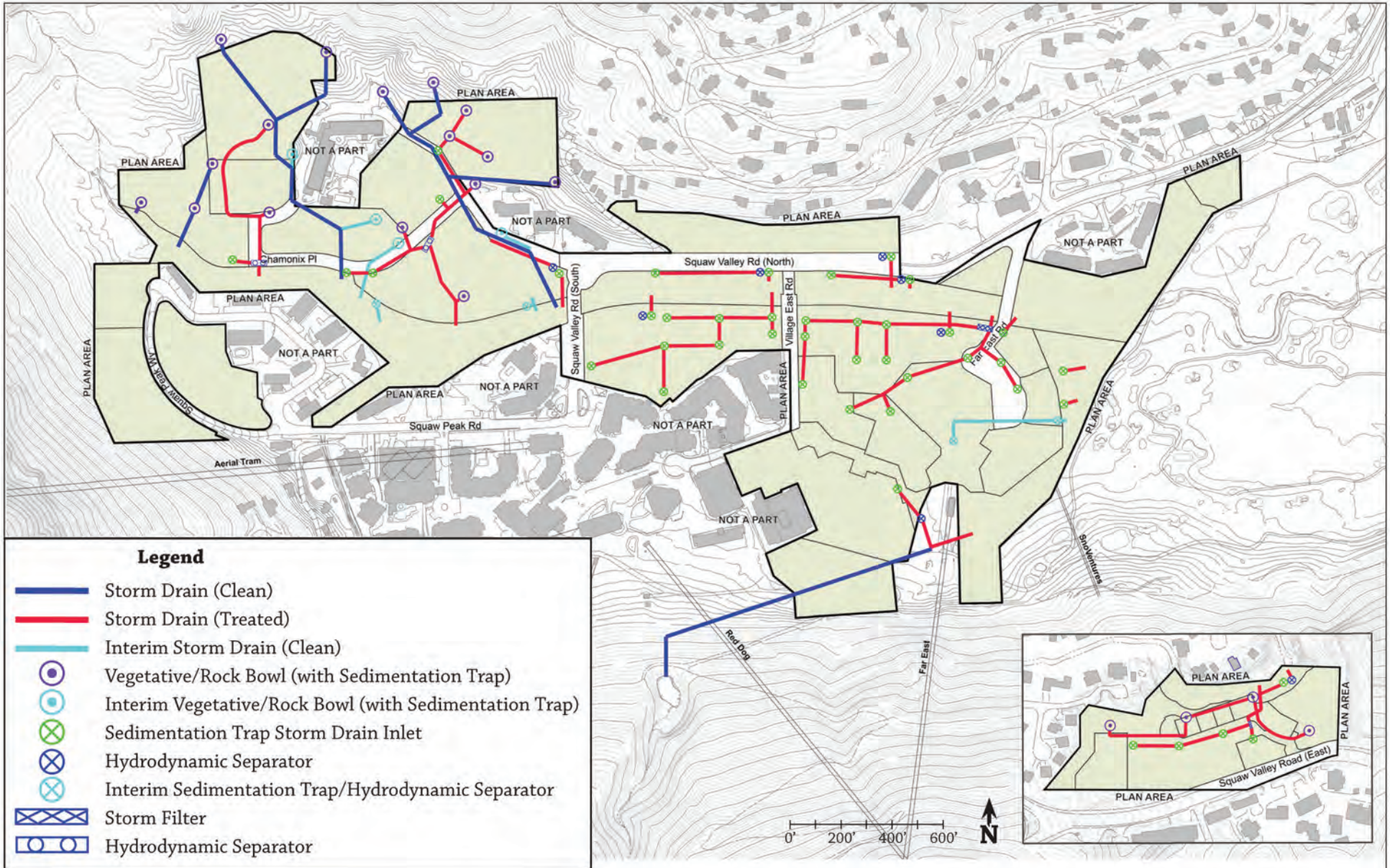
The LID features would be consistent with the Placer County Low Impact Development Guidebook. LID stormwater management designs typically use small-scale, natural drainage features that can slow, clean, infiltrate, and evapotranspire runoff, and can have a positive effect on stormwater quality and reduce stormwater runoff.

To avoid comingling of runoff from the ski mountain and stormwater flows from the main Village area, a separate, dual stormwater management system is proposed. Having separate systems for the mountain and Village generated stormwater will allow for each system to be designed and operated to address the different runoff sources and support water quality monitoring for runoff from each location. The mountain interception and conveyance system would primarily consist of a series of interceptor and conveyance swales that would capture and convey mountain runoff through and/or around the main Village area. These swales would cross under on-site developed areas in culverts that would convey the 100-year design flows.

ELECTRICAL POWER

Electrical power would be delivered to the plan area from the existing Liberty Utilities Squaw Valley Substation, near the northwest corner of the Squaw Valley Road and SR 89 intersection. Liberty Utilities has existing plans to upgrade the substation as part of its overall system design (U.S. Forest Service et al. 2014) and has confirmed that with the independently planned upgrade there is sufficient transformer capacity at the substation to serve the plan area at full buildout (Capitol Utilities Specialists 2014).

Power would be delivered from the substation through a new powerline to be installed in an existing, empty underground conduit structure that runs from the Squaw Valley Substation to the existing resort parking lot. With the availability of this existing underground conduit, no open cuts (i.e., excavations for trenches, conduit, boxes,



or manholes) or additional poles are anticipated to be required for new electrical transmission lines between the substation and parking lot. Existing overhead power lines on Squaw Valley Road fronting the East Parcel and the main Village area would be undergrounded concurrent with construction of project improvements.

In the main Village area, new main line and local electrical circuits would tie into pad-mounted switches and extend underground to the proposed site improvements. Existing overhead lines northwest of the proposed Village development would be undergrounded or relocated. Portions of the existing underground lines that currently serve the Village area would also require relocation to allow for the proposed construction. In the East Parcel, electrical service would be provided by installing underground lines to connect to the existing aerial 14.4 kilovolt electrical line along Squaw Valley Road.

PROPANE/LIQUEFIED NATURAL GAS

Propane is currently the main energy source used for area heating and hot water in the Village area. With implementation of the Specific Plan, two independent propane systems would serve the area: one would serve the Specific Plan development and the other would continue to serve existing development.

Propane to serve the main Village area would be stored at a “tank farm” in the Mountain Maintenance Yard planned at Lot 19 (see Exhibit 3-5). The storage tank(s) would be periodically filled by tanker truck and would be of sufficient size to support a week or more of propane usage without refilling. It is estimated that storage capacity would total approximately 30,000 gallons per tank, and there could be up to five tanks (four new for the project and one existing that would be relocated). The tanks would meet all applicable local, State, and federal safety standards, and if feasible (based on rock/soil conditions) would be buried. The East Parcel would be served by its own above ground propane storage tank(s) with a storage capacity of approximately 15,000 gallons.

Propane would be distributed through the plan area through underground pipelines. The overall distribution system would also include vaporizers, small storage tanks, and other equipment typical of such a system.

Liquefied natural gas (LNG) may also be available in Olympic Valley, and may be used as an alternative or supplemental energy source. LNG would be delivered, refueled, and distributed in the same manner as described above for propane.

Area heating is anticipated to be the primary use for propane/LNG in the plan area. All project units would also be provided air conditioning, which would be powered by the electrical system described above.

FIRE PROTECTION AND EMERGENCY SERVICES

The Squaw Valley Fire Department (SVFD) currently provides fire protection in the Olympic Valley and would provide this service for the plan area. A recent study of fire protection services prepared for the SVPSD (Citygate 2014) indicates that an important component of providing fire protection to the main Village area would be establishment of a West Valley Fire Substation somewhere in or near the Village area. It is recommended that this facility be of sufficient size to house a 2-person crew on weekends and peak activity holidays and provide two apparatus bays. This facility and the staff located there would support more rapid responses in the Village area, particularly during periods of inclement weather or heavy traffic on Squaw Valley Road that could slow emergency vehicles travelling from the existing fire station on the east side of the Valley. It is estimated that this facility would be needed when approximately 50 percent of the lodging units have been constructed in the plan area (Citygate 2014).

The project would make a fair share contribution to the establishment of a West Valley Fire Substation somewhere in or near the Village area that is of sufficient size to house a 2-person crew and provide two apparatus bays. The location of this facility has not yet been determined. The project applicant could provide land within the main Village area to the SVFD for construction of the substation. The substation could also ultimately be constructed outside the VSVSP, or the “old” fire station on Chamonix Place could be renovated to serve as the substation. If the substation is constructed outside the VSVSP area, separate permitting and environmental review would be required (as applicable).

The existing surface parking lots within the main Village area are currently identified by the SVFD as a potential gathering point during emergency events (e.g., wildfire). The proposed parking lots in Lots 11 and 12 (Exhibit 3-8) would continue to be available for this purpose, whether as surface lots early in Specific Plan development, or later when converted to parking structures.

To continue to enhance the availability of emergency access by helicopters in the Village area and as discussed earlier, the Specific Plan includes provision of a dedicated emergency helipad within the main Village area. The helipad would only be used for emergency services. Currently, emergency helicopter landing areas are available on an as needed basis in parking lots and other open areas on the Valley floor and level areas on the mountain. The location and use of mountain landing areas would not be altered by the VSVSP.

The proposed helipad would be a maximum of 120 feet by 120 feet and at this time is anticipated to be located on a raised structure on the existing Preferred Parking lot (this parking lot is shown on Exhibit 3-8). The helipad design and construction would incorporate a dedicated elevator that could accommodate a medical gurney, proper aeronautical markings, and snow clearing operations. If ultimately the helipad is developed at another location within the main Village area, the new location would meet the criteria of being easily accessible by ambulances and other emergency vehicles while minimizing the impacts of noise and rotor wash.

SNOW MANAGEMENT

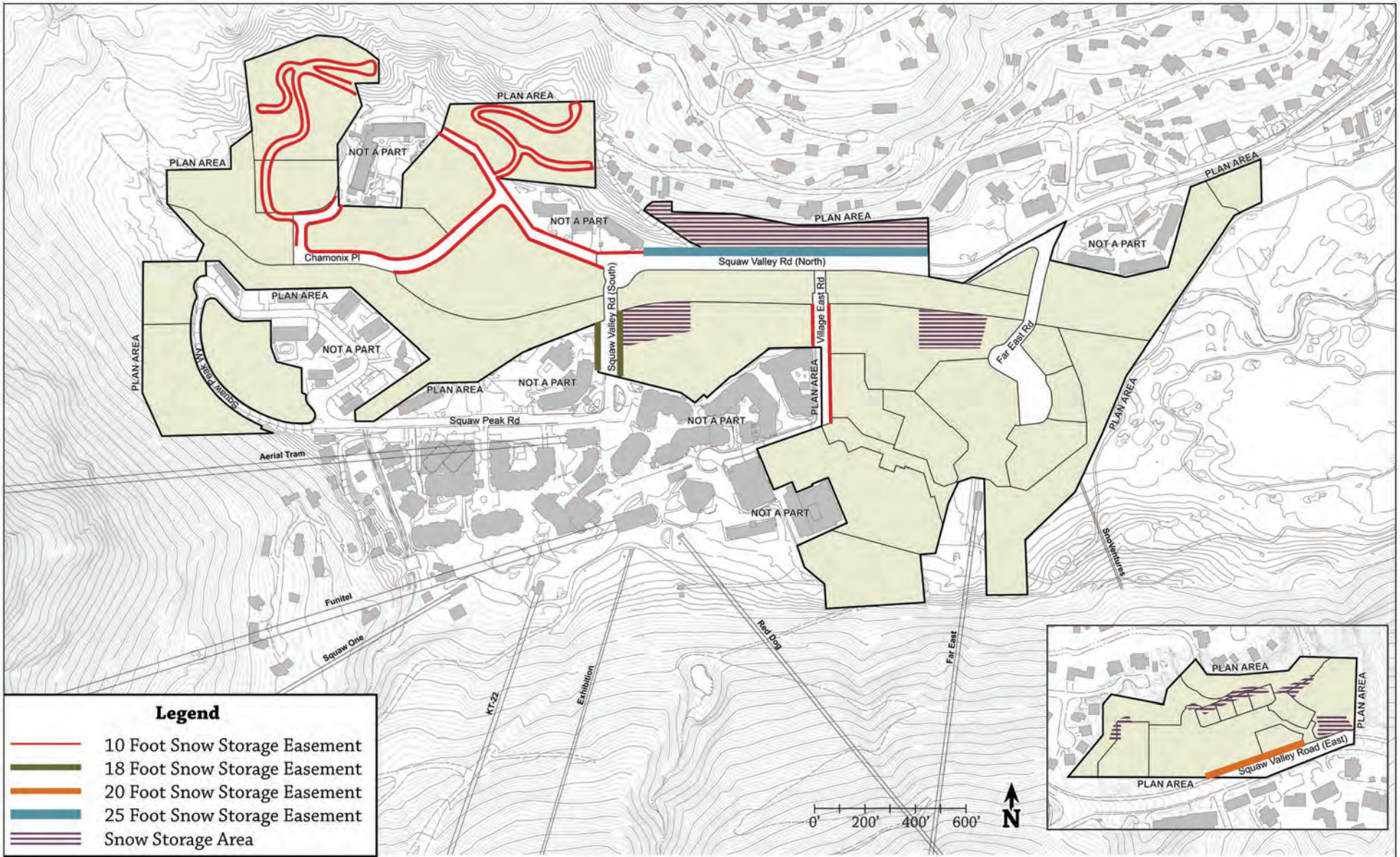
The VSVSP includes a program for snow storage and removal to maintain vehicular and pedestrian access within the plan area. The overall snow management program would implement a number of activities including on-site storage and relocation, natural snow melt, active snow melt, hauling off-site, and in situ snow retention. In situ snow retention refers to allowing snow to accumulate and melt without intervention on locations such as rooftops, between buildings, landscaped areas, natural areas, and open space.

Exhibit 3-14 shows areas planned for snow storage. Potential on-site storage locations include areas adjacent to roadways (e.g., snow is plowed or blown onto the side of the road), open spaces, between buildings, and bunkers incorporated into the Lot 11 and Lot 12 parking structures. These bunkers, one per lot, would replace existing snow storage areas that would no longer be available as a result of project development. The bunkers could accept snow transferred from anywhere within the plan area. They would be walled-in areas, with no roof, constructed concurrently with the Lot 11 and Lot 12 parking structures. Snow would be pushed and plowed into the bunkers from the ground and the top of the parking structures for storage and melting. Sunlight would be employed to melt the snow. Water quality and filtration systems would be used to capture and treat the snow melt runoff. Treated runoff would flow into the drainage network, and, once properly filtered, would recharge the aquifer or flow into Squaw Creek.

Active snow melt practices, such as heated walkways, may be used in areas that are determined to require high accessibility. The option of off-hauling of snow may be utilized when warranted and would be highly dependent upon the snow conditions within any given snow season. Due to the extra expense associated with off-hauling, it would typically only be used during exceptionally heavy snow conditions when on-site storage options have reached their maximum capacity. If off-hauling is used, snow would be transported by truck to various available off-site locations within 20 miles of the plan area that comply with Lahontan Regional Water Quality Control Board standards and properly impose appropriate Storm Water Pollution Prevention Plan (SWPPP) and water quality best management practices programs.

RECREATIONAL FACILITIES

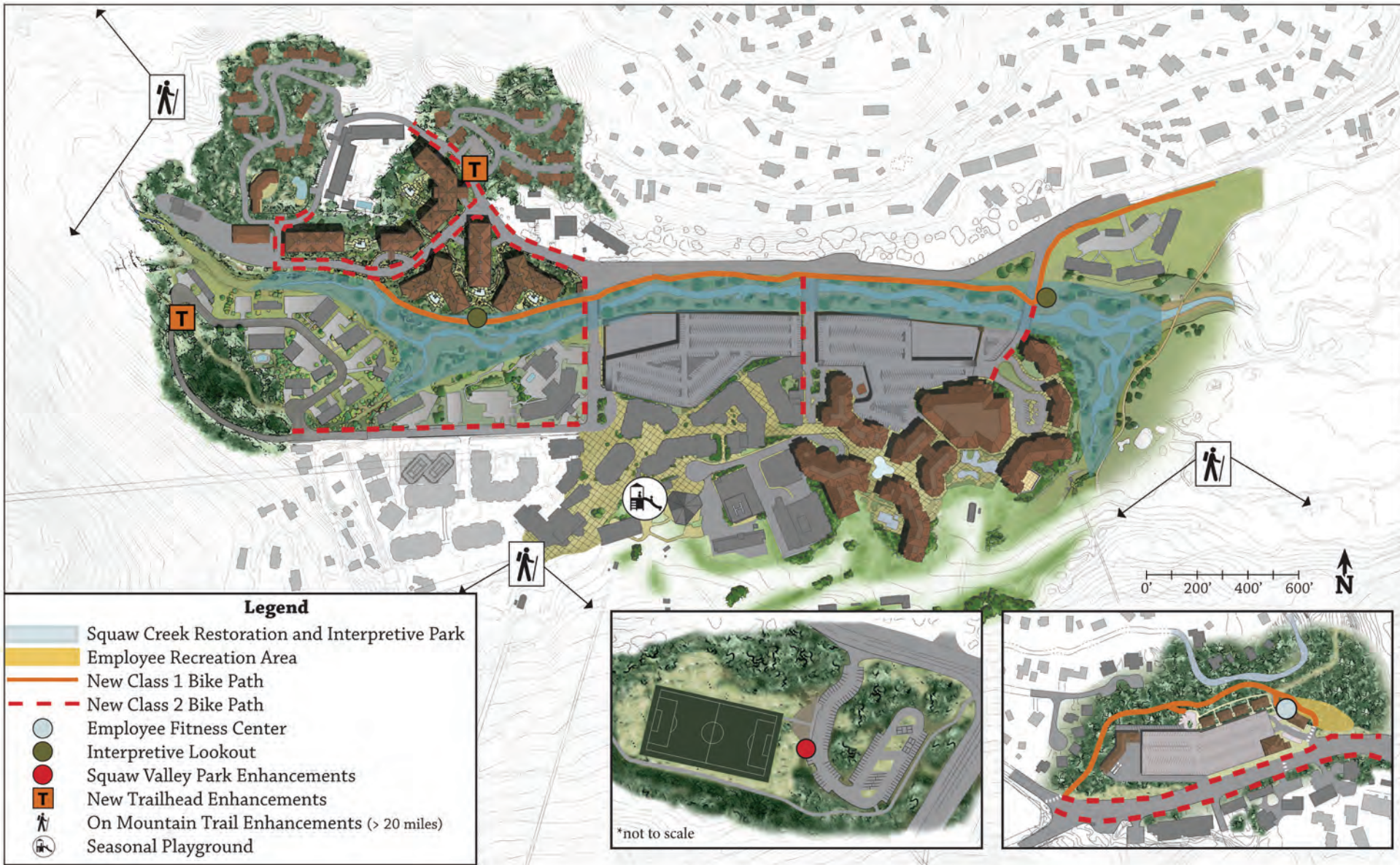
The Specific Plan includes a variety of new recreational facilities and amenities as well as improvements to existing facilities (Exhibit 3-15 and Table 3-3). Proposed bicycle facilities are described in Section 3.4.2, "Circulation and Parking," under "Bicycle Facilities," above, and proposed pedestrian and open spaces are described in Section 3.4.4, "Village Open Space Network," below.



Note: Where adequate space for snow storage is unattainable, an alternative storage location will be identified. The snow storage area north of Squaw Valley Road is only for Squaw Valley Road snow storage. All plans depicted are conceptual based on one possible design of the Project Area and are subject to change.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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Note: The Illustrative Concept Plan depicts a representative site plan to show the development that could occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Illustrative Concept Plan is subject to change.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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Table 3-3 Proposed Parks and Recreation Improvements	
Park/Facility	Proposed Improvements
Squaw Creek Linear Park and Trail	<ul style="list-style-type: none"> ▲ Complete trail connectivity from State Route 89 to Shirley Lake Trailhead ▲ Add trail improvements to connect the East Parcel to the existing Squaw Valley Trail ▲ Include interpretive signage and points of interest along the trail path
Squaw Valley Trailheads	<ul style="list-style-type: none"> ▲ Through signage, informational materials, and site rehabilitation (e.g., establish bike parking, provide shaded picnic area) better identify the Granite Chief Trailhead location and parking ▲ Provide off-street vehicle parking, bike parking, restrooms, and shaded picnic area (space permitting) at the Granite Chief and Shirley Lake Trailheads
New Trail Development	<ul style="list-style-type: none"> ▲ Improve existing and develop new trail connections between Alpine Meadows and Squaw Valley (extent and location of trail improvement/development not yet confirmed)
East Parcel Trails	<ul style="list-style-type: none"> ▲ Construct a hiking trail and Class I & II bicycle path through the East Parcel to connect employee housing and an existing trail to the Class I bicycle path along Squaw Valley Road.
Squaw Valley Community Park	<ul style="list-style-type: none"> ▲ Upgrade restroom facilities to include flush toilets and sewer lift station
New Squaw Valley Seasonal Playspace	<ul style="list-style-type: none"> ▲ Tot to kinder 3-dimensional play structures ▲ Relocateable and removable during ski season ▲ Open to public use
Source: Squaw Valley Real Estate, LLC 2015	

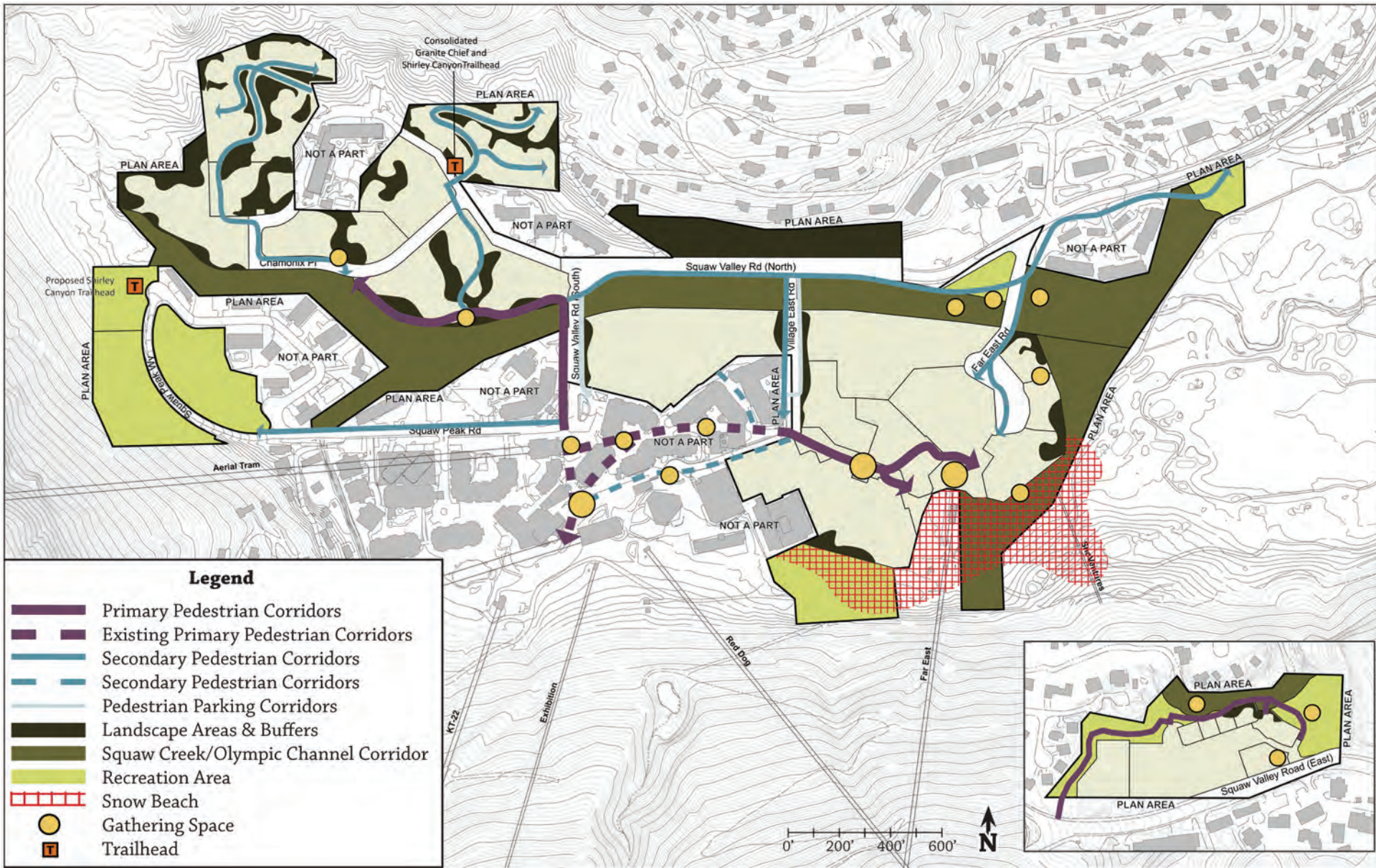
Additional commercial and non-commercial recreational amenities and attractions would be provided in the main Village area, including the Mountain Adventure Camp, ice skating on the central ice rink, playgrounds, public open space corridors, and gathering spaces and small entertainment areas in the pedestrian plazas and corridors.

3.4.4 Village Open Space Network

A network of natural and pedestrian oriented open space areas would weave through the main Village area. The basic components of this network include:

- ▲ Primary pedestrian corridors: The main pathways that interconnect all neighborhoods within the main Village area;
- ▲ Secondary pedestrian corridors: The smaller passageways, alleys, and lanes within each Village neighborhood;
- ▲ Pedestrian parking lot corridors: Pathways that provide safe pedestrian circulation between the surface parking lots and the Village;
- ▲ Gathering spaces: The snow beach (southern edge of plan area), plazas, courtyards, and event and entertainment areas along the pedestrian corridors;
- ▲ Landscape Corridors and Buffers: Landscaped open spaces within neighborhoods that provide visual buffers and links to the surrounding forested areas; and
- ▲ The Squaw Creek Preservation Corridor: An open space corridor set aside for future enhancement and restoration activities (see description in Section 3.4.5, “Squaw Creek Restoration,” below).

These components are illustrated in Exhibit 3-16.



3.4.5 Squaw Creek Restoration

A portion of Squaw Creek within the plan area was straightened and placed within a trapezoidal channel to provide efficient drainage at the time of the 1960 Winter Olympics (Exhibit 3-17). The Specific Plan designates this portion of Squaw Creek, as well as the remainder of the creek corridor in the plan area, as Village Conservation Preserve (V-CP) (see Exhibit 3-4).

A 150- to 200-foot-wide conservation corridor would be provided for the length of the creek through the plan area where a creek restoration program would be implemented. The creek restoration program would support improvement of terrestrial and aquatic habitat conditions, improved water quality and sediment management, and increased flood conveyance capacity. Additionally, a Class I bicycle and walking trail would be installed along the corridor, as well as interpretative signage and viewing areas.

A conceptual restoration design has been prepared and describes in detail the objectives, proposed methods, and planned outcomes for restoration activities (Balance Hydrologics, Inc. 2014) The following briefly summarizes the overall restoration plan. In the west side of the main Village area, at the confluence of the North and South Forks of Squaw Creek, the proposed design provides for a widened and expanded floodplain area on the north bank to allow for a more gradual transition to the downstream trapezoidal channel and Squaw Valley Road bridge (Exhibit 3-18). This is intended to allow for some level of natural channel migration and improve sediment management conditions. Occasional removal of accumulated sediment and woody debris may be necessary, but would be conducted in a manner to preserve areas of willow riparian habitat. Within the existing trapezoidal shaped channel that runs between the surface parking lots and Squaw Valley Road, the channel would be widened to allow for creation of a low flow meander

channel at the bottom larger channel, and to increase overall high flow capacity of the channel to improve flood protection (Exhibit 3-19). Riparian habitat plantings would be within the widened channel, along with vegetated bank stabilization measures and creation of deeper pools connected by shallow riffle segments. The pools, as well as created backwater channel segments would provide deeper water and cover for fish and other aquatic species. Partially buried logs with rootwads intact would be anchored in the channel to protect the banks during high flows and provide cover and habitat diversity for aquatic species during low to moderate flows. The widest portion of the creek restoration would be at the eastern end of the main Village area, at the confluence of Squaw Creek and the Olympic Channel (Exhibit 3-20). The proposed increase in width in both Squaw Creek and the Olympic Channel would allow for floodplain habitat restoration, sediment deposition, and active sediment management and removal. The design includes grade control structures and depressional features for water retention, groundwater recharge, and collection and management of sediment. The creek restoration will also include traditional hardened banks and boulder slope protection near bridges and other infrastructure to protect these features during high flows. The overall restoration plan would increase the extent and quality of wetlands in the plan area relative to existing conditions.

3.4.6 Project Construction

The Specific Plan would be developed over an estimated 25-year buildout period, with some construction proposed to begin as early as spring of 2016. The sequence and pace for constructing various land uses and facilities would be market driven; therefore, a specific construction schedule has not been developed. During some years there may be several Specific Plan elements under construction simultaneously and during other years there may be very little construction activity. However, as a mechanism to express potential maximum construction activity, it is anticipated that during the single most active possible construction year, no more than 20 percent of the total Specific Plan construction effort could occur. Due to typical market cycles, development of this intensity, if it reaches this level, would only happen once during the Specific Plan's estimated 25-year buildout period. The 20 percent total is a maximum-case estimate; it is the equivalent of

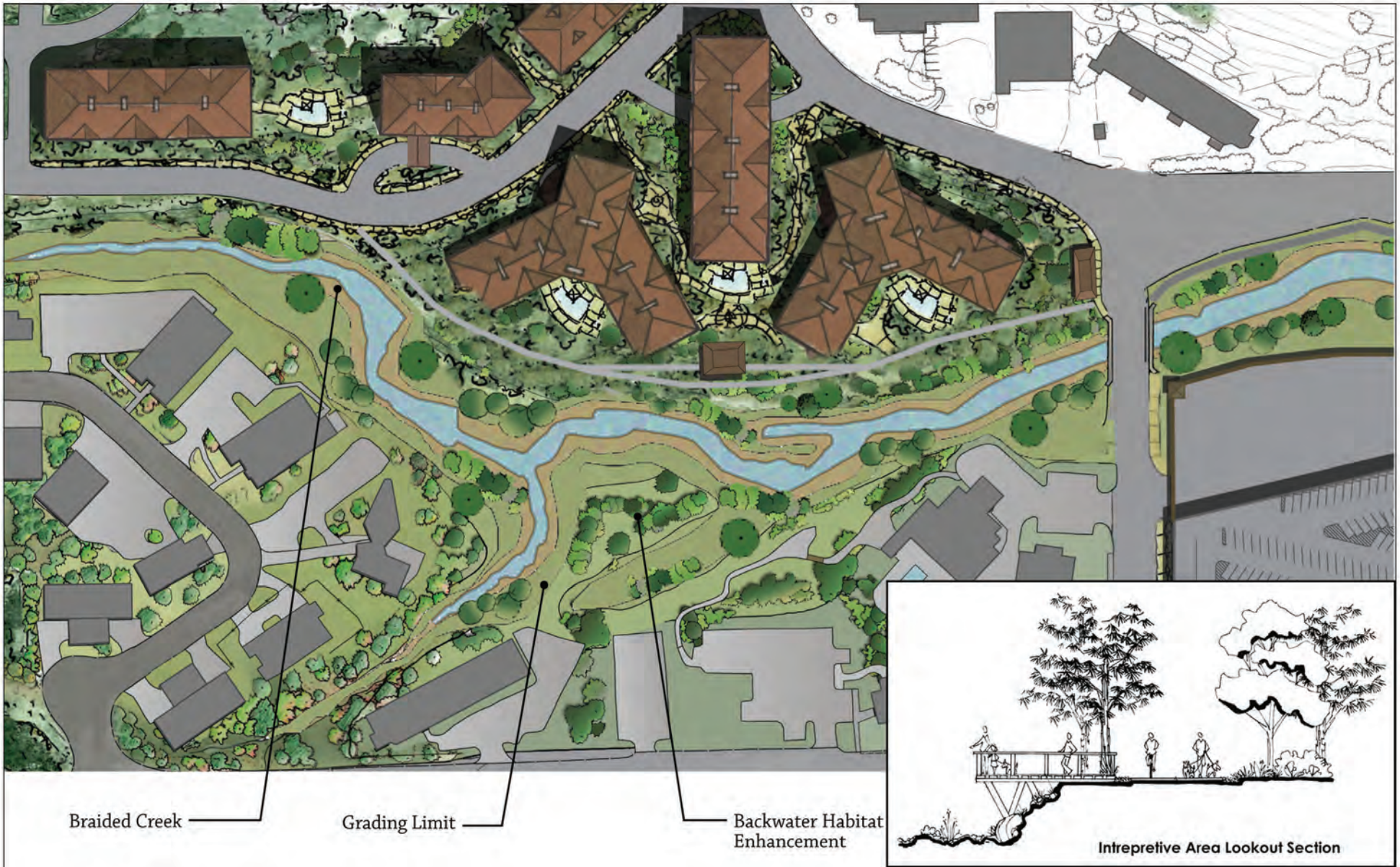


Source: Photos taken by Ascent Environmental in 2013

X11010091_03_034

Exhibit 3-17 Photos of Squaw Creek's Trapezoidal Channel (from the Village East Bridge)

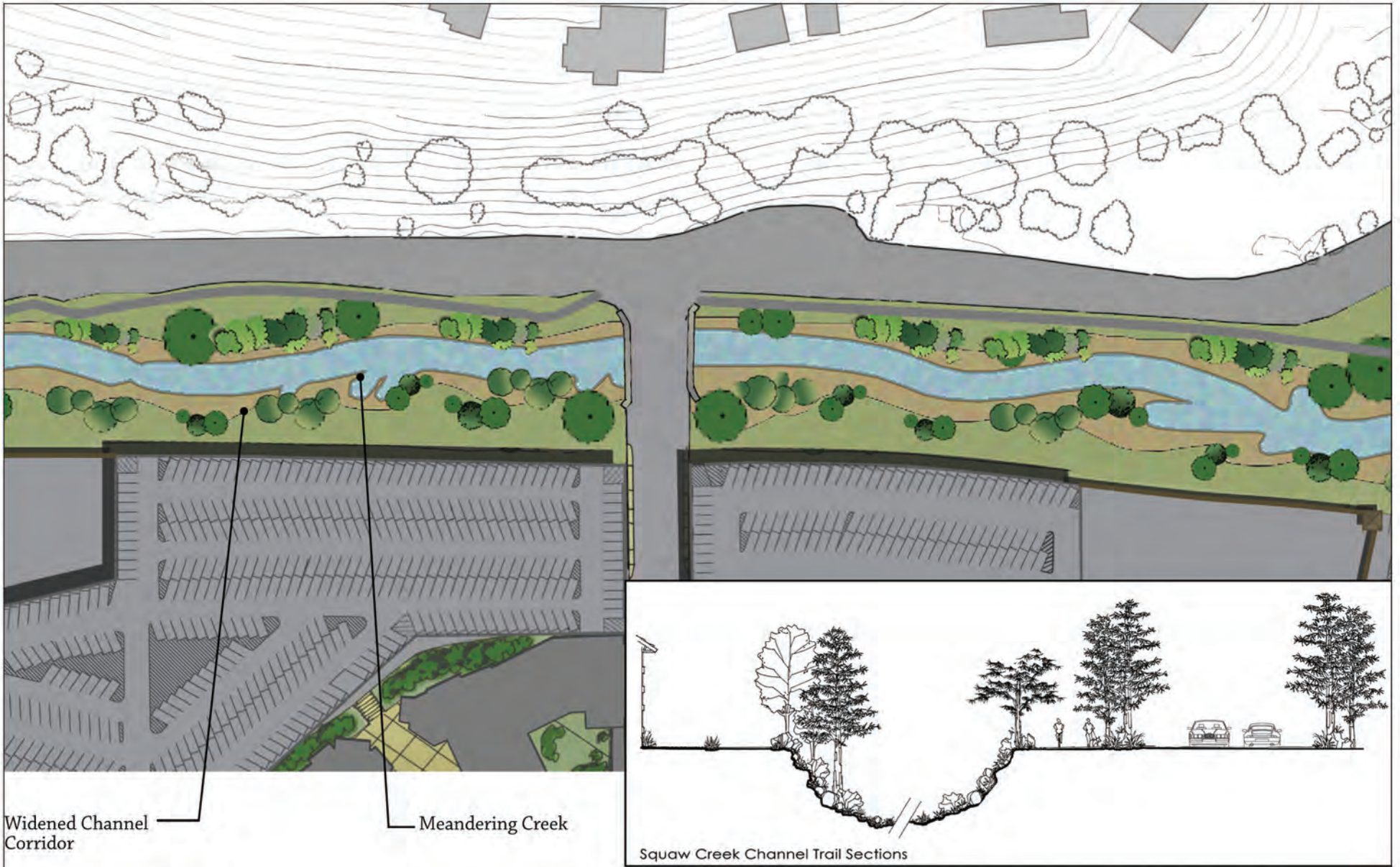




Note: The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

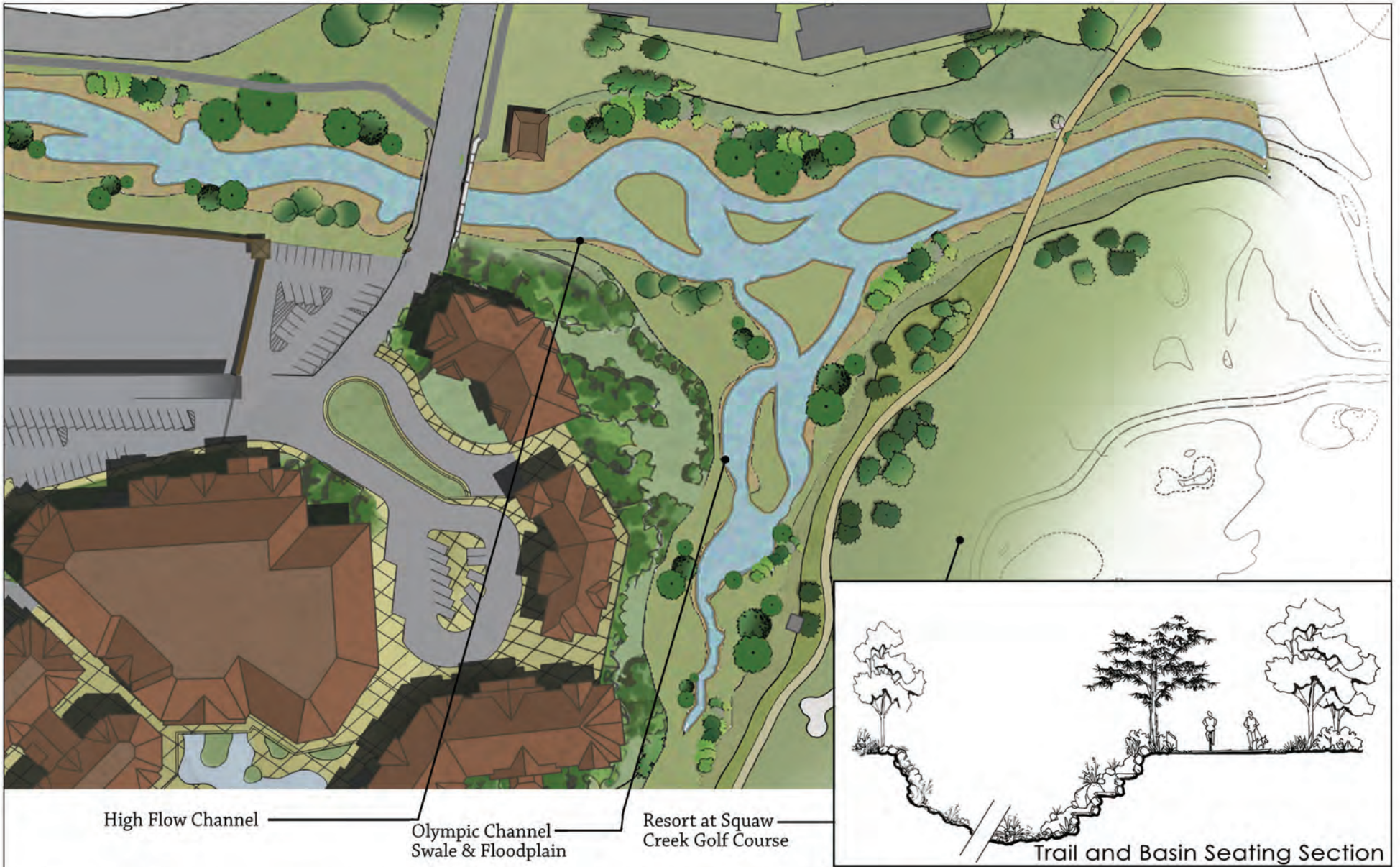
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Note: The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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Note: The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

X11010091 03 032

300 bedrooms (could be a combination of bedrooms, the Mountain Adventure Camp, and other uses, but no more than 20 percent of the project total construction effort), which is more development than has occurred in any single year on record in Olympic Valley.

Creek restoration is proposed to be complete by the recordation with the County of the Final Map (a step in final development approval) that includes the 600th bedroom (i.e., about 40 percent of project development).

Demolition, site preparation, grading, and paving activities would typically occur only during months considered the “construction season” authorized by local and State agencies (approximately May 1 to October 15). However, interior work on buildings, including the indoor application of architectural coatings, could potentially occur during all months of the year.

Typical construction activities would include demolition of existing structures, grubbing/clearing of on-site areas, excavation and relocation of soil on the site, backfilling and compaction of soils, construction of utilities (i.e., potable water conveyance, wastewater conveyance, storm water drainage facilities, underground electrical, and propane facilities), and construction of proposed buildings.

Construction equipment would vary day-to-day depending on the project phase and the activities occurring, but would involve operation of all-terrain vehicles, fork lifts, cranes, pick-up and fuel trucks, compressors, loaders, backhoes, excavators, dozers, scrapers, pavement compactors, welders, concrete pumps and concrete trucks, and off-road haul trucks. Construction workers would access the site via Squaw Valley Road and SR 89.

Construction activities are anticipated to require up to an estimated 136 construction workers during the most intense year of construction (i.e., when up to 20 percent of the overall construction effort is completed in one season). Construction activities would take place from Monday through Friday during normal daytime working hours for the majority of the construction activities; however, it may be necessary to conduct some activities during weekend and night time hours. Examples of activities that may necessitate night time construction include: lengthy and intensive construction elements that cannot or should not be interrupted until complete or strategic milestones are met (e.g., large concrete pours [for foundations, parking structures, etc.], erecting structural steel, erecting structural panels, etc.), weather-related activities such as protecting buildings from incoming storms, and some roadway improvements to make use of lower night time traffic periods.

Any clean excess fill generated by project-related grading/excavation would be reused on (a) the snow beach area, to implement the project applicant’s drainage objectives in that area; and/or (b) the ski mountain, with proper best management practices and vegetation initiatives in place, as has historically been allowed by the Lahontan Regional Water Quality Control Board.

Excavation of existing parking lots and roadways at various times throughout construction would generate large quantities of asphalt, which would be repurposed by removing it, grinding it, and then transporting it to the ski mountain to be utilized as road base for the existing mountain maintenance road network. The use of this type of material—ground asphalt—is currently in practice today. It is expected that most if not all of the asphalt spoils over the course of construction would be repurposed in this way.

3.5 Intended Uses of the EIR

Several agencies will be involved in the consideration of proposed project elements. As the lead agency under CEQA, Placer County is responsible for considering the adequacy of the EIR and determining if the overall project should be approved.

3.5.1 Planning Entitlements and Approvals from Placer County

The project applicant requests adoption of a Specific Plan. The proposed Specific Plan includes a land use illustrative concept plan, development standards, and design guidelines for development of the plan area. Specifically, the project applicant is requesting the following actions and planning entitlements from Placer County:

- ▲ Certification of a Final Environmental Impact Report;
- ▲ Amendment of the *Placer County General Plan (2013)*, as needed, to incorporate the Specific Plan;
- ▲ Amendment of the *Squaw Valley General Plan and Land Use Ordinance (1983)*, as needed, to incorporate the Specific Plan (see additional discussion below);
- ▲ Rezone of the plan area to include the Specific Plan zoning designations (see additional discussion below);
- ▲ Adoption of the proposed Specific Plan and Design Guidelines;
- ▲ Adoption of the Specific Plan Development Standards;
- ▲ Approval of a Development Agreement; and
- ▲ Approval of a Large-Lot Tentative Subdivision Map.

The VSVSP proposes redesignating the project site as “Specific Plan” in the SVGPLUO (the General Plan defers to community plans, such as the SVGPLUO, for land use designations and zoning). As stated in the *Placer County General Plan*, “Specific plans provide a bridge between the goals and policies in the General Plan and specific development proposals, and incorporate detailed land-use development standards and design criteria” (Placer County 2013:14). In the case of the VSVSP, a Specific Plan is proposed to create a single, coordinated plan for the plan area as a whole, providing for a well-integrated land use plan, necessary infrastructure and utilities, an integrated pedestrian/bicycle/skier circulation plan, protected open space and view corridors, and a visually cohesive village.

For the most part, the rezones are provided to better align the existing and proposed land uses with the appropriate zoning. For example, most of the Squaw Creek corridor is currently zoned Village Commercial and would be rezoned to Village – Conservation Preservation under the proposed project. Other rezones are necessary for the relocation of certain land uses. For example, Mountain Maintenance would be moved to Lot 19, which would therefore be rezoned to Village – Heavy Commercial (see Exhibits 3-4 and 3-5). Additional information regarding the location of proposed zoning districts, and uses permitted within each district, is available in the proposed VSVSP.

The VSVSP also includes proposed amendments to the text of the SVGPLUO to better reflect current avalanche risk data within the project boundary. These amendments are discussed further in Chapter 12, “Soils, Geology, and Seismicity.” In addition, the VSVSP proposes Policy CP-1 to allow temporary intermittent exceedance of County roadway level of service (LOS) standards in accordance with *Placer County General Plan Policy 3.A.7*. Analysis of this proposal can be found in Chapter 9, “Transportation and Circulation.” The proposed amendments to the SVGPLUO for avalanche risks and the proposed VSVSP Policy CP-1 pertaining to roadway LOS within and adjacent to the plan area are also addressed in Chapter 4, “Land Use and Forest Resources.”

After the Specific Plan and related actions described above are taken, there will be a subsequent approval process for the specific projects proposed within the plan area. In general, if it is determined that a subsequent project is consistent with the Specific Plan and is within the scope of the EIR, further environmental review may not be necessary. For example, Section 65457(a) of the California Government

Code and Section 15182(a) of the State CEQA Guidelines provide that no EIR or negative declaration is required for any residential project undertaken in conformity with an adopted Specific Plan for which an EIR has been certified. If it is determined that a development application is inconsistent with the Specific Plan and/or substantial evidence exists that supports the occurrence of any of the events set forth in Section 21166 of the Public Resources Code and Section 15183 of the State CEQA Guidelines, a determination will be made as to the appropriate subsequent environmental document. Examples of subsequent approvals include small lot tentative maps, Specific Plan amendments, Conditional Use Permits, Tree Permits and Design/Site Review applications. Chapter 8, "Implementation," of the Specific Plan lays out in detail the Subsequent Conformity Review process the County will follow to determine whether a proposed subsequent approval is consistent with the Specific Plan and EIR assumptions, and the extent to which amendments to the plan, and/or additional CEQA analysis are needed.

3.5.2 Other Agencies Using the EIR and Consultation Requirements

Permits and approvals may be required from the following federal, state, and local agencies:

FEDERAL

- ▲ **U.S. Army Corps of Engineers:** Compliance with Section 404 of the Clean Water Act for discharge of fill to Waters of the U.S. and/or fill of any wetlands that cannot be avoided by the project; including compliance with Section 106 of the National Historic Preservation Act, in coordination with the California State Office of Historic Preservation, for effects to eligible cultural or historic resources.
- ▲ **U.S. Environmental Protection Agency:** Concurrence with Clean Water Act Section 404 permit.
- ▲ **U.S. Fish and Wildlife Service:** Compliance with Section 7 of the federal Endangered Species Act for federal agency approvals if there is potential take of listed species.

STATE

- ▲ **California Department of Fish and Wildlife, Region 2:** Compliance with streambed alteration agreement requirements (California Fish and Game Code Section 1602) for any construction activities that occur within the bed or bank of a stream or creek, and Section 2081 of the Fish and Game Code if take of State listed species is likely to occur.
- ▲ **California Department of Forestry and Fire Protection:** Timber Harvest Plan and potentially a Timberland Conversion Permit for tree removal associated with project implementation.
- ▲ **California Department of Transportation, District 3:** Encroachment permit for any activities in the SR 89 right of way and approval of the emergency heliport.
- ▲ **California State Office of Historic Preservation:** Compliance with Section 106 of the National Historic Preservation Act (for any federal action, such as issuance of a Section 404 permit).
- ▲ **Lahontan Regional Water Quality Control Board:** National Pollutant Discharge Elimination System (NPDES) construction stormwater permit (Notice of Intent to proceed under General Construction Permit) for disturbance of more than one acre, discharge permit for stormwater, and Clean Water Act Section 401 water quality certification or waste discharge requirements.

LOCAL

- ▲ **Placer County Air Pollution Control District:** Authority to construct (for devices that emit air pollutants); permit to operate; and Air Quality Management Plan consistency determination.
- ▲ **Placer County Department of Public Works:** Encroachment permit.
- ▲ **Squaw Valley Public Service District:** Utilities and Infrastructure Plans; Development Agreement.
- ▲ **Tahoe-Truckee Sanitation Agency:** Utilities and Infrastructure Plans.

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Appendix B2

2016 Final EIR Revisions to the Project
Description

2 PROJECT MODIFICATIONS, UPDATED WATER SUPPLY AND GROUNDWATER DATA, AND REVISIONS TO THE DEIR

This chapter presents minor modifications to the Village at Squaw Valley Specific Plan (VSVSP) as a result of ongoing planning and design refinements since publication of the DEIR (Section 2.1). Also, this chapter summarizes the results of an update to the Water Supply Assessment (WSA) relied upon in the DEIR; the updated WSA was released in July 2015, after publication of the DEIR (Section 2.2). Finally, this chapter presents revisions to the DEIR text made in response to comments, or to amplify, clarify or make minor modifications or corrections (Section 2.3). Changes in the text are signified by ~~strikeouts~~ where text is removed and by underline where text is added. The information contained within this chapter clarifies and expands on information in the DEIR and does not constitute “significant new information” requiring recirculation. (See the Master Response regarding recirculation; see also Public Resources Code Section 21092.1; CEQA Guidelines Section 15088.5.)

2.1 PROJECT MODIFICATIONS

This section provides a brief description and evaluation of pertinent changes to the proposed VSVSP project (also referred to as the proposed project or project), that have occurred since the release of the DEIR. Since release of the DEIR, Squaw Valley Real Estate, LLC (project applicant) has worked with Placer County’s Squaw Valley Design Review Committee to improve the design features of the project so as to better meet the objectives of the Specific Plan as described in Section 3.3 of the DEIR, and to improve consistency with the vision and objectives of the *Squaw Valley General Plan and Land Use Ordinance* (SVGPLUO). There have also been minor changes to the Specific Plan project description that have been made in response to comments received on the DEIR and new information received by the applicant.

2.1.1 Description of Project Changes

Since publication of the DEIR, the project applicant has proposed several modifications to the proposed project some of which were made in response to comments on the DEIR. Many of the modifications involve changes in building designs resulting in greater space between buildings or reduced building heights. References to buildings and lots refer to the Illustrative Concept Plan (Exhibit 3-5 in the DEIR) and the Concept Plan for the East Parcel (Exhibit 3-6 in the DEIR). These DEIR exhibits have been revised and are provided below. These design changes include:

VILLAGE CORE

- ▲ Throughout the project area, maximum allowed heights of buildings would be reduced from 108 feet to a maximum of 96 feet, a 12-foot (11 percent) reduction. The only exception to this is the Mountain Adventure Camp (MAC) (building 8-A), where half of the building would remain with a maximum height of 108 feet and a large portion would be reduced to a maximum height of 84 feet. The purpose of this change is to break up a potential monolithic appearance of the MAC structure, while still maintaining its function, and to instead create a stepped appearance more consistent with project design objectives.
- ▲ The building separation throughout the Village Core has been increased to achieve a 0.8 building separation ratio (eight feet of separation between buildings for every ten feet of adjacent building height) along all passageways, and a 0.6 ratio along all paths. This is intended to give a more open feel to the Village Core.



Legend

Lodging	1A, 1B, 3, 4, 7, 13 ABC, 14 AB, 15
Lodging/Squaw Kids	9
Lodging/Skier Services	6
Fractional Cabins	16, 18
Fractional Cabins Lodge	17
Mountain Adventure Camp	8A
Skier Services	8B
Mountain Maintenance	19
Surface/Structured Parking	11, 12, 39
Squaw Creek Restoration	23, 24, 25
Squaw Creek/Olympic Channel	10, 26
Recreation/Open Space	2, 20, 21, 22, 27, 28, 29, 37, 44
Employee Recreation Area / Open Space	45
Roads	5, 30, 31, 32, 38
Ice Rink Plaza	33
Shipping Receiving	34
Market	35
Employee Housing	36, 40, 41, 42, 43
Transit Center	TC
Existing IntraWest Village	IV
Tank Farm Site	19, 28

Note: The Illustrative Concept Plan depicts a representative site plan to show the development that could occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Illustrative Concept Plan is subject to change.

Source: Squaw Valley Real Estate, LLC 2016; Adapted by Ascent Environmental in 2016

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Note: Employee housing will be located immediately adjacent to or above parking. The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

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- ▲ The plaza areas and courtyard of buildings 1-A and 1-B have been redesigned and expanded. This is intended to improve pedestrian circulation within the Village, create an enhanced plaza area, preserve scenic mountain views by increasing building separation, and provide a buffer to the vehicle noise and activity visible from the existing nearby Intrawest units.
- ▲ The plaza width and building separation at buildings 3 and 4 have been increased. These buildings have been redesigned to increase the plaza width so as to improve pedestrian circulation around these lodging units.
- ▲ The maximum allowable building height for building 6 has been reduced from 72 feet to 56 feet, a 16-foot (22 percent) reduction.

VILLAGE NEIGHBORHOOD

- ▲ Throughout the project area, maximum allowed heights of buildings would be reduced from 96 feet to a maximum of 84 feet.
- ▲ The maximum allowable building heights for buildings 13-A, 13-B, and 13-C would be reduced from 96 feet to 84 feet, a 12-foot reduction. The portion of building 13-C that is closest to Squaw Valley Road would be reduced to a maximum height of 56 feet to minimize visual impacts to scenic mountain views.
- ▲ The building separation throughout the Village Neighborhood has been increased to achieve a 0.8 building separation ratio (eight feet of separation between buildings for every ten feet of adjacent building height) along all passageways, and a 0.6 ratio along all paths, excluding the fractional cabins on Lots 16 and 18. This is intended to give a more open feel to the Village Neighborhood.
- ▲ The maximum allowable building height for building 15 has been reduced from 96 feet to 84 feet, a 12-foot reduction, and a portion of the southwest wing has been reduced to a maximum height of 66 feet.

EAST PARCEL

- ▲ All structures in the East Parcel would have a maximum building height of 35 feet. Before the project modifications, the maximum allowable height of the parking structure was 20 feet, but was increased to 35 feet for the reasons described below.
- ▲ The Class I bike path originally located in the back of the employee housing structures and near Squaw Creek, has been moved to the front of the parcel along Squaw Valley Road. This is intended to remove the bike path from close proximity to the nearby residences.
- ▲ The setback from the west property line to building 34, the shipping and receiving structure, has been increased from 75 feet to 100 feet, creating additional separation between the activities at shipping and receiving and nearby residences. Vehicular circulation at the shipping and receiving structure has also been improved, creating a drive-through passage to reduce noise impacts associated with vehicles otherwise needing to backup and triggering backup “beepers”.
- ▲ The surface/structured parking (Lot 39) would be taller as a result of the project modifications. To accommodate the changes to other building locations and configurations on the East Parcel, and to reduce effects to surrounding land uses, the footprint of the parking structure was reduced. However, to maintain the same parking capacity, the structure has been changed from having one parking level above the ground surface to having two parking levels above the ground, or three levels total. To minimize the height increase associated with adding an additional level, the ground level would be placed below the existing ground surface (i.e., the foundation excavated to below existing grade) so that the structure, including any top floor barricades and architectural features, does not extend beyond 35 feet above the ground surface.

- ▲ The setback of the surface/structured parking has been increased from 25 feet from Squaw Valley Road to 35 feet. This increase can occur, in part, because of the smaller footprint of the parking structure and allows for the relocation of the Class I bike path to the space between the parking structure and Squaw Valley Road.
- ▲ The employee housing structures (buildings 40-43) have been reconfigured on the parcel to move them further from nearby residences. An 8-foot-high privacy perimeter wall has also been added along the north side of the East Parcel to reduce noise and visual impacts to nearby residences and address potential trespass issues.
- ▲ Lots 44 and 45, originally proposed to be zoned as Entrance Commercial, have been rezoned as Village-Conservation Preservation, an open space designation.

GENERAL CHANGES TO THE SPECIFIC PLAN

In addition to the design changes described above, Chapter 3, “Project Description,” of the DEIR, has been modified as follows:

- ▲ In Section 3.4.3, “Public Services and Utilities,” the description under Propane/Liquefied Natural Gas identified the possibility that liquefied natural gas (LNG) may become available in Olympic Valley, and may be used as an alternative or supplemental energy source. After considering the relative cost, feasibility, and practicality of bringing LNG to Olympic Valley, the applicant no longer considers this as a viable option.
- ▲ Also in Section 3.4.3, “Public Services and Utilities,” the description under Propane/Liquefied Natural Gas proposed to locate all of the new propane tanks that would be required for this project on Lot 19, where propane tanks that serve the existing Village development are currently located. This has been modified to split the location of the new propane tanks between two locations. Approximately half of the new capacity would remain on Lot 19 at the west side of the Village, while the remainder of the new propane storage capacity would be located on Lot 28. Lot 19 would have fewer storage tanks and associated facilities as a result of these modifications.

The tanks on Lot 28 would be buried and placed behind the entry monumentation that is planned for the Village at the intersection of Squaw Valley Road and Far East Road. The vaporizer station, propane bulkhead, and backup generator would be located on the surface and screened by landscaping and rock walls. A truck access way would be built on the site, allowing trucks to enter from Far East Road and exit on to Squaw Valley Road.

- ▲ Table 3-3 in the DEIR shows the Proposed Parks and Recreation Improvements that are anticipated as part of the VSVSP. Among them was new trail development intended to “improve existing and develop new trail connections between Alpine Meadows and Squaw Valley (extent and location of trail improvement/development not yet confirmed).” The applicant developed a Comprehensive Parks and Recreation Plan in October 2014 to describe the recreational facilities anticipated with the expansion of the Village at Squaw Valley. The applicant has since made changes to the Parks and Recreation Plan as a result of the comments received on the DEIR. Specifically, the Five Lakes Connection, a trail proposed to connect the Western States Trail out of Squaw Valley to the Five Lakes Trail from Alpine Meadows Road, has been removed from the plan at the request of the U.S. Forest Service (USFS), and is not considered a proposed new trail improvement.
- ▲ In Section 3.4.2, “Circulation and Parking,” a new section has been added for crosswalk facilities that will be constructed on Squaw Valley Road outside of the Specific Plan area. Two crosswalks will be added to Squaw Valley Road: a west end crosswalk and an east end crosswalk. The west end crosswalk will be located in the vicinity of the intersection of Squaw Valley Road and Christy Hill Road. The east end crosswalk will be located in one of three potential locations: on the westerly side of the Winding Creek

Road and Squaw Valley Road intersection, just west of the Squaw Valley Academy driveway on Squaw Valley Road, or just west of the Tavern Inn driveway on Squaw Valley Road.

Standard crosswalk striping and crosswalk signage will be installed at both locations. In addition, Rapid Rectangular Flashing Beacons (RRFB) will be installed in each direction of travel. A RRFB consists of a push button on both sides of the roadway that, when activated by the pedestrian, triggers flashing lights on both sides of the roadway to warn approaching automobiles to slow for crossing pedestrians. The beacons are solar powered and equipped with wi-fi technology so that no power or cabling is needed. These facilities are further described in the Infrastructure Phasing Plan that will be considered concurrent with the adoption of the VSVSP, and the final location of these facilities will be determined during review of the project during which the improvements are triggered.

2.1.2 Evaluation of the Project Modifications

LAND USE AND FOREST RESOURCES

The project modifications that have been proposed by the applicant since the DEIR was released do not change the proposed maximum density or types of land uses that were analyzed in the proposed action for the DEIR. The proposed changes to the Placer County General Plan, Placer County Zoning Ordinances, and the SVGPLUO remain the same as those that were proposed in the VSVSP. The analysis of impacts of those changes in the DEIR remains unchanged, concluding that the impact would be less than significant.

The project modifications that have been made include the location of new propane storage facilities on Lot 28 in addition to the existing propane tanks on Lot 19. Lot 19, the Mountain Maintenance Yard, is already zoned for heavy commercial uses (V-HC) such as the propane storage tanks and maintenance facilities. Lot 28 is proposed by the project to be zoned for forest recreation (V-FR), an open space designation. As proposed in the April 2015 Specific Plan, propane storage facilities would not be an allowed use on Lot 28. However, the zoning designation for Lot 28 has been modified to include an overlay zone such that propane storage would be a permissible use on Lot 28 if the VSVSP is approved. Propane storage would not be an allowed use on other lots within the VSVSP proposed to be zoned forest recreation.

None of these changes would alter the DEIR's conclusions regarding impacts associated with division of an established community, conflict with land use plans or policies adopted for avoiding or mitigating and environmental effect, development of incompatible uses, alteration of planned uses, or economic or social changes leading to environmental changes, all of which were found to be less than significant.

The analysis of forest resources that would be affected by the project has also remained essentially unchanged. Removal of consideration of the Five Lakes Connector trail as part of the Proposed Parks and Recreation Improvements may reduce forest impacts by the small number of trees that would have been removed as part of constructing that trail. The conclusion in the DEIR that impacts to forest resources would be less than significant remains unchanged.

POPULATION, EMPLOYMENT, AND HOUSING

The proposed modifications to the Specific Plan do not change the maximum number of new residential units or bedrooms, or the densities of the new development. Population increase estimates, both permanent and seasonal, do not change. The total population of the Valley would remain at 9,483, well below the 11,000 to 12,000 peak overnight population planned for in the SVGPLUO. The conclusions reached in the DEIR that impacts from population growth and increases in housing demand would be less than significant remain with the proposed project modifications.

No changes to the number of employee housing units have been proposed in the modifications to the East Parcel. Conclusions and required mitigation measures do not change with the proposed modifications.

BIOLOGICAL RESOURCES

The proposed modifications to the project may slightly reduce the potential impacts to biological resources by moving the bike trail away from Squaw Creek on the East Parcel, and by removing the Five Lakes Connector trail from consideration as part of the Proposed Parks and Recreation Improvements due to potential risks to Sierra Nevada yellow-legged frog habitat. Overall, this would be a slight improvement related to biological resources, and the effects described in the DEIR would remain essentially unchanged. Also, see the Master Response regarding water supply for a discussion of the effects of groundwater pumping on biological resources and creek restoration benefits.

The proposed changes to the propane storage site locations would not significantly change the conclusions in the DEIR for biological resources. Locating additional storage on Lot 19 was analyzed for potential impacts from leaks or spills due to its proximity to Squaw Creek in the Hazards section of the DEIR, and it was determined that sufficient regulatory control was in place to reduce the risk of such an event to be less than significant. Similarly, Lot 28 is proximate to Squaw Creek, and the same conclusions can be made.

Appendix E1 of the DEIR shows the habitat impact assumptions that were made for each lot in the VSVSP. The assumption for Lot 19, where all the propane storage tanks were to be located for the proposed project, was that habitat would be 100 percent removed. With the proposed modifications, approximately half of the propane storage capacity would be transferred to Lot 28. In the DEIR, Lot 28 was already assumed to be 100 percent affected by the project. It is a gravel surface at the present time, and the applicant intends to use Lot 28 for entry monumentation and arrival information. The lot would also be graded. The addition of a buried propane storage tank, a vaporizer station, a back-up generator and an access way for propane trucks, would not change project effects related to habitat disturbance.

CULTURAL RESOURCES

The DEIR identifies significant impacts that would occur with the removal of historic buildings associated with the 1960 Olympics. Mitigation measures have been identified to document and interpret these structures prior to their removal, though the impact would remain significant and unavoidable because the buildings would be removed and would no longer exist. Additional mitigation measures are also included to reduce potentially significant impacts to known and currently undiscovered archaeological resources because actions would be taken to avoid, move, record, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. By providing an opportunity to avoid disturbance, disruption, or destruction of archaeological resources, the impacts would be reduced to a less-than-significant level. The proposed modifications to the project do not change the overall project footprint, effects on known cultural resources, the potential to discover and affect currently unknown cultural resources, or conclusions of the DEIR impact analysis or the need to implement the mitigation measures.

VISUAL RESOURCES

The DEIR identifies a number of significant, potentially significant, and significant and unavoidable impacts to visual resources. Mitigation Measure 8-2 in the DEIR requires the project applicant to obtain Design Review approval from the Placer County Design/Site Review Committee prior to submittal of Improvement Plans or Building Permits. In addition, all project phases must be compatible with the Plan Area Development Standards prescribed in Appendix B of the VSVSP. Since release of the DEIR, the project applicant has worked with Placer County's Squaw Valley Design Review Committee to improve the design features of the project so as to better meet the objectives of the Specific Plan, and to improve consistency with the vision and objectives of the SVGPLUO.

Most of the modifications to the project that have been proposed by the applicant are a result of the recommendations of the Design Review Committee. The reduced building heights, broader passageways, and increased setbacks of structures are all intended to help reduce the overall visual impacts to residents and visitors. This, together with compliance with the Placer County Development Standards and Design

Guidelines, would serve to further reduce the potential visual impacts of the project. However, the significant impacts associated with adverse effects on views from view blockage of the lower slopes of the background mountains, while slightly reduced, would continue to be significant to those who frequently visit or live in the valley; the changes in the viewshed would remain substantial because view blockage would occur, even if less than with the project evaluated in the DEIR, and because the long-term trend of development of the valley would continue.

The reduced heights and wider passageways in the proposed modifications would also reduce the shadowing effects of structures in the project area, which is already a less-than-significant impact.

The project modifications to the East Parcel include landscaping on the north and west sides to screen night lighting from adjacent residential parcels. This will bring the project into compliance with Mitigation Measure 8-5a as recommended in the DEIR. With this mitigation measure, lighting or glare generated by the project would have a less-than-significant impact on the day and nighttime views of the East Parcel.

The modifications to the project also include the anticipated placement of propane storage facilities on Lot 28. The propane tanks themselves will be below ground, and associated facilities that are above ground will be screened by landscaping vegetation and rock walls consistent with Placer County Development Standards and Design Guidelines. Additional scenic screening may be recommended at the project approval stage to accommodate site-specific needs for these two sites. Because of the proposed screening, this modification would not alter the overall significance of impacts to visual resources associated with the project.

TRANSPORTATION AND CIRCULATION

The proposed modifications to the Specific Plan would not change the maximum number of new residential units or bedrooms or square footage of restaurant, retail, and other uses. Therefore, traffic generation as described in the DEIR would not change. The project modifications include minor changes to the pedestrian and vehicular circulation pattern in the Village Core. The plaza areas and courtyard of buildings 1-A and 1-B have been redesigned and expanded, and the plaza width and building separation at buildings 3 and 4 have been increased. Pedestrian passageways have also been widened. The bike trail that passes through the East parcel has been moved within the parcel, but capacity and access to the bike trail has not changed. Vehicular circulation at the shipping and receiving structure on the East Parcel has also been improved, creating a drive-through passage rather than a back-in and out pattern. These changes would make modest improvements to the circulation patterns in the project area, but the impacts and mitigation needs described for the project in the DEIR remain essentially unchanged. Access ways for propane trucks to Lot 28 as part of the modifications related to the propane storage facility would not significantly affect transportation or circulation patterns in the project area. Finally, new crosswalk facilities on Squaw Valley Road outside of the Specific Plan area would improve pedestrian circulation patterns and enhance public safety in these areas.

AIR QUALITY

The proposed modifications to the Specific Plan would not change the maximum number of new residential units or bedrooms or square footage of restaurant, retail, and other uses. Therefore, factors associated with stationary and mobile source emissions would not appreciably change. The circulation improvements in the Village Core and the drive-through passage at the shipping and receiving structure on the East Parcel would reduce idling of vehicles and therefore slightly reduce air emissions. The air quality impacts and need for and effectiveness of the mitigation measures remain essentially unchanged with the project modifications.

NOISE

The proposed modifications to the Specific Plan would not change the proposed project land uses, maximum number of new residential units or bedrooms, or square footage of restaurant, retail, and other uses. Therefore, factors associated with noise generation (e.g., construction, vehicle traffic) would not appreciably change. Vehicular circulation at the shipping and receiving structure on the East Parcel has been improved,

creating a drive-through passage to reduce noise impacts associated with vehicles otherwise needing to backup and trigger backup alarms. An 8-foot-high privacy perimeter wall has also been added along the north side of the East Parcel and buffers between East Parcel facilities and nearby residences have been increased. These actions would reduce noise impacts associated with the East Parcel; however, the noise impacts and mitigation needs identified for the project as a whole in the DEIR remain essentially the same.

SOILS, GEOLOGY, AND SEISMICITY

Because the overall footprint, land use, and density of the project would not change with the project modifications, the development would be subject to the same seismic, liquefaction, and avalanche constraints as the proposed project in the DEIR. As with the proposed project, the preparation of a Final Fault Evaluation Report and a site-specific geotechnical engineering report that would be approved by the Placer County Engineering and Surveying Division, will provide final design guidance for building layouts, foundation engineering, and structural standards that will be consistent with and adequate for the actual seismic and soils hazards of the project site. Similarly, the applicant will prepare and implement an Avalanche Hazard Mitigation Plan for proposed structures within known Potential Avalanche Hazard Areas. Overall, soils, geology and seismicity impacts and the need for mitigation measures are the same as for the proposed project as evaluated in the DEIR.

HYDROLOGY AND WATER QUALITY

The project modifications would reduce the footprint of impervious surfaces on the East Parcel, thereby slightly increasing groundwater recharge, and slightly reducing potential water quality impacts to Squaw Creek with reduced surface runoff. The footprint of the parking garage is smaller, the bike trail that was on the Squaw Creek side of the development on the East Parcel has been moved to the Squaw Valley Road side, and Lot 44 has been designated as open space. These changes are minor in the scope of the overall project, however.

The project modifications include adding a new site for a propane storage facility on Lot 28. This will add impervious surfaces to the site, but reduce the amount of additional development originally proposed for Lot 19 in the Specific Plan. The total amount of impervious surfaces that may affect groundwater recharge and surface runoff will be generally offset with the new modifications, and the changes are minor in the scope of the overall project. The proposed modifications would not alter the effects identified for hydrology and water quality in the DEIR.

PUBLIC SERVICES AND UTILITIES

The project modifications would not change the total number of units, rooms or capacity of the proposed project, so estimates of increased demand for drinking water supply, wastewater and solid waste disposal, energy use, schools, parks, snow removal, police, fire protection and emergency medical services, do not change from those described in the DEIR. The modifications made to eliminate the option of using LNG as a supplement or alternative to propane for the project will not alter the conclusions of the DEIR, because both options were evaluated. Conclusions in the DEIR related to public services and utilities are not altered by the proposed project modifications.

HAZARDOUS MATERIALS AND HAZARDS

The project modifications would not change the potential for hazardous materials to be found in the project area or the potential for exposure to hazards. The modifications made to the propane distribution system will be subject to the pipeline safety regulations of the California Public Utility System. The proposed modification to transport and delivery of propane to two site locations rather than one is also subject to regulatory oversight by the state and federal government. No additional hazardous impacts are anticipated from this change to the proposed project. Lot 28, which has been proposed as a possible propane storage site is similar in characteristics, including proximity to Squaw Creek, to Lot 19, which was originally proposed as the

only propane storage location. The effects and mitigation measures related to hazardous materials and hazards would remain essentially unchanged with the proposed modifications from those described in the DEIR.

GREENHOUSE GASES AND CLIMATE CHANGE

The project modifications would not affect greenhouse gas (GHG) emissions. Improvements to vehicle circulation in the Village Core and the East Parcel will reduce the amount of time vehicles are idling, thereby slightly reducing emissions, but the improvement is not meaningful in terms of overall GHG emissions.

Climate change has the potential to increase risk from wildfires in the area, but none of the project changes would result in changes associated with the risks described in the DEIR.

2.1.3 Conclusion

CEQA requires recirculation of an EIR when significant new information is added to the EIR after public notice is given of the availability of the DEIR for public review, but before certification (CCR Section 15088.5). New information is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (CCR Section 15088.5).

The DEIR provided a comprehensive analysis of potential impacts of the project and alternatives. The modifications that have been made to the project include minor changes to the Illustrative Concept Plan and to the Project Description of the Specific Plan. The changes that have been made by the applicant would not generate a new substantial adverse environmental effect and in some cases, the changes reduce potential environmental effects of the project. The significance of impacts would not change. The modifications are also within the scope of the alternatives analyzed in the DEIR. Because the information in this section makes insignificant modifications to an otherwise adequate EIR, recirculation of the DEIR for additional comment is not required, pursuant to Section 15088.5 of the State CEQA Guidelines.

Because this FEIR did not result in the identification of any new significant environmental impacts or a substantial increase in the severity of an environmental impact, this FEIR does not contain “significant new information,” and recirculation of the DEIR is not required prior to approval. (See also the Master Response regarding recirculation).

2.2 UPDATED WATER SUPPLY ASSESSMENT AND GROUNDWATER DATA

Several sections of the DEIR relied upon the WSA that was prepared by Placer County in partnership with the Squaw Valley Public Services District (SVPSD), the entity proposed to provide water service to the project. The WSA was completed in July 2014. Sections of the biological resource impact analysis (DEIR Chapter 6), hydrology impact analysis (DEIR Chapter 13), and the water supply impact analysis (DEIR Chapter 14) relied on the results of the WSA. Extensive modeling based on years of groundwater data and calibrations was conducted by the SVPSD in preparing the WSA. Groundwater data spanned the period of May 1992 through December 2011. Although completed in 2014, data from the 2012 through 2014 period was not available at the time the analysis used to prepare the WSA was conducted. The WSA concluded that groundwater was sufficient to serve the project during normal, dry, and multiple dry year conditions under full buildout project conditions with cumulative development conservatively expected over the next 25 years, satisfying the requirements for a WSA as expressed both under the CEQA Guidelines (Section 15155) and the California Water Code (Sections 10910-10915).

Subsequent to release of the 2014 WSA and the DEIR, Olympic Valley groundwater data for the years 2012 through December 2014 became available. This timeframe covers a significant drought period. A number of

comments on the DEIR focused on this period of drought, and raised the issue of whether the Olympic Valley Groundwater Basin had sufficient supply under these drought conditions to serve the project and cumulative development over the next 25 years. This combination of factors resulted in an update to the 2014 WSA, which was released in July 2015.

The 2015 WSA Update (available in Appendix A of this FEIR) added the drought data from 2012 through December 2014 into the groundwater model. It was also updated to add additional demand data including the potential for irrigation if needed for Squaw Creek vegetation restoration. Demand data also assumed a slightly higher occupancy rate, resulting in slightly higher demand. Finally, an additional analysis (subsequent to the 2015 WSA) evaluated both a six and nine new well wellfield configuration. The reasoning for, and results of the study of the different wellfield scenarios are provided in the Master Response regarding water supply (see Section 3.1, “Master Responses,” in this FEIR). The 2015 WSA concluded that the Olympic Valley Groundwater Basin met the criteria for sufficient supply under the project build-out plus 25 years of cumulative development scenario.

The added data and water demand scenarios evaluated for the 2015 WSA Update were also used to support further detailed groundwater modelling (available in Appendix B of this FEIR). The impact analysis in Chapters 6 and 13 of the DEIR were supported by detailed groundwater modelling beyond the WSA to assess potential impact mechanisms such as whether any declines in groundwater elevations could adversely affect surface water conditions and vegetation in Squaw Creek. The detailed groundwater modelling was repeated using the added data and water demand scenarios to assess whether there would be any changes in effects from those identified in the DEIR.

Additional details regarding the development of the 2015 WSA Update and updated groundwater modeling, and the results of these analyses are provided in Chapter 3 of this FEIR, in the Master Response regarding water supply.

2.3 REVISIONS TO THE DEIR

This section presents specific text changes made to the DEIR since its publication and public review. The changes are presented in the order in which they appear in the original DEIR and are identified by the DEIR page number. Text deletions are shown in ~~striketrough~~, and text additions are shown in underline.

It should be noted that the following revisions do not change the intent or content of the analysis or effectiveness of mitigation measures presented in the DEIR.

2.3.1 Revisions to Chapter 1, “Introduction”

None

2.3.2 Revisions to Chapter 2, “Executive Summary”

Due to a changed and improved condition since publication of the DEIR and the addition of a new mitigation measure, Impacts 9-3, 11-5, and 18-32, on pages 2-4 and 2-5 of the DEIR are no longer significant and unavoidable impacts. Therefore, as shown below, they have been removed from the list in Section 2.2.1, “Significant and Unavoidable Environmental Impacts.”

Transportation and Circulation

~~▲ Impact 9-3: Impacts to Caltrans intersections~~

Noise

- ▲ ~~Impact 11-5: Exposure of new and existing sensitive receptors to operational project generated transportation noise sources (potentially significant for existing sensitive receptors)~~

Cumulative Impacts

- ▲ ~~Impact 18-32: Cumulative long term ambient noise levels~~

In response to comment O8a-26, a portion of Mitigation Measure 6-1a found in the second bullet in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-16 of the DEIR is revised as follows:

		<ul style="list-style-type: none"> ▼ An annual monitoring report for a minimum period of 5 years from the date of installation, prepared by the above-cited professional, shall be submitted to the Planning Services Division for review and approval. Any corrective action shall be the responsibility of the applicant. <u>The report shall include baseline (pre-restoration) and post-restoration measurements of suspended sediment concentration, streamflow, and turbidity as described on page 27 of the Channel Restoration Design Basis Report (Balance Hydrologics 2014).</u> 	
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In response to comment O9-83, Mitigation Measure 6-1a (text inserted in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-16 of the DEIR) is revised as follows to elaborate on the content of the Mitigation and Monitoring Implementation Plan with respect to mitigating effects to waters of the U.S. and other wetlands:

		<ul style="list-style-type: none"> ▼ It is the project applicant’s responsibility to ensure compliance with the MMIP. Violation of any components of the approved MMIP may result in enforcement activities per Placer County Environmental Review Ordinance, Section 18.28.080. If a monitoring report is not submitted for any one year, or combination of years, as outlined in these conditions, the County has the option of utilizing these funds and hiring a consultant to implement the MMIP. Failure to submit annual monitoring reports could also result in forfeiture of a portion of, or all of, the deposit. An agreement between the applicant and County shall be prepared which meets DRC approval that allows the County use of this deposit to assure performance of the MMIP in the event the project applicant fails to perform. ▲ <u>The Mitigation and Monitoring Implementation Plan shall, at a minimum, include the following specific criteria, standards, and information:</u> <ul style="list-style-type: none"> ▼ <u>Baseline locations of jurisdictional habitat including species along the western and upper eastern channel of Squaw Creek (West Cells E through J and East Cells A through D) within the plan area shall be documented before initiation of construction of the VSVSP. Conduct vegetation monitoring or additional groundwater modelling as described in Mitigation Measure 6-1c below. Any jurisdictional habitat lost within the western portion of Squaw Creek from</u> 	
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		<p><u>groundwater drawdown that affects streambank instability shall be replaced with native vegetation (riparian preferably) that will stabilize the streambank and prevent sediment mobilization.</u></p> <ul style="list-style-type: none"> ▼ <u>identification of compensatory mitigation sites and criteria for selecting these mitigation sites onsite and offsite;</u> ▼ <u>in kind reference habitats within the Tahoe-Truckee region for comparison with compensatory wetlands habitats (using performance and success criteria) to document success;</u> ▼ <u>monitoring protocol, including schedule and annual report requirements (compensatory habitat shall be monitored for a minimum of five years from completion of mitigation or last human intervention [including recontouring and grading and irrigation], or until the success criteria identified in the approved mitigation plan have been met, whichever is longer);</u> ▼ <u>ecological performance standards, based on the best available science and including specifications for native wetland and riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, indicators of stress that might result in mortality, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80 percent survival of planted wetland species by the end of the five-year maintenance and monitoring period or dead and dying species shall be replaced and monitoring continued until 80 percent survivorship is achieved;</u> ▼ <u>corrective measures if performance standards are not met;</u> ▼ <u>responsible parties for monitoring and preparing reports; and</u> ▼ <u>responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.</u> <p>▲ The project applicant shall follow requirements outlined in the MMIP and <u>Compensatory Stream and Riparian Mitigation and Monitoring Plan (CSRMMP)</u> for vegetation restoration success in all areas of onsite and off-site mitigation or restoration.</p>
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In response to comment O8b-36 and to further clarify the mitigation to ensure that compensation will occur in the Sierra Nevada and that there is no net loss of wetlands in the Sierra Nevada ecosystem, the following bullet is added to Mitigation Measure 6-1a in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-17 of the DEIR:

	<ul style="list-style-type: none"> ▲ <u>Any offsite wetlands mitigation will occur in the Sierra Nevada bioregion and within the Tahoe-Truckee area to ensure that there is a no net loss of wetland, riparian, or wet meadow habitat within the Sierra Nevada or Tahoe-Truckee regions.</u> ▲ Provide a combination of mitigation bank credit 	
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		purchase and off-site construction as outlined above.	
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In response to comment O8b-36 and to ensure all sensitive riparian and wetland habitats (including non-jurisdictional wetland habitats) are mitigated within the region, Mitigation Measure 6-1b (in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-18 of the DEIR) is revised as follows:

		<p>▲ The project applicant shall compensate for net permanent riparian habitat impacts at a minimum of a 1:1 ratio through contributions to a CDFW approved wetland mitigation bank <u>in the Sierra Nevada and the Tahoe-Truckee regions</u> or through the development and implementation of a Compensatory Stream and Riparian Mitigation and Monitoring Plan (CSRMMMP) and a County approved MMIP aimed at creating or restoring in-kind habitat within the plan area and/or in the surrounding area. Stream and riparian habitat compensation, which could be provided entirely or in part by the planned Squaw Creek restoration, shall include establishment of riparian vegetation on currently unvegetated bank portions of streams affected by the project and enhancement of existing riparian habitat through removal of nonnative species, where appropriate, and planting additional native riparian plants to increase cover, continuity, and width of the existing riparian corridor along streams in the project site initially and then in surrounding areas. Construction activities and compensatory mitigation shall be conducted in accordance with the terms of a streambed alteration agreement as required under Section 1602 of the Fish and Game Code.</p>	
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In response to comment O8b-37, Mitigation Measure 6-1b (in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-19 of the DEIR) is revised as follows to ensure riparian mitigation success:

		<p>▲ ecological performance standards, based on the best available science and including specifications for native riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, <u>indicators of tree stress that might result in mortality</u>, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80 percent survival of planted riparian trees and shrubs by the end of the five-year maintenance and monitoring period or dead and dying trees shall be replaced and monitoring continued until 80 percent survivorship is achieved;</p>	
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In response to multiple comments (08b-7, 08b-15, 08b-16, 08b-17, 08b-28, 08b-35, 08b-36, 08b-38, 09-61, 09-110, PH-47, etc.), Mitigation Measure 6-1c in Table 2-2, "Summary of Impact and Mitigation Measures," on pages 2-19 and 2-20 of the DEIR is revised as follows:

	<p><u>Mitigation Measure 6-1c: Implement Mitigation Measure 13-4 and monitor and respond to groundwater effects.</u></p> <p>The project applicant shall implement Mitigation Measure 13-4, provided in Chapter 13, "Hydrology and Water Quality."</p> <p>Mitigation Measure 13-4 reduces the uncertainty associated with management of well system design and operation by ensuring the adoption of performance standards, thresholds, and recommendations from the WSA for well system operation, and requiring consistency with applicable groundwater plans. By confirming that groundwater management is implemented in a manner that is consistent with the operational parameters described in the WSA, Mitigation Measure 13-4 would also result in confirmation that groundwater pumping does not result in losses of riparian vegetation in the west channel or upper east channel of Squaw Creek and any future groundwater/vegetation impact modeling is consistent.</p> <p>In addition, the project applicant shall record baseline locations and composition of species of riparian and meadow vegetation along the <u>in the surrounding meadow that is hydrologically connected to the upper eastern channel of Squaw Creek (in relation to East Cells A through ED) and along the western channel (in relation to West Cells E through J) before initiation of construction of the VSVSP. If sensitive plant species are found in these areas, the project proponent will follow mitigation measures outlined in Mitigation Measure 6-8 to consult with CDFW and USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for the indirect impacts that could occur as a result of project operational groundwater drawdown. Where these locations are on lands not controlled by the applicant, the applicant shall seek access from the landowner to conduct monitoring. If access cannot be obtained, monitoring will be conducted via photo points or other means from the property line or other nearby publicly accessible location.</u> The extent and composition of this vegetation <u>in the western channel and associated riparian and wet meadow areas shall be monitored annually until at least 5 years final project build-out after the last project element is occupied,</u> to ensure accurate recordation of responses to groundwater level declines and any beneficial effects resulting from creek restoration. Any riparian or meadow habitat lost or degraded within these areas <u>that is determined to be a result of project-related groundwater level declines shall be compensated for on or off-site (within the Olympic Valley preferred) at a minimum 1:1 ratio within the Sierra Nevada bioregion and the Tahoe-Truckee region, or conditions otherwise corrected, such as through irrigation of riparian vegetation and/or wet meadow vegetation to maintain composition and functionality of existing habitat. If monitoring shows that riparian vegetation along the streambank is not supported, other native vegetation will be planted and managed to stabilize the creek bank as per Mitigation Measure 6-1b. Alternatively, groundwater modeling can be conducted that</u></p>	
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	<p>predicts conditions for riparian vegetation and meadows at a higher elevation than the Squaw Creek low flow channel (current groundwater analysis only supports an evaluation of conditions at the elevation of the low flow channel). If this modeling indicates that changes in groundwater conditions under the proposed groundwater management regime would not result in a significant adverse effect to riparian and meadow habitat, ongoing monitoring would not be needed.</p> <p>In order to address the potential effects of groundwater pumping outside of the VSVSP area, the following steps shall be taken:</p> <p>(a) Prior to recordation of the first Small Lot Tentative Map, conduct soil borings throughout the wet meadow east of the project boundary (see Exhibit MM 6-1c) to determine whether groundwater is available to wet meadow vegetation (i.e., there are no barriers to between groundwater and plant roots and/or moisture levels in the soil column indicate that groundwater is available to plant roots). Soil borings may be taken in multiple months and in successive seasons as needed to determine if a connection to groundwater is present. If groundwater is not available to the plants during the July-October period, then no further steps are necessary with respect to those areas. In these conditions, it is assumed that vegetation is receiving water from sources other than groundwater, such as golf course irrigation overspray.</p> <p>(b) If soil borings indicate that groundwater is available to these plants in some or all portions of the study area east of the project boundary during July through October, then it is assumed that drops in groundwater levels could affect the viability of the plants and a monitoring plan shall be implemented, and shall include the following steps.</p> <ul style="list-style-type: none"> ▲ Determine the minimum depth to groundwater needed during the critical period for existing habitat to maintain baseline conditions. ▲ Install groundwater monitoring wells in the riparian and wet meadow portions of the study area east of the project boundary where a potential connection to groundwater has been established. The location of the wells shall be based on the extent of the area that could be affected, based on part on as indicated by the data collected by soil borings conducted as part of Item (a)#1, and for which access is available. For example, if the entire wet meadow in the study area east of the project boundary is included, it is anticipated that 8 to 12 wells will need to be installed, including at least one well east of the study area. Existing and planned monitoring wells may be used, if appropriate, and permission is provided by the well operator/owner. Well locations shall be coordinated with plant survey transects. ▲ Collect data from the monitoring wells each year from July through October, at a minimum. ▲ Establish transects on a north-south heading every 50 meters or less. ▲ Determine the species that are located on each transect at one-meter intervals. 	
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	<p>▲ <u>Surveys shall be conducted at least once annually to determine whether the vegetation profile is changing along the transect and/or there is increased plant mortality.</u></p> <p><u>Initial monitoring [as outlined in (b)] to establish baseline conditions of wet meadow vegetation and groundwater levels east of the VSVSP area shall be conducted annually for 5 years. The onset of monitoring may be coordinated with creek restoration efforts, but shall begin prior to or concurrent with recordation of the first Small Lot Tentative Map or within 2 years of project approval, whichever occurs first. After the initial 5 years, monitoring shall be conducted every 5 years, at a minimum, until 30 percent of VSVSP development has been completed. Upon occupancy of 30 percent of the VSVSP development, monitoring shall be conducted on an annual basis until 5 years after buildout of the project.</u></p> <p><u>If access cannot be gained to survey the riparian habitat and/or wet meadow and/or to install monitoring wells east of the VSVSP area, then an assessment shall be made via photo-points or other means from the property line or other nearby publicly accessible location and/or surveys of a control site with similar characteristics that is located on property that can be accessed. In order to determine whether observed changes are due to groundwater pumping, modeling methods may be used. If adverse effects are observed and can be attributed to groundwater pumping, then mitigation would be required as described below.</u></p> <p><u>If monitoring and surveys indicate that riparian and/or wet meadow vegetation is being lost and/or degraded at levels that could impair the viability and value of the wet meadow and/or riparian habitat, and that change is correlated with lowered groundwater levels as indicated by monitoring wells and pumping data, one or more of the following steps shall be undertaken to ensure that there is no net loss of acreage and/or value of wet meadow habitat:</u></p> <ul style="list-style-type: none"> ▲ <u>Work with the SVPSD to adjust the pumping regime in a manner that minimizes draw down in the portion of the overall study area that is being affected;</u> ▲ <u>Irrigate the affected area during the critical period using water from a source other than the aquifer, such as fractured wells used for snowmaking at Squaw Valley;</u> ▲ <u>Provide improvements to the water system in Squaw Valley (e.g., replacement of old, leaking pipelines, replacement of high-water use fixtures) to reduce demand from other sources by an amount commensurate with the amount of irrigation water required for riparian and/or meadow vegetation. In this case, water from the aquifer could be used for irrigation of sensitive habitats; and/or</u> ▲ <u>Provide compensation for the affected area by restoring a commensurate area that is degraded to wet meadow and/or riparian habitat conditions outside of the study area. Preference shall be given to areas within the Squaw Valley meadow and/or in the vicinity of Squaw Creek. Contribution to the restoration efforts for Squaw Creek east of the VSVSP would be one method of</u> 	
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	<p><u>compensation, because the creek restoration would improve the function of the creek, and thereby improve habitat conditions along the creek and within the meadow. If suitable land is unavailable within the Squaw Valley meadow and/or in the vicinity of Squaw Creek, then restoration activities may occur outside of Squaw Valley but within the Tahoe-Truckee area. VSVSP would be responsible for restoring that portion which is attributable to its share of increased groundwater pumping. Such compensation shall ensure that there is no net loss in the quantity or function of such habitat.</u></p> <p><u>The selection of the remediation measures shall be based in part on whether the effects on riparian and/or meadow vegetation are occurring only during certain years (e.g., particularly dry years) and the period of time that remediation would be needed to ensure vegetation viability. If irrigation is used, it shall be demonstrated that the amount of water used would be within the water demand evaluated in the 2015 Water Supply Assessment or that another source of water, such as snow making wells or reducing other demand, as discussed above, could be used. As discussed previously, water could be supplied from snow-making wells located within fractured bedrock (i.e. not drawing water from the Olympic Valley aquifer) to provide irrigation for landscaping, the creek restoration area, and riparian vegetation along East Cells A through C.</u></p>	
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In response to comment 09-61 and to clarify that potential groundwater impacts are included in the required consultation, Mitigation Measure 6-8 (the first bullet in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-31 of the DEIR) is revised as follows with respect to special-status plants:

	<p>▲ If special-status plant species are found that cannot be avoided during construction or because of <u>operational groundwater drawdown</u>, the project applicant shall consult with CDFW and/or USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for direct and indirect impacts that could occur as a result of project construction and will implement the agreed-upon mitigation measures to achieve no net loss of occupied habitat or individuals. Mitigation measures may include preserving and enhancing existing populations, creation of off-site populations on project mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat and/or individuals. Potential mitigation sites could include suitable locations within or outside of the project area. A mitigation and monitoring plan will be developed describing how unavoidable losses of special-status plants will be compensated.</p>	
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In response to comment F2-2, Mitigation Measure 6-10 in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-38 of the DEIR is revised as follows:

<p>Impact 6-10: Effects of additional trail construction and improvements identified in the Specific Plan. To meet County requirements for provision of recreational facilities, existing trails could be improved, and new trails could be developed, outside the currently defined project site. Depending on the specific locations of these trails and the types and magnitude of their effects on biological resources, this impact would be potentially significant.</p>	<p>PS</p>	<p>Mitigation Measure 6-10: Implement previous applicable mitigation measures during trail development. <u>Once a proposed alignment and the location of specific improvements are identified, a</u>A-qualified biologist shall survey <u>the new trail routes and segments of existing trails identified for improvements</u> outside the project boundary identified in this EIR to determine the biological resources present and the impacts identified within this chapter that could occur. Based on the results of this site review, the biologist shall identify mitigation measures within this chapter applicable to the specific trail route <u>segments</u> and the mitigation measures shall be implemented as appropriate during trail construction/improvement.</p>	<p>LTS</p>
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In response to comment I95-1, Mitigation Measure 7-3b in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-42 of the DEIR is revised as follows:

		<p>Mitigation Measure 7-3b: Develop and implement a Worker Environmental Awareness Program. The project applicant shall design and implement a Worker Environmental Awareness Program (WEAP) that will be provided to all construction personnel and supervisors who will have the potential to encounter and alter heritage and cultural resources. The topics to be addressed in the WEAP will include, at a minimum:</p> <ul style="list-style-type: none"> ▲ types of heritage and cultural resources expected in the project area; ▲ types of evidence that indicates heritage or cultural resources might be present (e.g., ceramic shards, trash scatters, lithic scatters, <u>mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints</u>); ▲ what to do if a worker encounters a possible resource; ▲ what to do if a worker encounters bones or possible bones; and ▲ penalties for removing or intentionally disturbing heritage and cultural resources, such as those identified in the Archeological Resources Protection Act (ARPA). 	
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Due to a changed and improved condition since publication of the DEIR, Impact 9-3 and Mitigation Measure 9-3 in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-51 of the DEIR are revised as follows:

<p>Impact 9-3: Impacts to Caltrans intersections. The proposed project would exacerbate unacceptable operations at the SR 89/Alpine Meadows Road intersection during all three analysis peak hours. This</p>	<p>SLTS</p>	<p>Mitigation Measure 9-3: Construct the planned traffic signal at the SR 89/Alpine Meadows intersection. Placer County has been working with Caltrans to construct a traffic signal at this intersection. Squaw Valley does not</p>	<p>w/signal: LTS w/o signal: SU</p>
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<p>would be a significant impact. <u>Since publication of the DEIR, the planned traffic signal at the SR 89/Alpine Meadows intersection has been constructed and is operational. Therefore, the project would not generate sufficient vehicle trips to generate an increase in intersection delay of more than 2.5 seconds, and this impact would be less than significant.</u></p>		<p>have a role in construction of this traffic signal. Although the precise timing of the signal's installation is not known at this time, the plans and specifications have been approved by the Placer County Board of Supervisors and the contract for construction has been awarded as of April 2015. It is anticipated to be constructed by the County and Caltrans in 2015 and be completed in one construction season. Once this traffic signal is in place, operations would improve to an acceptable LOS D or better during all three analysis periods, and no mitigation would be required of the project. <u>No mitigation is required.</u></p>	
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In response to comment O13-1 and as revised by the County Department of Public Works, the title and text of Mitigation Measure 9-7 in Table 2-2, "Summary of Impact and Mitigation Measures," on page 2-52 of the DEIR is revised as follows:

<p>Impact 9-7: Impacts to transit. The proposed Specific Plan describes several planned transit service expansions, some of which are listed as policies in the Specific Plan. However, the policies and service expansions do not explicitly require that the project applicant ensure that an adequate supply of public transit service be available to meet the anticipated demand. This would be a significant impact.</p>	<p>S</p>	<p>Mitigation Measure 9-7a: Contribute fair share or create a Community Service Area (CSA) or a Community Facilities District (CFD) to cover increased transit service. The project applicant shall commit to providing fair share funding to TART or forming the Department of Public Works and Facilities (DPW&F) or create a Community Service Area (CSA) or a Community Facilities District (CFD) to fund the costs of increased transit services prior to the recordation of the Initial Large Lot Final Map. The provisions for monitoring (discussed below), and determining the appropriate fair share or the steps for forming a CSA or CFD shall be determined at this time in consultation with, and to the satisfaction of TART and County staff. <u>An Engineer's Report shall be complete prior to recordation of any Small Lot Final Map to the satisfaction of DPW&F to define the fair share or used for the creation of the CSA or CFD. If and when a CSA or CFD is formed, the project applicant shall no longer be responsible for making fair share payments to DPW&F for the increased transit service for the portion of the project covered by the CSA or CFD.</u></p> <p>Prior to recordation of the Initial Small Lot Final Map, the project applicant shall work with TART to conduct winter and summer season monitoring of ridership on bus routes to/from, and within Olympic Valley. Written evidence of this monitoring, its results, and any comments from TART shall be provided to Placer County ESD and DPW. When ridership approaches capacity, and based on the previously agreed upon provisions, the project applicant shall make a fair share contribution to TART to support transit service, or create a CSA or a CFD to fund the costs of increased transit services. If and when a CSA or CFD is formed, the project applicant shall no longer be responsible for making fair share payments to TART, and TART shall be fully responsible for adjusting bus service.</p> <p>This mitigation measure meets the intent of Specific Plan</p>	<p>LTS</p>
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		<p>Policies CP-2 through CP-4, and clarifies how the project would contribute to enhanced transit operations. Increased service may consist of more frequent headways, longer hours of operations, and/or different routes. The fee calculations shall consider both capital expenses and on-going operations and maintenance expenses.</p>	
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In response to comment O13-1, new Mitigation Measure 9-7b is added to Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-53 of the DEIR as follows:

		<p><u>Mitigation Measure 9-7b: Maintain Membership in the Truckee North Tahoe Transportation Management Association (TNT/TMA).</u> <u>The following mitigation measure, while not required to achieve or maintain a less-than-significant impact conclusion, would further reduce the project’s impacts to transit.</u> <u>Prior to approval of improvement plans/final maps, the project applicant shall maintain membership in perpetuity in the Truckee North Tahoe Transportation Management Association (TNT/TMA). Once commercial and homeownership groups have been formed, the project applicant shall shift the TNT/TMA membership to the associations and the associations shall maintain membership in perpetuity. It is not anticipated that membership will need to be cancelled; however, if for a reason unknown at this time cancellation of the membership is required, it shall be mutually agreed to by the County and the entity responsible for paying the annual dues.</u></p>	
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In response to comment L6-9, Mitigation Measure 9-8 in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-53 of the DEIR is revised as follows:

<p>Impact 9-8: Construction impacts. Project construction would generate employee and truck trips, which would use segments of SR 89 and Squaw Valley Road. These activities could cause lane closures, damage to roadways, and increased conflicts with bicyclists and pedestrians. This would be a significant impact.</p>	<p>S</p>	<p><u>Mitigation Measure 9-8: Develop a Construction Traffic Management Plan.</u> 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; ▲ approved truck circulation patterns, <u>including coordination with the Town of Truckee if the aggregate mine in the Town is used as a material source;</u></p>	<p>LTS</p>
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In response to comment L2-2, Mitigation Measure 10-2 in Table 2-2, “Summary of Impact and Mitigation Measures,” on pages 2-54 through 2-56 of the DEIR is revised as follows with respect to PCAPCD’s thresholds:

<p>Impact 10-2: Long-term, operation-related (regional) emissions of criteria air pollutants and precursors. Operation of the Specific Plan under full buildout would result in days where the mass emissions of ROG and NOx, ozone precursors, in Placer County and the MCAB would exceed the PCAPCD-recommended mass emission threshold of 82 lb/day. Thus, long-term operational emissions of ROG and NOx could conflict with the air quality planning efforts and contribute substantially to the nonattainment status of Placer County with respect to the NAAQS and CAAQS for ozone. This would be a significant impact.</p>	<p>S</p>	<p>Mitigation Measure 10-2: Implement an ongoing ROG and NOx emissions review and reduction program. <u>This measure is designed to reduce the project’s operational emissions of ROG or NOx to less than PCAPCD’s project-level threshold of 82 lbs/day and to less than PCAPCD’s cumulative threshold of 10 lbs/day.</u></p> <p>Mitigation measures for reducing operational emissions of ozone precursors were developed using PCAPCD guidance (PCAPCD 2012:C-1 through C-2) and mitigation guidance published by the California Air Pollution Control Officers Association (CAPCOA 2010) and the California Attorney General’s Office (2010). The Lake Tahoe Sustainability Collaborative’s Sustainability Action Plan was also reviewed for mitigation options as it includes multiple emission reduction measures that are well-suited to the climate and development patterns in the Sierra Nevada (Lake Tahoe Sustainability Collaborative 2013:4-1 through 4-37).</p> <p>Prior to recordation of each Small Lot Final Map, the project applicant shall prepare, to the satisfaction of Placer County Planning Services Division and PCAPCD, a chart or table with supporting analysis, which demonstrates that construction and operation of the proposed phase, combined with emissions from all past approved phases, will not result in ROG or NOx emissions in excess of 82 <u>10</u> lbs/day. Compliance with this threshold may be achieved through project design and/or other “on-site” measures, which may include any of the project-level reduction measures listed below. Alternatively, the project applicant may demonstrate compliance with this mitigation measure, partially or wholly, through off-site measures (i.e., emission reductions not directly associated with the proposed project but funded/implemented by the applicant, such as reducing emissions associated with ski operations) and/or purchase of offset credits identified below.</p> <p>Placer County Planning Services Division shall maintain a file for the charts to provide future applicants with the historical emissions record and approved tracking methodology.</p> <p>The project applicant shall be responsible for the funding and implementation of all identified reduction measures. The ROG and NOx reduction benefits achieved by all measures must occur during the ozone season (May through October). The method used to quantify the reduction or offset amount achieved by each measure must be approved by the County and PCAPCD.</p> <p>Subsequent to the implementation of all selected reduction measures, the project applicant shall evaluate and report the effectiveness of the measures annually to the County and PCAPCD to verify that the suite of</p>	<p>LTS</p>
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	<p>measures result in the combined reduction in ROG and NOX that was expected. This annual reporting shall be completed and submitted to the County and PCAPCD within 30 days of the end of each ozone season. If it is determined that the effectiveness of reduction measures has been overestimated, then additional reduction measures must be implemented. Similarly, if it can be verified that reduction measures achieve better than anticipated results, or previous emission estimates were above actual emission levels, the overall emission reduction approach can be adjusted accordingly.</p> <p>Types of reduction and offset measures implemented by the project applicant may include, but are not limited to, the measures listed below, so long as the combination of selected measures results in calculated emissions below the target threshold. Note that not all of these measures need to be implemented; rather, the project applicant will be required to implement a combination of those measures needed to reduce ROG and NOX emissions below the 82<u>10</u> lbs/day threshold:</p>	
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In response to comment L2-3, Mitigation Measure 10-2 in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-59 of the DEIR is revised as follows:

	<p>OFFSET MEASURES</p> <ul style="list-style-type: none"> ▲ Establish mitigation off-site within the portion of Placer County that is within the MCAB by participating in an off-site mitigation program, coordinated through PCAPCD. Examples include, but are not limited to retrofitting, repowering, or replacing heavy duty engines from mobile sources (e.g., busses, construction equipment, on-road haulers, boilers, ski lift equipment, grooming equipment); or other programs that the project proponent may propose to reduce emissions. ▲ Participate in PCAPCD’s Off-site Mitigation Program by paying the equivalent amount of fees for the project’s contribution of ROG and NO_x that exceeds the 82 lbs/day. The applicable fee rates changes over time. At the time of writing this EIR, the fee rate is \$18,030 per ton emitted during the ozone season. The actual amount to be paid shall be determined, and satisfied per current California Air Resource Board guidelines, at the time of recordation of the Final Map (residential projects), or issuance of a Building Permit (non-residential projects). 	
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In response to comment L2-1, Mitigation Measure 10-2 in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-59 of the DEIR is revised as follows:

	<p>CONSTRUCTION MEASURES</p> <ul style="list-style-type: none"> ▲ Cease or substantially limit ROG- and NO_x- 	
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		<p>generating construction activity during peak operations (i.e., peak occupancy periods) of buildings and facilities that are already built and operational under the Specific Plan.</p> <ul style="list-style-type: none"> ▲ <u>Prior to approval of Grading or Improvement Plans, whichever occurs first, the applicant shall submit a Construction Emission/Dust Control Plan to PCAPCD. The applicant shall deliver approval from the PCAPCD to the Placer County Planning Services Division.</u> 	
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In response to DEIR comments regarding potential construction noise at Squaw Valley Academy, a boarding school near the East Parcel site (see the Master Response regarding noise), Mitigation Measure 11-1a in Table 2-2, “Summary of Impact and Mitigation Measures,” on page 2-61 of the DEIR is revised as follows:

		<ul style="list-style-type: none"> ▲ When existing and future noise sensitive uses are within close proximity to prolonged construction noise, noise attenuating buffers such as structures, truck trailers, temporary noise curtains or sound walls, or soil piles shall be located between noise sources and the receptor to shield sensitive receptors from construction noise. ▲ <u>Construction on the East Parcel shall be designed to avoid intrusive noise, defined as an interior noise level of 45 dBA L_{eq} /65 dBA L_{max} or greater, during the time when classroom activities take place at the Squaw Valley Academy. The applicant shall coordinate with administrators at the academy and shall achieve these performance standards either by adjusting the timing of construction, adjusting construction methods during times of classroom instruction, temporary screening, and/or improving noise attenuation at the school by replacing windows, increasing insulation, etc., as needed. The applicant shall prepare and submit to Placer County an acoustical study that demonstrates these criteria will be met prior to approval of each Small Lot Tentative Map for all construction on the East Parcel.</u> 	
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In response to DEIR comments regarding traffic noise impacts to existing sensitive receptors along Squaw Valley Road (see the Master Response regarding noise), Mitigation Measure 11-5 in Table 2-2, “Summary of Impact and Mitigation Measures,” on pages 2-66 through 2-67 of the DEIR is revised as follows:

<p>Impact 11-5: Exposure of new and existing sensitive receptors to operational project-generated transportation noise sources. Implementation of the project could expose existing and future planned sensitive receptors to transportation noise levels that exceed the Placer County noise standard of 60 dBA L_{dn} at the property line of residential land uses. Therefore, this impact would be significant.</p>	<p>S</p>	<p>Mitigation Measure 11-5: Reduce transportation noise exposure to sensitive receptors. For new sensitive receptors developed as part of the proposed project and that would be located within 170 feet of the centerline of Squaw Valley Road (i.e., the distance from the centerline that is estimated, based on the noise modelling, to result in exceedance of the Placer County transportation related exterior noise standard of 60 dBA L_{dn}), the following design criteria shall be adhered to:</p> <ul style="list-style-type: none"> ▲ <u>Building materials and design shall be used that</u> 	<p>New Receptors: Exterior Noise Levels: LTS Interior Noise Levels: LTS Existing</p>
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		<p>achieve, at a minimum, 25 dBA of exterior to interior noise attenuation. In all cases, interior noise levels comply with the Placer County interior noise standard of 45 dBA L_{dn}.</p> <p><u>Mitigation Measure 11-5: Reduce roadway noise levels on Squaw Valley Road.</u></p> <p><u>To reduce noise levels associated with increased traffic on Squaw Valley Road, the project applicant shall install a rubberized hot mix asphalt overlay (RHMA) or equivalent surface treatment with known noise reducing properties on top of the existing conventional asphalt of Squaw Valley Road along the segment identified below. Sufficient project generated traffic resulting in a significant contribution to the exceedance of noise standards does not occur until the later portions of project implementation. Therefore, the RHMA overlay need not be installed immediately at project initiation. The RHMA overlay shall be installed when development reaches 30 percent of all proposed Hotel/Condo/Cabin Units Land uses (i.e., 255 units or more), which would be the point where current modeling indicates traffic noise may exceed standards. The RHMA overlay shall meet the following conditions:</u></p> <ul style="list-style-type: none"> ▲ <u>A RHMA overlay shall be installed on top of the existing conventional asphalt on Squaw Valley Road beginning at its' intersection with SR 89 and terminating at its intersection with Christy Lane.</u> ▲ <u>The RHMA overlay shall be designed with appropriate thickness and rubber component quantity (typically 15 percent by weight of the total blend), such that traffic noise levels are reduced by an average of 4-6 dB (noise levels vary depending on travel speeds, meteorological conditions, and pavement quality) as compared to current noise levels.</u> ▲ <u>Prior to installation of any RHMA overlay, the applicant shall hire a qualified acoustical engineer to review all design parameters to ensure that the RHMA design is adequate, based on most current technology, practices, and availability of products, such that, at a minimum, 4 dB in noise reduction relative to conditions without a RHMA overlay would be achieved.</u> 	<p>Receptors: Exterior Noise Levels: SU LTS Interior Noise Levels: LTS</p>
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To ensure that cross-referencing of all relevant mitigation is clear, and in response to comment S4-8, Mitigation Measure 13-1 in Table 2-2, "Summary of Impact and Mitigation Measures," on page 2-70 of the DEIR is revised as follows:

<p>Impact 13-1: Well and sewer line construction and abandonment risks to groundwater and surface water quality. Implementation of the proposed project would result in the construction new water supply wells and destruction of some existing wells, and abandonment of some existing sewer lines. If wells are not properly sited, constructed, or destroyed, or if sewer lines are not properly</p>	<p>PS</p>	<p>Mitigation Measure 13-1: Implement water and sewer infrastructure water quality protection measures. The project applicant shall implement the following actions, including standard mitigation measures as required by the County, to protect water quality during the design, installation, and destruction/abandonment of wells and sewer lines:</p>	<p>LTS</p>
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<p>abandoned, contamination of groundwater and/or discharge of contaminated groundwater to surface water could result. Various codes and regulations address the protection of water quality during these activities. If these codes and regulations are not properly adhered to, this impact would be potentially significant.</p>		<ul style="list-style-type: none"> ▲ Prior to providing final authorization for drilling of a well (e.g., initiating an applicant directed test well, providing access to property for a well drilled by another entity, final agreement to fund a well drilled by another entity), the project applicant shall confirm that required fees are paid and a drilling permit is obtained from Environmental Health Services for each well and that the location of the well meets applicable DWR criteria for distances from utility infrastructure (e.g., stormwater, sewer, and petroleum pipelines and petroleum storage tanks). ▲ Prior to approval of a Final Subdivision Map, the applicant shall provide to Placer County Environmental Health Services final design drawings indicating that separation between any planned or existing wells in the map area and any planned or existing stormwater, sewer, and petroleum pipelines and petroleum storage tanks is sufficient to meet applicable DWR separation requirements. ▲ Prior to approval of a Final Small-Lot Subdivision Map, complete or provide for the proper destruction under permit and inspection, of existing wells and abandonment of sewer lines located within the project site. ▲ Prior to approval of an Improvement Plan that includes the need for well destruction or sewer line abandonment, well destruction and/or sewer line abandonment shall be shown on the Improvement Plans; the actions shall be included in the engineers' estimate of costs for subdivision improvements; and the Improvement Plan will include a Plan Note indicating proper destruction, under permit and inspection, of the existing wells and abandonment of sewer lines located within the Improvement Plan area. <p><u>The project applicant shall also implement relevant provisions of Mitigation Measures 13-2a and 13-2b.</u></p>	
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In response to comments L4-34, L5-5, and O12b-2, Mitigation Measure 14-2a in Table 2-2, "Summary of Impact and Mitigation Measures," on page 2-81 of the DEIR is revised as follows:

<p>Impact 14-2: Increased demand for wastewater collection, conveyance, and treatment. The project would be served by existing and upgraded (as part of the project) sewer facilities that have sufficient capacity to collect, and convey wastewater through the project area. Further, T-TSA has sufficient capacity to treat wastewater at its treatment plant outside of Truckee. However, there may not be sufficient capacity in the Truckee River Interceptor during peak flow periods to serve existing plus project flows. The impact would be potentially significant.</p>	<p>PS</p>	<p>Mitigation Measure 14-2a: Provide sufficient on-site wastewater storage. In the event that T-TSA finds that project-generated peak wastewater flows may exceed the capacity of the TRI, wastewater detention facilities, such as enlarged pipes, vaults, or tanks, shall be incorporated into the Specific Plan to time wastewater flows to off-peak conditions when the TRI has sufficient capacity. These facilities will be located within the plan area and will be underground or otherwise incorporated into project's development footprint (e.g., incorporated into a building podium). <u>All facilities will be designed and maintained according to applicable design standards such that effluent would be fully contained.</u> The project</p>	<p>LTS</p>
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		<p>applicant shall work directly with T-TSA to determine a sufficient volume of detention capacity <u>for the project</u> and to define the methodology for determining when wastewater detention facilities should be used, and timing for releases from these facilities. <u>The capacity of the on-site storage shall only be sufficient to meet the peak capacity needs associated with the project.</u> A SVPSD representative's signature from T-TSA shall be provided on the Improvement Plans.</p> <p>Mitigation Measure 14-2b: Obtain will-serve requirements letter from the public service district. Prior to Improvement Plan approval, the project applicant shall submit to Environmental Health Services a "will-serve" letter from the SVPSD indicating that the district can and will provide sewer service to the project. Connection of each lot in this project to a public sanitary sewer is required.</p>	
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In response to the recent California Supreme Court decision, *Center for Biological Diversity v. California Department of Fish and Wildlife (CBD v CDFW)*, to update the analysis to more current emissions data and as explained in detail in Section 3.1, "Master Responses," of this FEIR, Impact 16-2 and Mitigation Measure 16-2 in Table 2-2, "Summary of Impact and Mitigation Measures," on pages 2-88 and 2-89 of the DEIR are revised as follows:

<p>Impact 16-2: Operational greenhouse gas emissions. GHGs associated with operation of the Specific Plan would exceed the Tier I mass-emission threshold of 1,100 MT CO₂e/year; however, operational GHGs would not exceed the GHG efficiency based Tier II threshold recommended by PCAPCD for 2020. Nevertheless, GHG emissions would be substantial and may be less efficient than needed to achieve GHG reduction targets that could be in place after 2020, when the project is completed. Therefore, operation of the Specific Plan has the potential to result in a substantial contribution to GHG emissions. This impact would be potentially significant.</p>	<p>PS</p>	<p>Mitigation Measure 16-2: Implement ongoing operational greenhouse gas review and reduction program. The state legislature or Governor's Office may establish new GHG targets <u>or other programs or metrics</u> that apply for the period both before and after 2020, as discussed in the First Update to the Climate Change Scoping Plan, released by ARB in May 2014 (and discussed above in Section 16.2.2) <u>and in response to CBD v CDFW as it relates to connecting Scoping Plan targets to individual projects.</u> Any projects processed by the County after 2020 will be required to reduce, to the extent needed and feasible, GHG emissions such that the project operates within the targets <u>or adopted plan</u> established at the time the project is submitted for approval, <u>as explained below.</u></p> <p>The County shall require the following actions for all subdivision maps submitted for approval after December 31, 2020:</p> <ul style="list-style-type: none"> ▲ In consultation with the PCAPCD and Placer County, the applicant shall demonstrate, based on currently adopted regulations and industry-accepted GHG calculation methods, whether operation of the subdivision would be consistent with GHG targets adopted by the State. "Adopted" means that a specific GHG reduction target, such as is currently specified in the Global Warming Solutions Act of 2006 (achieve 1990 levels by 2020), is required by state legislative action, state administrative action, by legislative action of Placer County, or an applicable qualified Climate Action Plan or similar GHG reduction plan approved by Placer County. <u>The target or plan shall be based on a substantiated</u> 	<p>PSU</p>
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		<p>linkage between the project (or Placer County projects in general if a countywide qualified GHG reduction plan is approved) and statewide GHG reduction goals. "Within GHG targets" means that the subdivision, using methods such as a comparison between No Action Taken and the subdivision as proposed scenarios, would achieve or exceed the target.</p> <ul style="list-style-type: none"> ▲ If the subdivision achieves or exceeds the reduction target <u>or plan</u>, no further actions shall be required. ▲ If the subdivision does not meet the target, then measures shall be incorporated into the subdivision to reduce GHG emissions to the target <u>or plan level and to the extent, if it is feasible to do so.</u> Emissions reductions provided by these measures shall be calculated to determine if targets can be achieved. These measures may include any combination of GHG reduction actions needed to achieve the target, including: <ul style="list-style-type: none"> ▼ Actions included in Mitigation Measure 10-2 that also reduce GHG emissions (menu of options to reduce ROG and NOX emissions to a specified level such as trip reduction and energy management; nearly all of these measures would similarly reduce GHG emissions); ▼ Actions specified in Specific Plan Section 7.6, "Climate Change Initiatives," but with mandated actions (instead of "should" or "encourage" the actions, use "shall"), such as requiring that all buildings exceed Title 24 energy-efficiency requirements by 15 percent; requiring incorporation of on-site renewable energy production to meet at least 25 percent of the subdivision's electricity needs, etc. ▼ Payment of GHG offset fees to an ARB-approved GHG reduction program. Project applicant will consent to any GHG reduction fees that may be applicable after January 1, 2020. 	
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In response to several comments and as discussed in the Master Response regarding noise, Mitigation Measure 11-5 was revised to require the installation of a rubberized hot mix asphalt overlay (RHMA) on top of the existing conventional asphalt of a segment of Squaw Valley Road, which also mitigated cumulative traffic noise impacts. Accordingly, Impact 18-32 in Table 2-2, "Summary of Impact and Mitigation Measures," on page 2-93 of the DEIR is revised as follows:

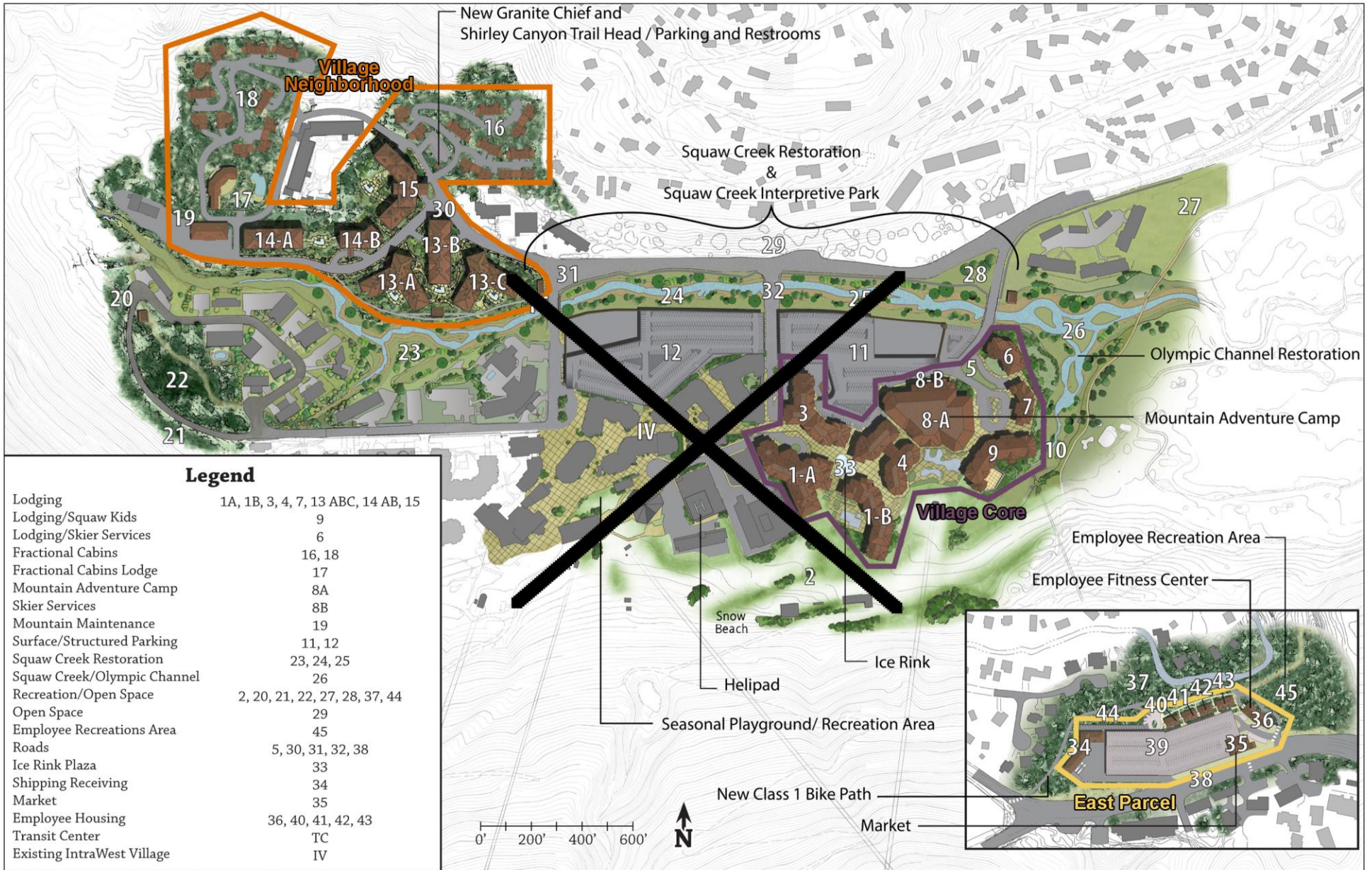
<p>Impact 18-32: Cumulative long-term ambient noise levels.</p>	<p>S</p>	<p>There are no additional feasible mitigation measures available to reduce this cumulative impact to a less than significant level. <u>No additional mitigation is required.</u></p>	<p>SU LTS</p>
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2.3.3 Revisions to Chapter 3, “Project Description”

As described in Section 2.1 of this FEIR, the project applicant has proposed several modifications to the proposed project since publication of the DEIR. These changes are described in detail in Section 2.1 of this FEIR, but are not shown here in strikeout and underline except for the below exhibits.

Due to the project modifications described in Section 2.1 of this FEIR, Exhibits 3-5 and 3-6 on pages 3-12 and 3-15 of the DEIR are revised as follows:

In response to comment F2-2, Exhibit 3-15 on page 3-30 of the DEIR is revised as follows:



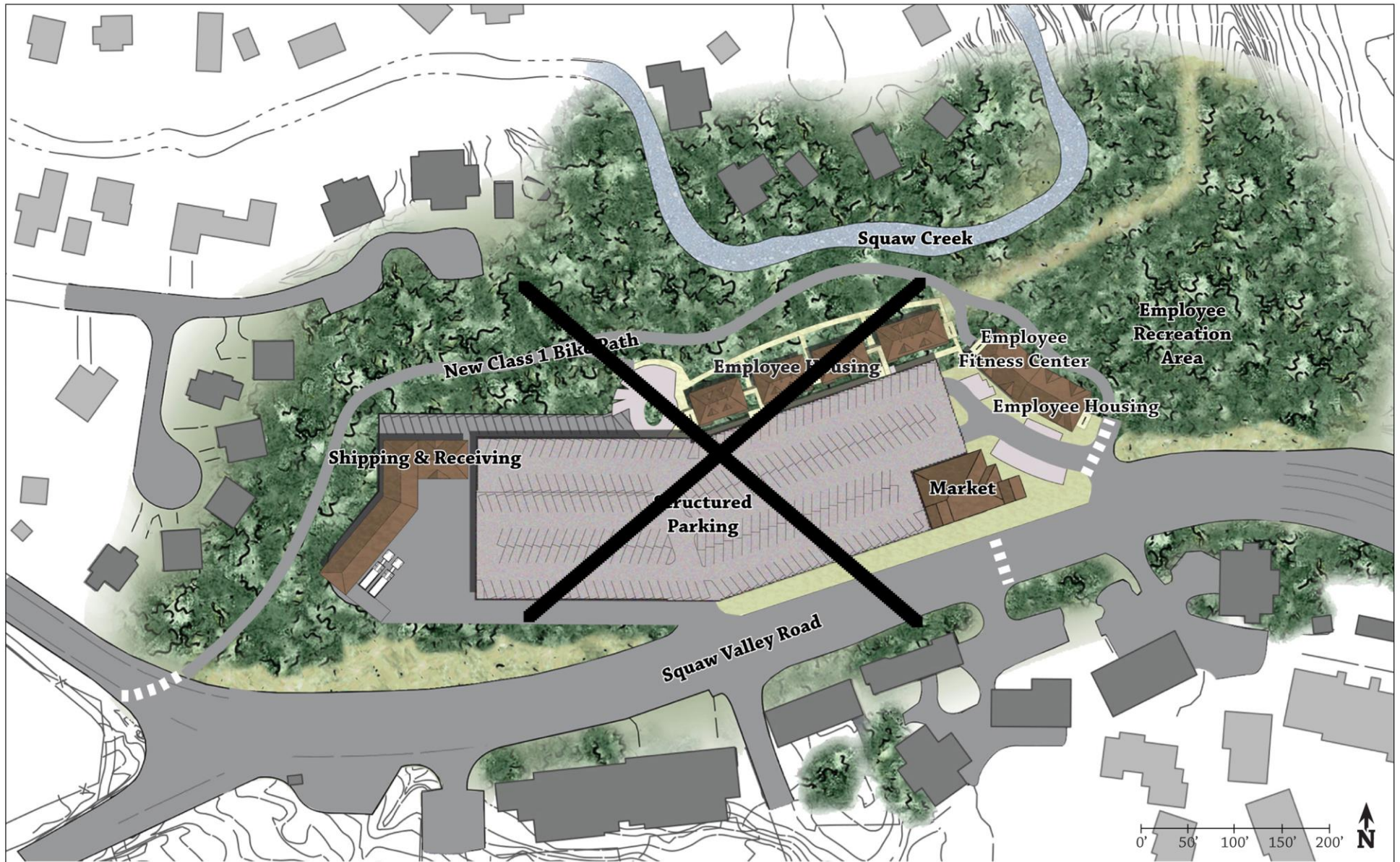
Note: The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.
 Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

X11010091 03 003



Note: The Illustrative Concept Plan depicts a representative site plan to show the development that could occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Illustrative Concept Plan is subject to change.

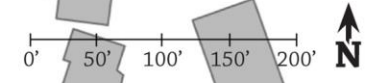
Source: Squaw Valley Real Estate, LLC 2016; Adapted by Ascent Environmental in 2016
X11010091 04 007



Note: Employee housing will be located immediately adjacent to or above parking. The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

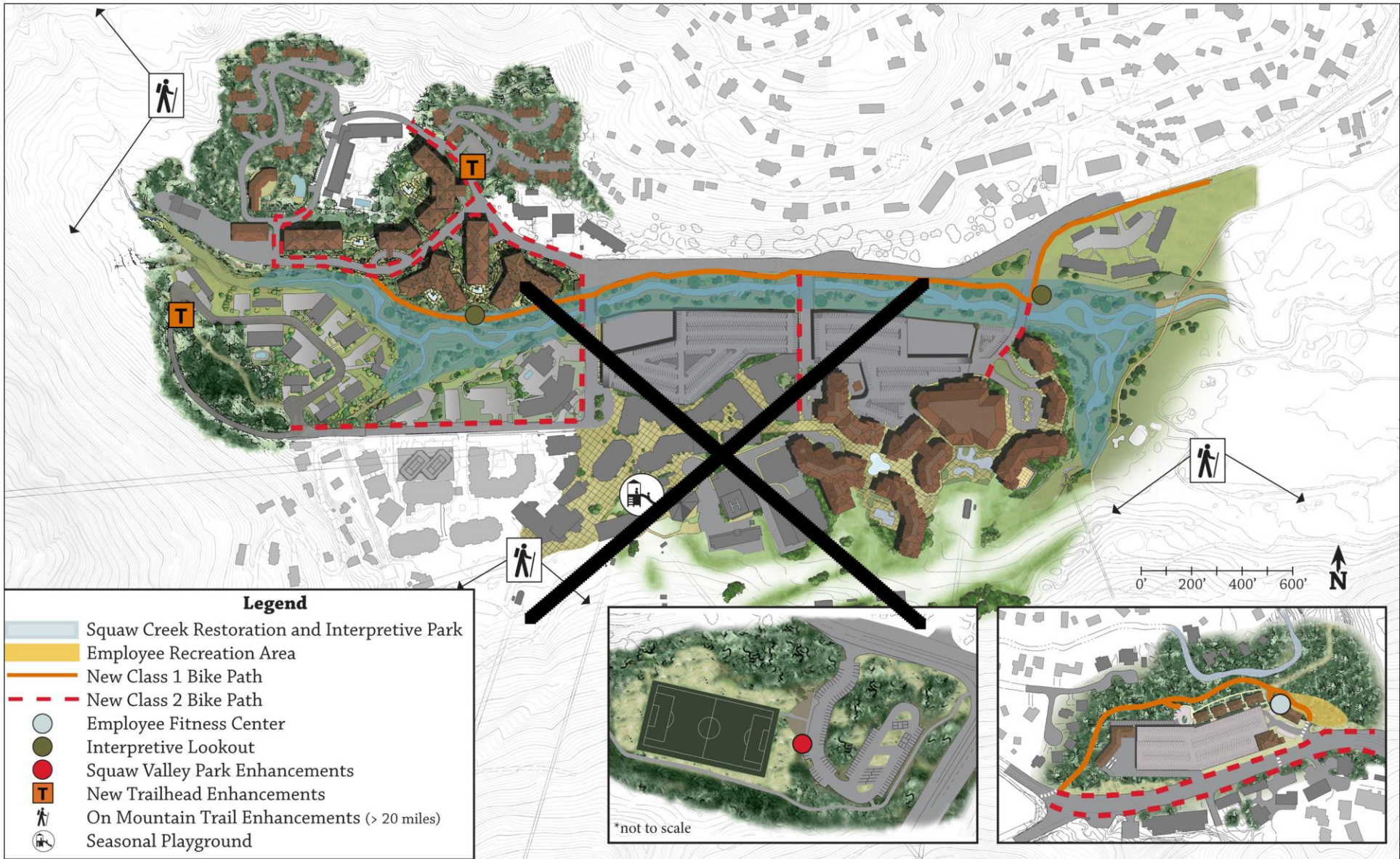
X11010091 03 006



Note: Employee housing will be located immediately adjacent to or above parking. The Concept Plan depicts a representative site plan to show the development that would occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Concept Plan is illustrative.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

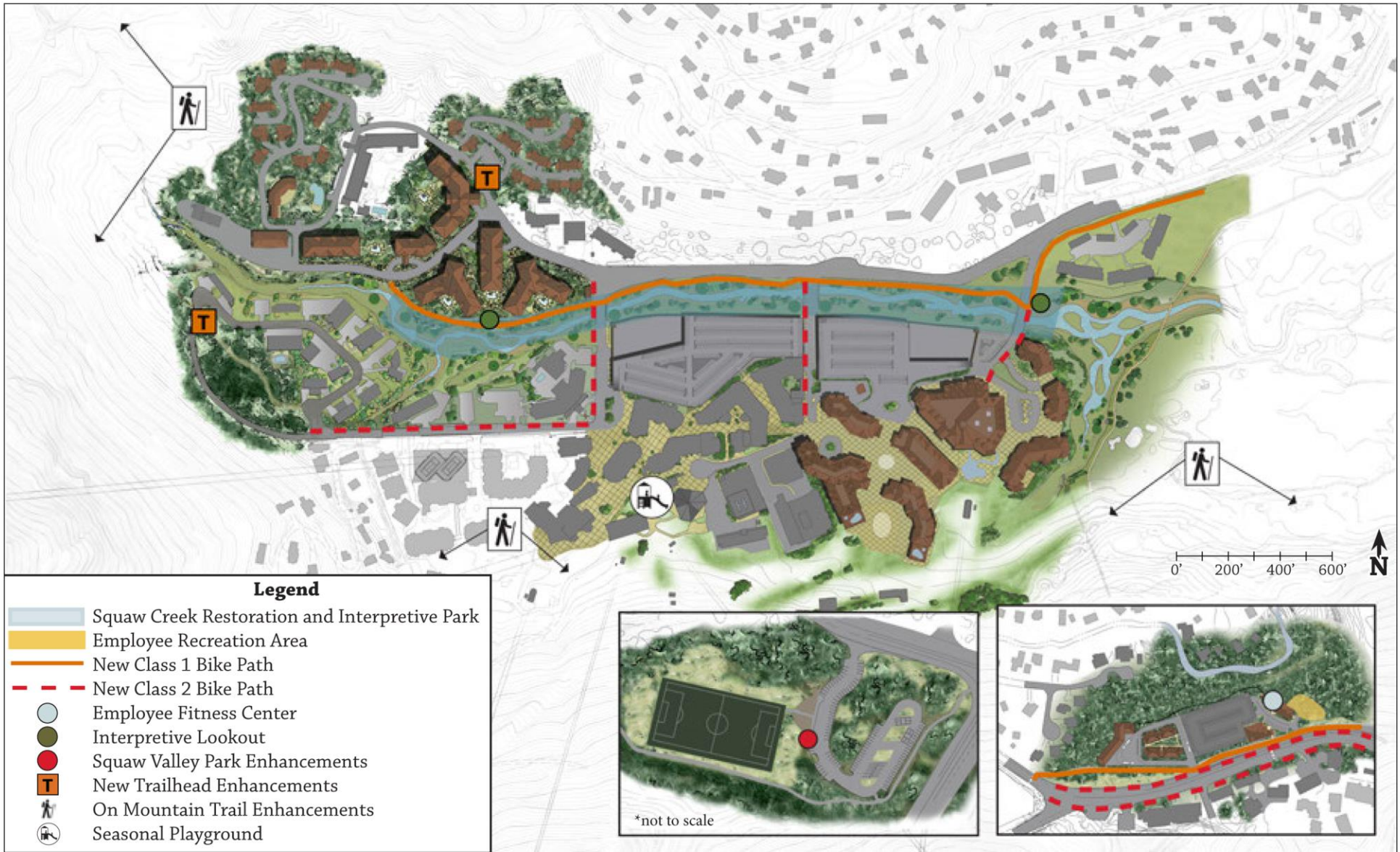
X11010091 04 008



Note: The Illustrative Concept Plan depicts a representative site plan to show the development that could occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Illustrative Concept Plan is subject to change.

Source: Squaw Valley Real Estate, LLC 2015; Adapted by Ascent Environmental in 2015

X11010091 03 029



Note: The Illustrative Concept Plan depicts a representative site plan to show the development that could occur based on the zoning and design standards set forth in the Specific Plan. The Specific Plan provides flexibility regarding the placement and design of individual buildings. For this reason, the Illustrative Concept Plan is subject to change.
 Source: Squaw Valley Real Estate, LLC 2016; Adapted by Ascent Environmental in 2016

X11010091 04 009

In response to comment F2-2, Table 3-3 on page 3-31 of the DEIR is revised as follows:

Table 3-3 Proposed Parks and Recreation Improvements

Park/Facility	Proposed Improvements
Squaw Creek Linear Park and <u>New Class I Trail</u>	<ul style="list-style-type: none"> ▲ Complete trail connectivity from State Route 89 to Shirley Lake Canyon Trailhead ▲ Add trail improvements to connect the East Parcel to the existing Squaw Valley Trail ▲ Include interpretive signage and points of interest along the trail path
Squaw Valley Trailheads	<ul style="list-style-type: none"> ▲ Through signage, informational materials, and site rehabilitation (e.g., establish bike parking, provide shaded picnic area) better identify the Granite Chief Trailhead location and parking ▲ Provide off-street vehicle parking, bike parking, restrooms, and shaded picnic area (space permitting) at the Granite Chief and Shirley Lake Canyon Trailheads
<u>New Trail Development Improvements and Repairs</u>	<ul style="list-style-type: none"> ▲ Improve existing and develop new trail connections between Alpine Meadows and Squaw Valley (extent and location of trail improvement/development not yet confirmed) ▲ <u>Improve and repair existing trails in Squaw Valley, including the Granite Chief / Shirley Canyon Loop Trail, Shirley Canyon Trail, World Cup Trail connection to the Western States Trail, and Thunder Mountain Trail by compacting, removing obstacles, and otherwise improving conditions on the existing trails</u> ▲ <u>In addition, a new trail alignment between Granite Chief Trail and Shirley Canyon Trail may be identified and constructed</u>
East Parcel Trails	<ul style="list-style-type: none"> ▲ Construct a hiking trail and Class I & II bicycle path through the <u>along Squaw Valley Road and East Parcel frontage</u> to connect employee housing and an existing trail to the <u>existing</u> Class I bicycle path along Squaw Valley Road.
Squaw Valley Community Park	<ul style="list-style-type: none"> ▲ Upgrade restroom facilities to include flush toilets and sewer lift station
New Squaw Valley Seasonal Playspace	<ul style="list-style-type: none"> ▲ Tot to kinder 3-dimensional play structures ▲ Relocatable and removable during ski season ▲ Open to public use

Source: Squaw Valley Real Estate, LLC 2015

In response to comment F2-8, the list of federal agencies from which permits and approvals may be required on page 3-40 of the DEIR is revised as follows:

FEDERAL

- ▲ **U.S. Army Corps of Engineers:** Compliance with Section 404 of the Clean Water Act for discharge of fill to Waters of the U.S. and/or fill of any wetlands that cannot be avoided by the project; including compliance with Section 106 of the National Historic Preservation Act, in coordination with the California State Office of Historic Preservation, for effects to eligible cultural or historic resources.
- ▲ **U.S. Environmental Protection Agency:** Concurrence with Clean Water Act Section 404 permit.
- ▲ **U.S. Fish and Wildlife Service:** Compliance with Section 7 of the federal Endangered Species Act for federal agency approvals if there is potential take of listed species.
- ▲ **U.S. Forest Service:** Approval of improvements to any trails or related facilities on USFS land, such as the Shirley Canyon Trail.

2.3.4 Revisions to Chapter 4, “Land Use and Forest Resources”

None

2.3.5 Revisions to Chapter 5, “Population, Employment, and Housing”

To clarify one of the sources of population data used in the DEIR, the last paragraph on page 5-2 of the DEIR is revised as follows:

Placer County estimates that the current maximum overnight peak population of Olympic Valley is approximately 5,858 residents and guests, including existing single- and multi-family residences, as well as existing condo, timeshare, and hotel lodging units (Fisch, pers. comm., 2014). Existing peak guest populations of condominium hotel properties including the Intrawest Village, the Resort at Squaw Creek, and the Squaw Valley Lodge are estimated to contribute a maximum peak overnight population of 2,757 guests. This estimate was developed by applying the occupancy rate assumptions developed in the Water Supply Assessment (WSA; Appendix C), which determined an average population of 1.6 persons per bedroom for managed condo hotel lodging units and 2.0 persons per bedroom in unmanaged condo hotel lodging units. The calculation was based upon a conservatively assumed 100 percent occupancy rate for all lodging units in the rental pool and 100 percent occupancy for all owner-occupied units. The conservative nature of the calculation was increased by multiplying the occupancy estimate by a 1.31 peak factor that was developed from review of peak period overnight guest occupancies (i.e., the factor necessary to get from the average guest population used in the WSA to the peak average observed on August 30, 2014 and December 29 and 30, 2014). Existing timeshare and hotel lodging units including the Olympic Village Inn, PlumpJack Squaw Valley Inn, and the Red Wolf Lodge are estimated to contribute a peak overnight population of 923 guests assuming 100 percent of all rooms/suites are occupied with an average occupancy rate of 4 persons per bedroom and applying the same peak factor of 1.31. The peak population of existing single- and multi-family residences is estimated to be 2,178, based on the number of units reported in the 2010 U.S. Census, plus construction permits issued between June 2010 and February 5, 2014 (1,037 total units), and assuming 2.1 persons per household. This is a conservative estimate of existing peak overnight population that assumes all available units are 100 percent occupied. Actual overnight peak occupancies are unknown.

To clarify one of the sources of population data used in the DEIR, the first paragraph under Impact 5-2 on page 5-11 of the DEIR is revised as follows:

The Specific Plan proposes the construction of new housing units. As described in Chapter 3, “Project Description,” within the main Village area, the Specific Plan allows for a maximum of up to 1,493 bedrooms (within up to 850 units, and not including employee housing) that would include a mixture of hotel, condo hotel, fractional ownership, and timeshare units (see Table 3-1). These types of units would support a tourist-based, transient population. Based on average annual occupancy rate assumptions, this is anticipated to result in an average population of 1,196 project guests (Farr West Engineering et al. 2014). Peak overnight population, assuming full occupancy of all available units, could reach 3,625 guests and employees (based on 1,120 managed bedrooms with an average occupancy of 1.6 persons each and 373 unmanaged bedrooms with an average occupancy of 2.0, each multiplied by a peak factor of 1.31, plus 300 employees residing in provided employee housing) (Fisch, pers. comm., 2014).

2.3.6 Revisions to Chapter 6, “Biological Resources”

In response to comment O8b-14, the text formatting for the wet meadow heading in Table 6-4 on page 6-25 of the DEIR is revised as shown below in an excerpt of Table 6-4:

Wetlands and Other Waters of the U.S. ¹	Main Village	East Parcel	Utilities and Other Facilities	Total Acres on Project Site
Seasonal Wetland/Willow Scrub				
SW/WS-1		0.158	0.035	0.193
SW/WS-2		0.097		0.097
Wet Meadow				<u>1.081</u>
WM-1	0.231			0.231
WM-2	0.053			0.053
WM-3	0.067	-	-	0.115
WM-4	0.047	-	-	0.047
WM-5	-	-	0.018	0.018
WM-6	-	-	0.0002	0.0002
WM-7	-	-	0.003	0.003
WM-8	-	-	0.0002	0.0002
WM-9	-	-	0.314	0.314
WM-10	-	-	0.275	0.275

In response to multiple comments in letter O8b (i.e., O8b-15, O8b-17 through O8b-22, O8b-29 through O8b-32, and O8b-35) and to reflect additional information available since release of the DEIR, the analysis under Impact 6-1 on pages 6-40 through 6-46 of the DEIR is revised as follows with respect to the discussion of operational impacts to riparian vegetation and meadow vegetation, beginning with the first full paragraph on page 6-43 and ending after the first full paragraph on page 6-45 of the DEIR:

Establishment of seedlings and saplings is important to maintaining a healthy riparian community as well as successful riparian habitat restoration. While some riparian tree species like black cottonwood can regenerate primarily through suckering from adult trees (sprouting from shallow roots or the tree base) in drier areas away from the streambank, riparian tree seedlings from species such as cottonwood and willow require water tables within 3.3 feet of the ground surface (Mahoney and Rood 1998, Shafroth et al. 2000, Scott et al. 1999, USDA 2004). Therefore, having a groundwater depth from surface <3.3 feet for establishment survival of seedlings/saplings is taken into account when considering whether any groundwater reduction from proposed new wells and increased pumping would negatively impact perennial riparian vegetation.

Cottonwood seed germination requires moist seeds beds at the soil surface for up to a month after seed deposition for germination and seedling survival, prior to deep root growth (Steinberg 2001, DeBell 1990). Reduced groundwater levels could impact riparian seedling germination and initial survival where summer months have reduced soil moisture in areas currently adequate. Rood and Mahoney 1998 report that studies show that cottonwood species seeds generally have adequate moisture 60 centimeters (1.9 feet) to 150 centimeters (4.9 feet) above the base flow of the stream during summer months. This level of groundwater depth can be used to address adequacy of germination potential sites. Sites would have to have groundwater levels less than 1.9 feet from the

surface for more than two consecutive months during the summer from July to October when seed falls, since exposed germination rates are highest when moist conditions persist for a month after seed deposition (Steinberg 2001), would likely be disseminated around mid-July, and seeds are usually only viable in natural conditions for 2 weeks to a month (DeBell 1990).

Studies have also documented sublethal indirect effects on black cottonwood and other riparian tree species such as reduced tree growth, crown dieback, and lower canopy foliage density (Stromberg and Patten 1990, 1992, and 1996, Rood and Mahoney 1990, Scott et al 1999, Lite and Stromberg 2005) from reduced groundwater or changes to flow regime. These effects could occur in areas where the threshold for tree mortality described above is not reached, but reductions in available groundwater are still sufficient to cause measurable stress to existing trees. The groundwater levels at which these sublethal impacts could occur for the species present along Squaw Creek are not described in sufficient manner to determine areas of impact based on the literature surveyed for this project. Those areas that are impacted by significant reductions in groundwater level described below would be susceptible to these indirect effects.

Exhibits 13-23 through 13-27 in Chapter 13 show simulated groundwater elevations under the baseline and project scenarios (including the cumulative 2040 scenario evaluated in the Water Supply Assessment [WSA] prepared for the project) and comparison to surface elevation in the same model cells (Todd Groundwater 2015). Exhibit 13-22 also shows the location of the “West Cells, A through J” identified in the study (Village reach, western channel) and East Cells, A through N (meadow reach) at which data was taken and simulated. Based on observations from this data (Todd Groundwater 2015), the bullet items below reflect whether the areas where perennial riparian vegetation requirements described above would not be met:

- ▲ West Cells B, D, E, G and H, E, F, G, H and I show more years with maximum groundwater depths >10 feet below the surface during the growing season when compared with baseline and non-project (i.e., future Olympic Valley development condition without the proposed project) conditions. However, baseline groundwater conditions for West Cells A, B, and D are generally greater than 10 feet below the surface in most years. So it can be expected that this is a circumstance where existing perennial riparian vegetation likely has root systems that extend farther than 10 feet below the ground surface. Thus there will likely be no substantial increase in probability of mortality to established vegetation in these areas based on the groundwater depths > 10 feet criteria. Only the East Cells and West Cells C and J will be less than 10 feet below the creek bed during summer months for all years after plan implementation and have a higher likelihood to maintaining perennial riparian vegetation. Thus, there will be no impacts from the project to established riparian vegetation in the East Cells or West Cells A, B, C, D, and J. West Cells E, F, G, H, and I may experience some mortality to the riparian vegetation located at the bottom of the channel due to the increase in depths and duration. Additionally, these cells may experience indirect effects such as branch die-back or reduced growth, especially during stressful low water years.
- ▲ Relative to seedling/sapling establishment and survival and providing water tables within 3.3 feet of the ground surface, specific to this parameter, all West Cells except Cells F, G, and J would experience similar conditions to the baseline and Non-Project conditions with groundwater withdrawals for the new development. West Cell F, G, and J would see unsuitable establishment/survival conditions increase from 60-68 percent of years under Non-Project conditions to all or almost all years under 2040 WSA conditions; removing any possibility of good germination years. These All other West Cell areas already experience groundwater levels greater than 3.3 feet below the ground surface for either all modelled years, or almost all most modelled years (greater than 75 percent of years), with an expected commensurate reduced potential for seedling/sapling establishment and survival. Further reductions in groundwater levels associated with implementation of the VSVSP and other development would only move groundwater levels further below the 3.3 foot threshold, which would not result in a greater

reduction in the potential for seedling/sapling establishment and survival. Whether groundwater levels are 4 feet below the ground surface or 14 feet below the ground surface, conditions are highly unfavorable for seedling/sapling establishment and survival. Seedlings/sapling survival and establishment potential in East Cells A, ~~and B, and C~~ would be reduced compared to baseline and Non-Project conditions because the number of years where groundwater is below the 3.3 foot threshold would increase by approximately 10-20 percent. However, WSA 2040 conditions show 37 percent (East Cell A), ~~to~~ 53 percent (East Cell B), and 68 percent (East Cell C) of the years continuing to provide groundwater elevations suitable for supporting seedling/sapling establishment and survival (i.e., groundwater less than 3.3 feet below the ground surface). Conditions suitable for seedlings/sapling survival and establishment is already intermittent in these areas. While the number of years with suitable conditions would be reduced slightly with future groundwater withdrawals, conditions are likely to remain adequate to support a multi-aged riparian system since many perennial riparian species reproduce through clones, suckers, or intermittent periods of seedling establishment every 5-10 years (Steinberg 2001). If seedling establishment occurs every 5-10 years in a 10- year period, then the number of years seedling establishment would occur would be 20 percent of all years (two years in ten). The amount of years seedling/sapling survival is available under WSA conditions for East Cells A, B, and C are greater than this 20 percent. Changes to East Cells A, ~~and B, and C~~ groundwater levels should therefore continue to allow for enough years of potential establishment and seedling/sapling survival and long-term maintenance of riparian vegetation within the upper meadow reach without restoration.

- ▲ Germination is not expected to occur in locations that do not have groundwater depths of 1.9 feet from the surface during at least two consecutive months between July and October. Based on this threshold, conditions for germination are not adequate under baseline or Non-Project conditions in West Cells A through E. Because the years of germination potential are only a few in West Cells H through J (11-18 percent) under Non-Project conditions, these areas are likely inadequate to support a black cottonwood healthy community through germination. Therefore, reduced groundwater from project and 2040 WSA conditions would not impact germination of black cottonwoods in these areas.
- ▲ West Cells F and G and all East Cells have adequate germination threshold levels in greater than 20 percent of years under Project and Non-Project conditions to support a healthy community (as noted above). The Project and 2040 WSA conditions would reduce the years of germination in West Cells F and G, East Cells A through C. 2040 WSA levels would drop West Cells F and G below the necessary 20 percent of years to support a healthy community. East Cells A through C would see a reduction in years of germination potential under Project and WSA conditions, but the number of years for adequate germination would remain suitable to support a healthy community (>20 percent of years). The reduction in East Cells C is minor and would likely not impact regeneration of cottonwoods by continuing to allow for germination in 91 percent of all years.
- ▲ As a result of these impacts, germination in areas connected hydrologically with West Cells F and G would be negatively impacted by the project and 2040 WSA conditions by increasing the number of years with unsuitable germination conditions far below baseline or Non-Project levels. Since these areas are located in the proposed restoration area, this impact may be mitigated somewhat through restoration of the channel and its increased water holding capacity.

These data show that based on these perennial vegetation requirement thresholds, groundwater withdrawals to support the Specific Plan and other development, if managed as currently modelled, are unlikely to ~~has some potential to result in some mortality and degradation to selected areas of established perennial riparian vegetation within portions of the western channel or upper meadow reach of Squaw Creek- the areas most affected by groundwater withdrawal. The reduction of potential germination levels through groundwater decline could impact seedling recruitment in~~

certain areas and reduce the health of the riparian community along the streambank where seedlings of cottonwoods succeed. Sapling establishment/survival could be reduced to the point of not allowing for suitable riparian replacement or age structure around West Cells F and G. However The data used in this analysis does not take into account riparian vegetation that may be several feet above the creek bed. The stream channel for Squaw Creek is several feet below the surrounding ground surface in many areas, and some riparian vegetation is located along the higher elevation edges of the incised channel. The data available only shows groundwater levels compared to creek bed levels, not bank levels that may be several feet higher than the creek. While direct observations (Ascent Environmental 2013) of the creek show that most perennial riparian vegetation is at or just slightly above creek level in the areas mentioned above, this is not the case in all areas of the creek or even within the meadow complex itself. Therefore, it is possible that some riparian vegetation within along the creek in the west channel and upper east channel may die due to a drop in ground water below these thresholds, or significant degradation of seedling/sapling establishment and survival conditions could occur. Within the plan area, riparian or wetland vegetation associated with the hydrology of West Cells D through J could be affected by lowering groundwater levels, if such vegetation loses access to groundwater that is currently available to the plants during the dry months. Table 6-5 provides the acreages of sensitive habitat within the plan area that, depending on distance to groundwater levels under current and future conditions, could be affected by drops in groundwater levels. The mapped vegetation that could be negatively impacted within these affected areas would include an estimated 12.87 acres of sensitive habitats. Of this acreage, 7.66 acres would be directly affected by construction activities (e.g., grading), so up to an additional 5.21 acres could be affected solely by lowering groundwater levels. The actual acreage that could be affected would vary from year to year depending on rainfall, drought, fluctuations in groundwater, creek restoration design and other conditions, and the location of this vegetation relative to existing and future groundwater levels.

Additionally, some indirect effects such as crown dieback, reduced growth rates, or reduced foliage density may occur throughout the west channel in the Village area (West Cells E through I) and at the top of the east channel surrounding East Cells A and B. Groundwater level reduction that could result in loss or degradation of riparian habitat, a sensitive natural community specifically identified in the significance criteria listed above, and protected under Placer County policies and under the jurisdiction of the CWA, would be a potentially significant impact.

Table 6-5 Estimate of Potentially Affected Sensitive Habitats from Operational Groundwater Impacts within the Mapped Project Area*

<u>Sensitive Habitat Land Cover</u>	<u>Total Acres Potentially Impacted by Operational Groundwater Drawdown</u>	<u>Acres Impacted by Construction in the Area Potentially Impacted by Operational Groundwater Drawdown</u>	<u>Acres Impacted by Operational Groundwater Drawdown Only (Minus Construction Acres)</u>
<u>Intermittent Stream</u>	<u>4.14</u>	<u>1.69</u>	<u>2.45</u>
<u>Meadow</u>	<u>4.09</u>	<u>3.42</u>	<u>0.67</u>
<u>Riparian</u>	<u>3.73</u>	<u>1.74</u>	<u>1.99</u>
<u>Seasonal Wetland</u>	<u>0.07</u>	<u>0.05</u>	<u>0.02</u>
<u>Wet Meadow</u>	<u>0.4</u>	<u>0.33</u>	<u>0.07</u>
<u>Wetland Swale</u>	<u>0.43</u>	<u>0.41</u>	<u>0.02</u>
<u>Wetland Swale/Willow Alder Scrub</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
<u>Willow Alder Scrub</u>	<u>0.01</u>	<u>0.01</u>	<u>0.00</u>
Total	12.87	7.66	5.21

* Sensitive habitat vegetation surrounding Todd Groundwater (2015) modeled groundwater cells considered potentially affected by groundwater reduction within the plan area: areas associated with West Cells E through J. This area includes meadow habitat north and south of Squaw Creek within the Plan Area.
Source: Ascent Environmental 2015

Sensitive vegetation east of the plan area could also be affected by changes in groundwater levels. As stated above, groundwater modeling shows that as a result of increased pumping, groundwater levels in East Cells A through C could drop 3 or more feet below the creek bed during the dry months more often than occurs under existing conditions. As discussed above, riparian vegetation adjacent to the creek could be affected by lowering groundwater levels. It should be noted that much of this area is sparsely vegetated under existing conditions. A baseline assessment prepared by Balance Hydrologics, Inc. conducted a reconnaissance survey of the Squaw Creek in September 2015 to characterize current conditions. That survey found that Reach 5, which encompasses East Cells A through E, was largely lacking in riparian vegetation immediately adjacent to the channel, with only approximately 10 percent of banks covered by riparian vegetation. The total width of the sparsely vegetated corridor was estimated to be 90 to 170 feet wide.¹

Lowered groundwater elevations could also affect planting and restoration success during any creek restoration undertaken in the project area. While planned creek restoration should help sustain soil moisture and potentially higher groundwater levels (Balance Hydrologics 2014a, 2014b), no data is available to compare post-restoration groundwater levels and its impact to established perennial vegetation or natural seedling/sapling establishment. Therefore, the extent to which creek restoration would offset lowered establishment and survival of seedlings and saplings is not known.

Meadow Vegetation

The creek bed groundwater depth estimates show that annual vegetation, such as meadow vegetation, could also be affected during low water years by groundwater reduction near the upper meadow reaches of Squaw Creek nearest to the anticipated new wells. According to Stillwater Science's 2012 *A Guide for Restoring Functionality to Mountain Meadows of the Sierra Nevada - Technical Memorandum*, a functional meadow with the Sierra Nevada "supports plants that use surface water and/or shallow groundwater (generally at depths of less than one meter [3.3 feet]) at some point during the growing season." This statement includes annual and perennial plants. Meadow habitat occurs only within the northeastern portion of the plan area, with small areas of wet meadow located in proximity to West Cells I and J. Changes in groundwater elevations in this area would typically range from 0 to 3 feet during the critical period, although in some instances the changes would be more than 4 feet.

Baseline and non-project groundwater depths in the upper meadow reaches of the Squaw Creek (East Cells A-C) is generally 0-3 feet below surface during the growing season and only drops below 3.3 feet during the driest months of some years (East Cells A, B, and C). With VSVSP operations associated groundwater reduction (including 2040 WSA conditions), these cell areas would continue to have groundwater within 3.3 feet of the surface during the majority of growing season months (Todd Groundwater 2014) during most years, although the number of years that the threshold would be exceeded would increase. In the WSA 2040 conditions, the driest years (10-20 percent of years) would have seasons where groundwater levels drop below the threshold of meadow functionality for the majority of the growing season near Squaw Creek. These changes could affect timing and amount of annual seed set, mortality of individuals, and cause a shift in compositions from wet meadow vegetation to dry meadow vegetation. Additionally, they could lead to conditions in which invasive annual plants brought in by visitors become established in the meadow.

The relationship of groundwater levels to meadow vegetation, particularly the wet meadow east of the plan area, has not been established. There could be other sources of water for some or all of the wet meadow, such as the surrounding golf course. If groundwater is the primary source of water during the growing season, then a lowering of groundwater could affect the viability of meadow vegetation.

¹ Balance Hydrologics, Inc., Baseline assessment of riparian conditions and Squaw Creek baseflow, September 3, 2016 observations, September 22, 2015, page 7.

In order to address the potential extent of groundwater impacts east of the plan area, Salix Consulting, Inc. prepared a habitat map for a study area that encompasses those the portions of the meadow in proximity to East Cells A, B, and C (in order to be conservative, the study area extends past East Cell D).² The mapping was based on aerial photograph analysis, surveys prepared in the study area vicinity and the biologist’s working knowledge of the Squaw Valley meadow. The habitats within the study area are quantified in Table 6-6. Sensitive habitats in this study area are estimated to include 10.4 acres of wet meadow, 3.3 acres of riparian and 1.9 acres of intermittent stream. The developed areas and ruderal areas are disturbed and would not be affected by groundwater levels. The golf course is irrigated. The sagebrush scrub and dry meadow habitats are composed of upland species that are better-adapted to groundwater fluctuations than wetland species are, because the upland species are not as dependent on year-round water.³ For these reasons, the analysis focused on the wetland habitats. The study area and sensitive habitats area shown in Exhibit MM 6-1c. As discussed above, if vegetation in the sensitive habitat areas is dependent on groundwater during the growing season under existing conditions, and groundwater pumping caused those levels to decline farther than 3.3 feet from the ground surface, the functionality of the wet meadow could be adversely affected.

Table 6-6 Habitat Components East of the VSVSP Potentially Affected by Groundwater Drawdown

<u>Components</u>	<u>Approximate Acreage</u>
<u>Golf Course</u>	<u>12</u>
<u>Dry Meadow</u>	<u>0.4</u>
<u>Riparian</u>	<u>3.3</u>
<u>Wet Meadow</u>	<u>10.4</u>
<u>Intermittent Stream</u>	<u>1.9</u>
<u>Total</u>	<u>28</u>

Source: Salix Consulting, Inc., 2016

Since meadows are composed of annual plants that have adapted to variable water conditions, reduced vegetation productivity or earlier die off of annual vegetation due to lower water levels or dry years is a regular part of ecosystem function. Meadow vegetation will return during wetter years, which are the majority of years in the upper meadow reach of Squaw Creek near East Cells A and B (based on implementation of groundwater management as assumed in the modelling). Thus, impacts to meadow vegetation in the upper reaches of Squaw Creek meadows would not be substantial since any reduction in meadow vegetation or vegetation productivity during dry years would be minimal and temporary.

However, stated above with perennial riparian vegetation, the data used in this analysis does not take into account the meadow vegetation that may be several feet above the creek bed or how the groundwater levels for meadow vegetation away from Squaw Creek might be affected. While personal observations (Ascent Environmental 2013) of the creek show that most meadow vegetation is at or just slightly above creek level in the areas mentioned above, this is not the case in all areas of the creek or even within the meadow complex itself. Therefore, it is possible that some meadow vegetation along the Squaw cCreek in the upper east channel or the south of the upper east channel (West Cells may not be able to be sustained due to a drop in ground water below these thresholds. As a result of the impacts described above, Plan Operations induced groundwater reduction (nearest the wells) that could result in loss or degradation of wet meadow habitat protected under Placer County policies and under the jurisdiction of the CWA would be a **potentially significant** impact.

² Salix Consulting, Inc., Potential Squaw Valley Village Groundwater Effects on Wetland Vegetation, February 18, 2016.

³ Salix Consulting, Inc., Potential Squaw Valley Village Groundwater Effects on Wetland Vegetation, February 18, 2016, page 2.

Restoration Potential

While restoration within Squaw Creek could increase riparian and meadow habitat, potential irrigation from restoration could impact groundwater levels and further impact vegetation outside the restoration area. Irrigation for restoration of sensitive habitats would likely be most required during the period following revegetation, until the new plants are established. Additionally, after vegetation has been established, some irrigation could be needed during the driest months and driest years within the upper eastern channel of Squaw Creek and most of the western channel as described above under "Riparian Vegetation." An analysis of irrigation needs, water demand, and groundwater modelling (provided in Appendices A and B in the FEIR) conclude that vegetation within the VSVSP area and mitigation areas could be irrigated during dry periods without increasing demand on the Olympic Valley Groundwater Basin. This analysis included the calculation of potential irrigation demands for the proposed Squaw Creek restoration area and some areas of potential wetlands impacts along Squaw Creek, considering an area covering 16.1 acres. Snow-making wells located above the Olympic Valley aquifer are identified as potential source of irrigation water, if needed, to limit use of the basin aquifer. Since these wells are located in granitic fractures (spaces in the granitic rock) above, and isolated from, the modeled aquifer, additional impacts to sensitive habitats or species from use of these wells would not occur. Based on these data, the mitigation measure to irrigate 16.1 acres within parts of West cells B and D through East Cell C would not further affect groundwater or vegetation in this irrigation area.

The proposed restoration of Squaw Creek would increase the width of the creek corridor and restore the floodplain at the confluence with the Olympic channel, with the effects of increasing the riparian and wetland vegetation in that area (Balance Hydrologics 2014a, 2014b). Although no combined hydrologic and vegetation modeling has been done to support this expectation, the restoration is expected to result in a net increase in wetted habitat of 0.25 acres during low flow periods when groundwater recharge is lowest and up to 5.4 acres during high flow periods when restored floodplain areas and secondary channels become inundated (Balance Hydrologics 2014b). Additional seasonal wetland habitat is anticipated to increase by 3.2 acres within the restoration area (Balance Hydrologics 2014b) in Village area reaches of Squaw Creek; this includes riparian habitat, although acres of riparian habitat within the overall 3.2 acres of seasonal wetland increase is not identified. The expansion of meadows and riparian areas through restoration along the creek and along the Olympic Channel would enhance the functionality of the wetland system and would provide mitigation for Specific Plan impacts to existing riparian habitat, and wetlands or waters of the United States and State of California. While the amount of riparian or meadow habitat adversely affected by reduced groundwater elevation in the western or upper eastern reaches is unknown, the long-term benefits from creek restoration would offset at least some of these effects once restoration is completed.

In response to comment O8a-26, a portion of Mitigation Measure 6-1a found in the second bullet on page 6-47 of the DEIR is revised as follows:

- ▲ An annual monitoring report for a minimum period of 5 years from the date of installation, prepared by the above-cited professional, shall be submitted to the Planning Services Division for review and approval. Any corrective action shall be the responsibility of the applicant. The report shall include baseline (pre-restoration) and post-restoration measurements of suspended sediment concentration, streamflow, and turbidity as described on page 27 of the Channel Restoration Design Basis Report (Balance Hydrologics 2014).

In response to comment O9-83, Mitigation Measure 6-1a (text inserted after the fourth full paragraph on page 6-47) is revised as follows to elaborate on the content of the Mitigation and Monitoring Implementation Plan with respect to mitigating effects to waters of the United States and other wetlands:

- ▲ The Mitigation and Monitoring Implementation Plan shall, at a minimum, include the following specific criteria, standards, and information:

- Baseline locations of jurisdictional habitat including species along the western and upper eastern channel of Squaw Creek (West Cells E through J and East Cells A through D) within the plan area shall be documented before initiation of construction of the VSVSP. Conduct vegetation monitoring or additional groundwater modelling as described in Mitigation Measure 6-1c below. Any jurisdictional habitat lost within the western portion of Squaw Creek from groundwater drawdown that affects streambank instability shall be replaced with native vegetation (riparian preferably) that will stabilize the streambank and prevent sediment mobilization.
- identification of compensatory mitigation sites and criteria for selecting these mitigation sites onsite and offsite;
- in kind reference habitats within the Tahoe-Truckee region for comparison with compensatory wetlands habitats (using performance and success criteria) to document success;
- monitoring protocol, including schedule and annual report requirements (compensatory habitat shall be monitored for a minimum of five years from completion of mitigation or last human intervention [including recontouring and grading and irrigation], or until the success criteria identified in the approved mitigation plan have been met, whichever is longer);
- ecological performance standards, based on the best available science and including specifications for native wetland and riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, indicators of stress that might result in mortality, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80 percent survival of planted wetland species by the end of the five-year maintenance and monitoring period or dead and dying species shall be replaced and monitoring continued until 80 percent survivorship is achieved;
- corrective measures if performance standards are not met;
- responsible parties for monitoring and preparing reports; and
- responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.
- ▲ The project applicant shall follow requirements outlined in the MMIP and CSRMMMP for vegetation restoration success in all areas of onsite and off-site mitigation or restoration.

In response to comment 08b-36 and to further clarify the mitigation to ensure that compensation will occur in the Sierra Nevada and that there is no net loss of wetlands in the Sierra Nevada ecosystem, the following bullet is added to Mitigation Measure 6-1a after the first bullet on page 6-48 of the DEIR:

- ▲ Any offsite wetlands mitigation will occur in the Sierra Nevada bioregion and within the Tahoe-Truckee area to ensure that there is a no net loss of wetland, riparian, or wet meadow habitat within the Sierra Nevada or Tahoe-Truckee regions.

In response to comment 08b-36 and to ensure all sensitive riparian and wetland habitats (including non-jurisdictional wetland habitats) are mitigated within the region, the second bullet under Mitigation Measure 6-1b (page 6-48 of the DEIR) is revised as follows:

- ▲ The project applicant shall compensate for net permanent riparian habitat impacts at a minimum of a 1:1 ratio through contributions to a CDFW approved wetland mitigation bank in the Sierra Nevada and the Tahoe-Truckee regions or through the development and implementation of a Compensatory Stream and Riparian Mitigation and Monitoring Plan (CSRMMMP) and a County approved MMIP aimed at creating or restoring in-kind habitat within the plan area and/or in the

surrounding area. Stream and riparian habitat compensation, which could be provided entirely or in part by the planned Squaw Creek restoration, shall include establishment of riparian vegetation on currently unvegetated bank portions of streams affected by the project and enhancement of existing riparian habitat through removal of nonnative species, where appropriate, and planting additional native riparian plants to increase cover, continuity, and width of the existing riparian corridor along streams in the project site initially and then in surrounding areas. Construction activities and compensatory mitigation shall be conducted in accordance with the terms of a streambed alteration agreement as required under Section 1602 of the Fish and Game Code.

In response to comment O8b-37, Mitigation Measure 6-1b (the fourth full second-level bullet point on page 6-49 of the DEIR) is revised as follows to ensure riparian mitigation success:

- ecological performance standards, based on the best available science and including specification for native riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, indicators of tree stress that might result in mortality, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80 percent survival of planted riparian trees and shrubs by the end of the five-year maintenance and monitoring period or dead and dying trees shall be replaced and monitoring continued until 80 percent survivorship is achieved;

In response to multiple comments (O8b-7, O8b-15, O8b-16, O8b-17, O8b-28, O8b-35, O8b-36, O8b-38, O9-61, O9-110, PH-47, etc.), Mitigation Measure 6-1c on pages 6-49 and 6-50 of the DEIR is revised as follows:

Mitigation Measure 6-1c: Implement Mitigation Measure 13-4 and monitor and respond to groundwater effects.

The project applicant shall implement Mitigation Measure 13-4, provided in Chapter 13, "Hydrology and Water Quality." Mitigation Measure 13-4 reduces the uncertainty associated with management of well system design and operation by ensuring the adoption of performance standards, thresholds, and recommendations from the WSA for well system operation, and requiring consistency with applicable groundwater plans. By confirming that groundwater management is implemented in a manner that is consistent with the operational parameters described in the WSA, Mitigation Measure 13-4 would also result in confirmation that groundwater pumping does not result in losses of riparian vegetation in the west channel or upper east channel of Squaw Creek and any future groundwater/vegetation impact modeling is consistent.

In addition, the project applicant shall record baseline locations and composition of species of riparian and meadow vegetation along the in the surrounding meadow that is hydrologically connected to the upper eastern channel of Squaw Creek (in relation to East Cells A through D) and along the western channel (in relation to West Cells E through J) before initiation of construction of the VSVSP. If sensitive plant species are found in these areas, the project proponent will follow mitigation measures outlined in Mitigation Measure 6-8 to consult with CDFW and USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for the indirect impacts that could occur as a result of project operational groundwater drawdown.

Where these locations are on lands not controlled by the applicant, the applicant shall seek access from the landowner to conduct monitoring. If access cannot be obtained, monitoring will be conducted via photo points or other means from the property line or other nearby publicly accessible location. The extent and composition of this vegetation in the western channel and associated riparian and wet meadow areas shall be monitored annually until at least 5 years final project build-out after the last project element is occupied, to ensure accurate recordation of responses to groundwater level declines and any beneficial effects resulting from creek restoration. Any riparian or meadow habitat lost or degraded within these areas as that is determined to be a result of project-related groundwater level declines shall be compensated for on or off-site (within the Olympic Valley preferred) at a minimum 1:1

ratio within the Sierra Nevada bioregion and the Tahoe-Truckee region, or conditions otherwise corrected, such as through irrigation of riparian vegetation and/or wet meadow vegetation to maintain composition and functionality of existing habitat. If monitoring shows that riparian vegetation along the streambank is not supported, other native vegetation will be planted and managed to stabilize the creek bank as per Mitigation Measure 6-1b. Alternatively, groundwater modeling can be conducted that predicts conditions for riparian vegetation and meadows at a higher elevation than the Squaw Creek low flow channel (current groundwater analysis only supports an evaluation of conditions at the elevation of the low flow channel). If this modeling indicates that changes in groundwater conditions under the proposed groundwater management regime would not result in a significant adverse effect to riparian and meadow habitat, ongoing monitoring would not be needed.

In order to address the potential effects of groundwater pumping outside of the VSVSP area, the following steps shall be taken:

(a) Prior to recordation of the first Small Lot Tentative Map, conduct soil borings throughout the wet meadow east of the project boundary (see Exhibit MM 6-1c) to determine whether groundwater is available to wet meadow vegetation (i.e., there are no barriers to between groundwater and plant roots and/or moisture levels in the soil column indicate that groundwater is available to plant roots). Soil borings may be taken in multiple months and in successive seasons as needed to determine if a connection to groundwater is present. If groundwater is not available to the plants during the July-October period, then no further steps are necessary with respect to those areas. In these conditions, it is assumed that vegetation is receiving water from sources other than groundwater, such as golf course irrigation overspray.

(b) If soil borings indicate that groundwater is available to these plants in some or all portions of the study area east of the project boundary during July through October, then it is assumed that drops in groundwater levels could affect the viability of the plants and a monitoring plan shall be implemented, and shall include the following steps.

- ▲ Determine the minimum depth to groundwater needed during the critical period for existing habitat to maintain baseline conditions.
- ▲ Install groundwater monitoring wells in the riparian and wet meadow portions of the study area east of the project boundary where a potential connection to groundwater has been established. The location of the wells shall be based on the extent of the area that could be affected, based on part on the data collected by soil borings conducted as part of Item (a), and for which access is available. For example, if the entire wet meadow in the study area east of the project boundary is included, it is anticipated that 8 to 12 wells will need to be installed, including at least one well east of the study area. Existing and planned monitoring wells may be used, if appropriate, and permission is provided by the well operator/owner. Well locations shall be coordinated with plant survey transects.
- ▲ Collect data from the monitoring wells each year from July through October, at a minimum.
- ▲ Establish transects on a north-south heading every 50 meters or less.
- ▲ Determine the species that are located on each transect at one-meter intervals.
- ▲ Surveys shall be conducted at least once annually to determine whether the vegetation profile is changing along the transect and/or there is increased plant mortality.

Initial monitoring [as outlined in (b)] to establish baseline conditions of wet meadow vegetation and groundwater levels east of the VSVSP area shall be conducted annually for 5 years. The onset of monitoring may be coordinated with creek restoration efforts, but shall begin prior to or concurrent with recordation of the first Small Lot Tentative Map or within 2 years of project approval, whichever

occurs first. After the initial 5 years, monitoring shall be conducted every 5 years, at a minimum, until 30 percent of VSVSP development has been completed. Upon occupancy of 30 percent of the VSVSP development, monitoring shall be conducted on an annual basis until 5 years after buildout of the project.

If access cannot be gained to survey the riparian habitat and/or wet meadow and/or to install monitoring wells east of the VSVSP area, then an assessment shall be made via photo-points or other means from the property line or other nearby publicly accessible location and/or surveys of a control site with similar characteristics that is located on property that can be accessed. In order to determine whether observed changes are due to groundwater pumping, modeling methods may be used. If adverse effects are observed and can be attributed to groundwater pumping, then mitigation would be required as described below.

If monitoring and surveys indicate that riparian and/or wet meadow vegetation is being lost and/or degraded at levels that could impair the viability and value of the wet meadow and/or riparian habitat, and that change is correlated with lowered groundwater levels as indicated by monitoring wells and pumping data, one or more of the following steps shall be undertaken to ensure that there is no net loss of acreage and/or value of wet meadow habitat:

- ▲ Work with the SVPSD to adjust the pumping regime in a manner that minimizes draw down in the portion of the overall study area that is being affected;
- ▲ Irrigate the affected area during the critical period using water from a source other than the aquifer, such as fractured wells used for snowmaking at Squaw Valley;
- ▲ Provide improvements to the water system in Squaw Valley (e.g., replacement of old, leaking pipelines, replacement of high-water use fixtures) to reduce demand from other sources by an amount commensurate with the amount of irrigation water required for riparian and/or meadow vegetation. In this case, water from the aquifer could be used for irrigation of sensitive habitats; and/or
- ▲ Provide compensation for the affected area by restoring a commensurate area of wet meadow and/or riparian habitat. Preference shall be given to areas within the Squaw Valley meadow and/or in the vicinity of Squaw Creek. Contribution to the restoration efforts for Squaw Creek east of the VSVSP would be one method of compensation, because the creek restoration would improve the function of the creek, and thereby improve habitat conditions along the creek and within the meadow. If suitable land is unavailable within the Squaw Valley meadow and/or in the vicinity of Squaw Creek, then restoration activities may occur outside of Squaw Valley but within the Tahoe-Truckee area. VSVSP would be responsible for restoring that portion which is attributable to its share of increased groundwater pumping. Such compensation shall ensure that there is no net loss in the quantity or function of such habitat.

The selection of the remediation measures shall be based in part on whether the effects on riparian and/or meadow vegetation are occurring only during certain years (e.g., particularly dry years) and the period of time that remediation would be needed to ensure vegetation viability. If irrigation is used, it shall be demonstrated that the amount of water used would be within the water demand evaluated in the 2015 Water Supply Assessment or that another source of water, such as snow making wells or reducing other demand, as discussed above, could be used. As discussed previously, water could be supplied from snow-making wells located within fractured bedrock (i.e. not drawing water from the Olympic Valley aquifer) to provide irrigation for landscaping, the creek restoration area, and riparian vegetation along East Cells A through C.

To provide further clarification and in response to comment O8c-3, the second full paragraph on page 6-52 regarding impacts to Sierra Nevada yellow-legged frogs is revised as follows:

If Sierra Nevada yellow-legged frogs are present within the Squaw Creek drainage and meadows, construction near the creek, and associated meadows and wetlands, could injure or kill adults within these and adjacent upland habitats (i.e., upland habitat within approximately 80 feet of aquatic habitat [USFWS 2013]). Grading, excavation, or other construction related activities could kill or injure individuals in this area. Construction activities could degrade aquatic habitat through increased sedimentation, contaminant releases, habitat removal, or erosion. Construction related issues that could degrade water quality have been analyzed in the document and mitigated to reduce risk in Chapter 13 and Impact 6-1. As a result, the construction activities are not anticipated to result in any violations of water quality standards or waste discharge requirements that should maintain water quality and aquatic habitat for Sierra Nevada yellow-legged frog. Creek restoration would involve the temporary disturbance of the creek channel as well as removal of riparian and meadow habitat through grading and excavating. Injury or mortality caused by construction or creek restoration would be considered take of a federally endangered species. The degradation and removal of creek and meadow habitat as a result of construction and creek restoration activities (as described and mitigated for in Impact 6-1) would ~~also not~~ be considered take, ~~if because~~ Sierra Nevada yellow-legged frogs are highly unlikely to use these areas due to the presence of fish and lack of suitable habitat in the project area. However, because of the potential, although remote, that dispersing frogs could occur in the project area, potential take of individuals or loss of habitat of the Sierra Nevada yellow-legged frogs from construction activities is considered ~~would be~~ a **significant** impact.

In response to comment O9-75 and to provide clarification, the discussion under Impact 6-5 (Disturbance or loss of Sierra Nevada snowshoe hare or its habitat) on pages 6-59 and 6-60 of the DEIR is revised as follows:

Sierra Nevada snowshoe hare is designated as a species of special concern by CDFW. The species has been documented within five miles of the plan area near Lake Tahoe. In California, they are found primarily in montane riparian habitats with thickets of alders and willows, and in stands of young conifers interspersed with chaparral. The early seral stages of mixed conifer, subalpine conifer, red fir, Jeffrey pine, lodgepole pine, and aspen are likely habitats, primarily along edges, and especially near meadows. They prefer dense cover in the understory thickets of montane riparian habitats, or in shrubby understories of young conifer habitats. Locations within the plan area that might have high habitat potential would be upland riparian areas and seeps within the Village area, Squaw Creek middle and lower meadow reach, and the meadow and riparian areas in the East Parcel. The potential habitat in the Village area would not likely serve as suitable habitat due to the high amounts of disturbance from tourists and recreationalists. Therefore, the only suitable habitat in the analysis area would be located in the Squaw Creek middle and lower meadow reach, and the meadow and riparian areas in the East Parcel.

CONSTRUCTION

In the short term, activities related to construction of the Village area and the East Parcel could temporarily disturb snowshoe hare and/or their habitat located within the plan area. If snowshoe hare use the plan area for foraging or breeding, increased noise, human activities, or other factors associated with construction activities (vegetation removal, clearing, grading, building, and excavation) could temporarily disturb foraging, movement, or reproductive activities and temporarily displace individuals. Also, individuals could alter their behavior by avoiding the plan area during construction, potentially using alternative areas where they could be more susceptible to predation or other adverse effects. In addition, mortality or injury could occur as a result of collision with construction equipment, although individuals are mobile and would likely avoid active construction areas.

Sierra Nevada snowshoe hare is a potential prey species for raptors and mammal predators (e.g., coyote). Vegetation removal during construction could reduce cover and increase predation risk for this species, if it uses habitats within and near construction areas.

In addition to potential temporary effects on individuals described above, the removal of trees and vegetation ~~for the main Village area and in the East Parcel,~~ and temporarily for the Squaw Creek restoration, would also result in the permanent or temporary loss of habitat suitable potentially suitable for snowshoe hare.

Because construction-related effects of Specific Plan implementation may cause disturbance or injury and mortality to Sierra Nevada snowshoe hare, the impact would be **significant**

OPERATIONS

Operation impacts occur in much the same area as current Squaw Valley operations. New residences and buildings will occur in areas that are already exposed to human disturbance. It is unlikely that further human activity associated with the new structures will limit potential foraging opportunities within Olympic Valley. While human traffic and noise may increase through riparian areas, meadows, and trails in the project area as a result of increased residency, the areas to be visited by people will not be substantially different from existing conditions where human disturbance already occurs. Therefore, there would likely be no change in disturbance to Sierra Nevada snowshoe hare from operational impacts. Additionally, the proposed creek restoration could increase meadow and riparian habitat (if it offsets groundwater reduction or creek restoration planting is successful with Mitigation Measures 6-1a and 6-1b) along the western portion of Squaw Creek. This could increase habitat availability for snowshoe hare around the creek in the Village area if recreational disturbance does not continue to restrict habitat use as it seems to do currently. Potentially reduced meadow or riparian vegetation in the upper meadow reaches of Squaw Creek due to ground water reduction are not likely to impact Sierra Nevada snowshoe hare habitat since the dense willow and alder areas that provide habitat for this species are located in the middle and lower portions of the meadows downstream of where groundwater effects are anticipated.

Operational impacts to snowshoe hare would be **less than significant**.

In response to comment O9-61 and to clarify that potential groundwater impacts are included in the required consultation, Mitigation Measure 6-8 (the first bullet on page 6-69 of the DEIR) is revised as follows with respect to special-status plants:

- ▲ If special-status plant species are found that cannot be avoided during construction or because of operational groundwater drawdown, the project applicant shall consult with CDFW and/or USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for direct and indirect impacts that could occur as a result of project construction and will implement the agreed-upon mitigation measures to achieve no net loss of occupied habitat or individuals. Mitigation measures may include preserving and enhancing existing populations, creation of off-site populations on project mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat and/or individuals. Potential mitigation sites could include suitable locations within or outside of the project area. A mitigation and monitoring plan will be developed describing how unavoidable losses of special-status plants will be compensated.

In response to comment F2-2, the first paragraph under Impact 6-10 (Effects of additional trail construction and improvements identified in the Specific Plan) on pages 6-74 and 6-75 of the DEIR is revised as follows:

Improvements to existing trails and construction of ~~additional trails~~ one new trail connection between existing trails outside the Specific Plan site would be implemented in the future as part of the project

applicant's overall program to meet the County's requirements for provision of recreational facilities. Trail development outside the Specific Plan site currently being considered include improvements to the Shirley Canyon and Granite Chief trails ~~and new trails on the mountain to the south of the plan area, a new connection between these two trails, and improvements to existing trails on the mountain to the south and west of the plan area.~~ Specific alignments have not been identified at this programmatic level. Given that the alignments would be within habitat types identified in this EIR, no sensitive species beyond those already described would be expected to be encountered. Trail ~~e~~Construction and operation of trail improvements could result in the same environmental effects described above under Impacts 6-1 through 6-9, including tree removal; disturbances to sensitive habitats, nesting raptors, and special-status plant and animal species; and disruption of potential mule deer fawning habitat and animal movement corridors. For the same reasons described previously for Impacts 6-1 through 6-9, this would be a **potentially significant** impact.

In response to comment F2-2, Mitigation Measure 6-10 and the "Significance after Mitigation" summary on page 6-75 of the DEIR are revised as follows:

Mitigation Measure 6-10: Implement previous applicable mitigation measures during trail development.

Once a proposed alignment and the location of specific improvements are identified, a qualified biologist shall survey the new trail routes and segments of existing trails identified for improvements outside the project boundary identified in this EIR to determine the biological resources present and the impacts identified within this chapter that could occur. Based on the results of this site review, the biologist shall identify mitigation measures within this chapter applicable to the specific trail route segments and the mitigation measures shall be implemented as appropriate during trail construction/improvement.

Significance after Mitigation

Implementation of Mitigation Measure 6-10 would reduce potentially significant impacts to biological resources as a result of new or additional trail improvements and operation to a **less-than-significant** level for the same reasons described for each mitigation measure included in this chapter.

2.3.7 Revisions to Chapter 7, "Cultural Resources"

In response to comment I95-1, Mitigation Measure 7-3b on page 7-22 of the DEIR is revised as follows with respect to potential effects to cultural or paleontological resources during construction:

Mitigation Measure 7-3b: Develop and implement a Worker Environmental Awareness Program.

The project applicant shall design and implement a Worker Environmental Awareness Program (WEAP) that will be provided to all construction personnel and supervisors who will have the potential to encounter and alter heritage and cultural resources. The topics to be addressed in the WEAP will include, at a minimum:

- ▲ types of heritage and cultural resources expected in the project area;
- ▲ types of evidence that indicates heritage or cultural resources might be present (e.g., ceramic shards, trash scatters, lithic scatters, mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints);
- ▲ what to do if a worker encounters a possible resource;
- ▲ what to do if a worker encounters bones or possible bones; and

- penalties for removing or intentionally disturbing heritage and cultural resources, such as those identified in the Archeological Resources Protection Act (ARPA).

2.3.8 Revisions to Chapter 8, “Visual Resources”

For the purpose of clarity, the second paragraph under the heading “Significance after Mitigation,” on page 8-50 of the DEIR is revised as follows:

The project would be constructed in an area that is currently disturbed. The project employs substantial design guidelines that would result in a unified design consistent with a mountain setting for a resort project. The overall appearance would be attractive, for a built environment, and it would largely replace a parking lot. This would not obviate the project’s contribution to blocking the scenic vistas currently available to year-round and seasonal residents of Olympic Valley, and elimination of the structures with potential to affect scenic vistas would not be feasible, given the relatively small size of the project site and the intensity of the proposed development. Conversely, increasing the height of structures on other areas of the site may restore some views from these existing buildings, but would result in visual tradeoffs, and would likely result in a development appearance that is too intensive for the mountain setting. No mitigation measures are available that would further reduce scenic vista impacts to year-round residents of the Valley or to part-time residents of adjacent timeshare and hotel condominium projects to a less-than-significant level. Therefore, Impact 8-1 would remain **significant and unavoidable** to many viewer groups, including residents, during project operation.

To correct an error, the last paragraph on page 8-52 of the DEIR is revised as follows:

Commercial buildings and signage along the Squaw Valley Road frontage would reduce visual quality by partially blocking views of forested areas to the north; however, distant views of forested hill sides would partially retain the character of the site and surroundings (see Exhibit 8-20, Viewpoint 12). The visual character of the East Parcel development would be similar to the existing visual character of the ~~commercial and office~~ development on the south side of Squaw Valley Road that consists of two- and three-story buildings, including visitor serving commercial (hotel, the Tavern Inn condominium complex, the Squaw Valley Academy, the SVPSD offices and Fire Station 21). Visitors, residents and employees driving past the site would have views that incorporate ~~commercial~~ these structures on the south and north side of the road with forested views in the background. The project would have a **potentially significant** impact on visual character and quality of the East Parcel.

2.3.9 Revisions to Chapter 9, “Transportation and Circulation”

To correct an error and in response to comment I226-21, Table 9-11 on page 9-17 of the DEIR is revised as follows:

Segment	Type	Winter Saturday Daily Conditions		
		Average Daily Traffic	V/C Ratio	LOS
West River Street east of SR 89	Two-Lane Moderate Access Control Arterial	3,800	0.21	A
Squaw Valley Road between SR 89 and Squaw Creek Road	Three-Lane Low Access Control Arterial	12,600	0.56	A
Squaw Valley Road between Squaw Creek Road and Village Area	Two-Lane Low Access Control Arterial	12,900	0.86	D

Note: LOS = level of service; V/C ratio = volume-to-capacity ratio
 Values rounded to the nearest 100 vehicles.
 Source: Appendix G-Based on comparison to values shown in Table 9-7.

To provide clarification, the significance after mitigation discussion on pages 9-58 and 9-59 of the DEIR is revised as follows:

Significance after Mitigation

Implementation of Mitigation Measure 9-2a through 9-2d would reduce this impact to a **less-than-significant** level for all intersections within the plan area, except the Squaw Valley Road/Village East Road intersection, because these measures would restore operations to acceptable levels.

The traffic management procedures described above at the Squaw Valley Road/Far East Road/Christy Hill Road, Squaw Valley Road/Wayne Road, and Squaw Valley Road/Squaw Creek Road intersections were analyzed to determine how the level of service would change. With the use of traffic management personnel, the Squaw Valley Road/Wayne Road and Squaw Valley Road/Squaw Creek Road intersections would operate similar to a two-phased signalized intersection. Traffic conditions would be improved at the Squaw Valley Road/Far East Road/Christy Hill Road intersection by restricting turning movements on Far East Road during peak periods. Based on the existing plus project traffic volumes and anticipated right-of-way allocations, these intersections would operate at LOS C or better with traffic management.

However, after implementation of the mitigation measures provided above, the Squaw Valley Road/Village East Road intersection would continue to experience increases in delays in excess of 2.5 seconds. As discussed above, adoption of Policy CP-1 within the VSVSP would allow for an LOS F standard for intersections within the plan area during peak ski/occupancy days and would therefore make peak hour/day traffic conditions at the Squaw Valley Road/Village East Road intersection acceptable. However, this impact would be considered **significant and unavoidable** for the Squaw Valley Road/Village East Road intersection unless and until Policy CP-1 is adopted.

Due to a changed and improved condition since publication of the DEIR, Impact 9-3 and Mitigation Measure 9-3 on page 9-59, and the “Significance after Mitigation” summary on page 9-61 of the DEIR are revised as follows:

Impact 9-3: Impacts to Caltrans intersections.

The proposed project would exacerbate unacceptable operations at the SR 89/Alpine Meadows Road intersection during all three analysis peak hours. This would be a **significant** impact. Since publication of the DEIR, the planned traffic signal at the SR 89/Alpine Meadows intersection has been constructed and is operational. Therefore, the project would not generate sufficient vehicle trips to generate an increase in intersection delay of more than 2.5 seconds, and this impact would be less than significant.

As shown in Table 9-21, the proposed project would add vehicle trips to various Caltrans-maintained intersections along SR 89; however, operations would remain at an acceptable LOS D or better at each location. This applies to the following intersections:

- ▲ SR 89/Donner Pass Road
- ▲ SR 89/I-80 WB Ramps
- ▲ SR 89/I-80 EB Ramps
- ▲ SR 89/Deerfield Drive
- ▲ SR 89/West River Street
- ▲ SR 89/Squaw Valley Road
- ▲ SR 89/SR 28

Therefore, under the Existing Plus Project condition, the proposed project would not generate a significant adverse effect at these intersections related to changes in LOS or delays.

Table 9-21 shows that vehicle trips generated by the proposed project would add traffic to the SR 89/Alpine Meadows Road intersection, which currently operates at LOS F during the winter Saturday a.m., winter Sunday p.m., and summer Friday p.m. peak hours. The project would cause the delay to increase by 96 seconds or more for each of these peak hours. Because these increases are greater than the 2.5-second increase threshold, these degradations would be **significant**.

The DEIR included Mitigation Measure 9-3, which required the County and Caltrans to construct the planned traffic signal at the SR 89/Alpine Meadows intersection. Construction occurred in 2015, after publication of the DEIR. Now that this traffic signal is in place, operations are expected to improve to an acceptable LOS D or better during all three analysis periods, and no mitigation would be required of the project. Because the planned traffic signal at the SR 89/Alpine Measures intersection has been constructed and is operational, and the project would not generate sufficient vehicle trips to generate an increase in intersection delay of more than 2.5 seconds, this impact would be less than significant.

Mitigation Measure 9-3: Construct the planned traffic signal at the SR 89/Alpine Meadows intersection.

~~Placer County has been working with Caltrans to construct a traffic signal at this intersection. Squaw Valley does not have a role in construction of this traffic signal. Although the precise timing of the signal's installation is not known at this time, the plans and specifications have been approved by the Placer County Board of Supervisors and the contract for construction has been awarded as of April 2015. It is anticipated to be constructed by the County and Caltrans in 2015 and be completed in one construction season. Once this traffic signal is in place, operations would improve to an acceptable LOS D or better during all three analysis periods, and no mitigation would be required of the project.~~

Mitigation Measures

No mitigation is required.

Significance after Mitigation

~~Impact 9-3 would be considered **significant and unavoidable** in the short term if the planned traffic signal at the SR 89/Alpine Measures intersection is not constructed prior to the proposed project generating sufficient vehicle trips to generate an increase in intersection delay of more than 2.5 seconds. However, once the signal is operational, the effect of added vehicle trips from the proposed project would be **less than significant**.~~

In response to comment O13-1 and as revised by the County Department of Public Works, the title and text of Mitigation Measure 9-7 in Table 2-2, "Summary of Impact and Mitigation Measures," on page 2-52 of the DEIR is revised as follows:

Mitigation Measure 9-7a: Contribute fair share or create a Community Service Area (CSA) or a Community Facilities District (CFD) to cover increased transit service.

The project applicant shall commit to providing fair share funding to TART or forming the Department of Public Works and Facilities (DPW&F) or create a Community Service Area (CSA) or a Community Facilities District (CFD) to fund the costs of increased transit services prior to the recordation of the Initial Large Lot Final Map. The provisions for monitoring (discussed below), and determining the appropriate fair share or the steps for forming a CSA or CFD shall be determined at this time in consultation with, and to the satisfaction of TART and County staff. An Engineer's Report shall be complete prior to recordation of any Small Lot Final Map to the satisfaction of DPW&F to define the fair share or used for the creation of the CSA or CFD. If and when a CSA or CFD is formed, the project applicant shall no longer be responsible for making fair share payments to DPW&F for the increased transit service for the portion of the project covered by the CSA or CFD.

~~Prior to recordation of the Initial Small Lot Final Map, the project applicant shall work with TART to conduct winter and summer season monitoring of ridership on bus routes to/from, and within Olympic Valley. Written evidence of this monitoring, its results, and any comments from TART shall be provided to Placer County ESD and DPW. When ridership approaches capacity, and based on the previously agreed upon provisions, the project applicant shall make a fair share contribution to TART to support transit service, or create a CSA or a CFD to fund the costs of increased transit services. If and when a CSA or CFD is formed, the project applicant shall no longer be responsible for making fair share payments to TART, and TART shall be fully responsible for adjusting bus service.~~

This mitigation measure meets the intent of Specific Plan Policies CP-2 through CP-4, and clarifies how the project would contribute to enhanced transit operations. Increased service may consist of more frequent headways, longer hours of operations, and/or different routes. The fee calculations shall consider both capital expenses and on-going operations and maintenance expenses.

In response to comment O13-1, new Mitigation Measure 9-7b is added to page 9-66 of the DEIR as follows:

Mitigation Measure 9-7b: Maintain Membership in the Truckee North Tahoe Transportation Management Association (TNT/TMA).

The following mitigation measure, while not required to achieve or maintain a less-than-significant impact conclusion, would further reduce the project's impacts to transit.

Prior to approval of improvement plans/final maps, the project applicant shall maintain membership in perpetuity in the Truckee North Tahoe Transportation Management Association (TNT/TMA). Once commercial and homeownership groups have been formed, the project applicant shall shift the TNT/TMA membership to the associations and the associations shall maintain membership in perpetuity. It is not anticipated that membership will need to be cancelled; however, if for a reason unknown at this time cancellation of the membership is required, it shall be mutually agreed to by the County and the entity responsible for paying the annual dues.

In response to comment O13-1, the "Significance after Mitigation" summary on page 9-66 of the DEIR is revised as follows:

Significance after Mitigation

Implementation of Mitigation Measures 9-7a and 9-7b would reduce this impact to a **less-than-significant** level because the creation of the CSA/CFD to provide additional funding and the project applicant's continued membership in the TNT/TMA would ensure that increased TART service would be supported.

In response to comment L6-9, Mitigation Measure 9-8 on page 9-67 of the DEIR is revised as follows:

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;
- ▲ approved truck circulation patterns, including coordination with the Town of Truckee if the aggregate mine in the Town is used as a material source;
- ▲ 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 Olympic Valley to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences if 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 Olympic 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 is achieved throughout project construction. It is anticipated that additional performance standards will be developed once details of more 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 or leased 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.

2.3.10 Revisions to Chapter 10, “Air Quality”

In response to comment L2-2, the bulleted items in Section 10.3.1, “Significance Criteria” on page 10-11 of the DEIR are revised as follows:

As stated in Appendix G of the State CEQA Guidelines, the significance criteria established by the applicable air district may be relied on to make the above determinations. Thus, as identified by PCAPCD, an air quality impact also is considered significant if implementation of the proposed project would result in:

- ▲ a net increase in short-term construction-related or long-term operation-related (regional) emissions of ROG, NOX, or PM10 that exceed the project-level threshold of 82 pounds per day (lbs/day) (PCAPCD 2012:2-2). The thresholds of 82 lbs/day are based on the limit of 15 tons per year that is mandated for permitting of individual stationary sources of emissions (e.g., factories, industrial facilities, gasoline stations) by the New Source Review program (PCAPCD Rule 502).

One objective of the New Source Review program is to ensure that air quality is not significantly degraded from the addition of new and modified industrial sources (PCAPCD 2012:2-2 and 2-3). Therefore, Placer County considers the thresholds of 82 lbs/day to represent the allowable incremental contribution of a land use development project while still progressing toward overall attainment within Placer County; and/or

- ▲ a net increase in long-term operation-related (regional) emissions of ROG or NO_x that exceed the cumulative threshold of 10 pounds per day (lbs/day) (PCAPCD 2012:2-3). PCAPCD established this cumulative threshold based on the requirement of Rule 502 (“New Source Review”) that any stationary source that emits more than 10 lbs per day of ROG and NO_x must employ best available control technology (PCAPCD 2012:2-3 and 2-4). Therefore, Placer County considers the threshold of 10 lbs/day to represent the acceptable incremental contribution of a land use development project while still progressing toward overall attainment within Placer County; and/or
- ▲ exposure of sensitive receptors to TAC emissions that would exceed 10 in 1 million for the carcinogenic risk (i.e., the risk of contracting cancer) or a noncarcinogenic Hazard Index of 1 for the maximally exposed individual (PCAPCD 2012:E-3).

In response to DEIR comments regarding air quality emissions associated with the upgrade to the existing approximately 1.87-mile-long sewer line between the existing Village and SR 89 (see the Master Response regarding construction emissions), Table 10-4 on page 10-14 of the DEIR is revised as follows to include emissions of CAPs and precursors associated with the upgrade to the sewer line:

Table 10-4 Summary of Maximum Daily Emissions of Criteria Air Pollutants and Precursors Associated with Project Construction Activities (Revised)¹

Construction Activity	ROG (lb/day)	NO _x (lb/day)	PM ₁₀ (lb/day)	PM _{2.5} (lb/day)
<u>Village and East Parcel²</u>				
Demolition	1.0	9.3	0.6	0.5
Site Preparation	1.1	11.0	1.6	1.1
Grading	1.1	11.0	2.1	1.2
Paving	1.4	15.0	0.3	0.2
Building Construction	0.6	4.5	3.6	1.3
Architectural Coatings	9.6	12.7	0.6	0.2
<u>Upgrade to Utility Line Connection³</u>	<u>3.2</u>	<u>20.1</u>	<u>6.4</u>	<u>2.3</u>
Total Maximum Daily Emissions	32.2 35.4	53.3 73.4	8.9 15.3	4.5 6.8
PCAPCD Thresholds of Significance	82	82	82	NA

Notes:
 ROG = reactive organic gases
 NO_x = oxides of nitrogen
 PM₁₀ = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less
 PM_{2.5} = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less
 lb/day = pounds per day
 PCAPCD = Placer County Air Pollution Control District

Modeled values represent maximum daily emissions that could occur if up to 20 percent of the land uses are under construction during any single year. See Appendix H for detail on model inputs, assumptions, and project specific modeling parameters.

¹ See Appendix H for detail on model inputs, assumptions, and project specific modeling parameters.

² Emissions from the construction of proposed facilities in the Village and at the East Parcel were estimated using CalEEMod Version 2013.2 (SCAQMD 2013). Modeled values for the construction of facilities at the Village and East Parcel represent maximum daily emissions that could occur if up to 20 percent of the land uses were under construction during any single year.

³ Construction emissions from the utility line upgrade were estimated using the Roadway Construction Emissions Model, Version 7.1.5.1 (SMAQMD 2015).

Source: Modeling conducted by Ascent Environmental in 2014 2015

To correct a grammatical error, the second paragraph on page 10-15 of the DEIR is revised as follows:

Fugitive dust PM₁₀ and PM_{2.5} emissions would also be minimized due to implementation of the dust control measures required by PCAPCD Rule 228, including measures that minimize track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 mph, and stabilization of storage piles and disturbed areas. Short-term construction-generated emissions would not exceed PCAPCD's significance thresholds for ROG, NO_x, or PM₁₀, and; thus, would not be expected to contribute to pollutant concentrations that exceed the NAAQS or CAAQS. Because construction-generated PM₁₀ emissions would be less than the applicable threshold of 82 lbs/day, and because PM_{2.5} is a subset of PM₁₀, it is not anticipated that construction activity would result in concentrations of PM_{2.5} that would violate or substantially contribute to a violation of the ambient air quality standards for PM_{2.5}. This impact would be **less than significant**.

In response to comment L2-2, Mitigation Measure 10-2 beginning on pages 10-17 and 10-18 of the DEIR is revised as follows with respect to PCAPCD's thresholds:

Mitigation Measure 10-2: Implement an ongoing ROG and NO_x emissions review and reduction program.

This measure is designed to reduce the project's operational emissions of ROG or NO_x to less than PCAPCD's project-level threshold of 82 lbs/day and to less than PCAPCD's cumulative threshold of 10 lbs/day.

Mitigation measures for reducing operational emissions of ozone precursors were developed using PCAPCD guidance (PCAPCD 2012:C-1 through C-2) and mitigation guidance published by the California Air Pollution Control Officers Association (CAPCOA 2010) and the California Attorney General's Office (2010). The Lake Tahoe Sustainability Collaborative's *Sustainability Action Plan* was also reviewed for mitigation options as it includes multiple emission reduction measures that are well-suited to the climate and development patterns in the Sierra Nevada (Lake Tahoe Sustainability Collaborative 2013:4-1 through 4-37).

Prior to recordation of each Small Lot Final Map, the project applicant shall prepare, to the satisfaction of Placer County Planning Services Division and PCAPCD, a chart or table with supporting analysis, which demonstrates that construction and operation of the proposed phase, combined with emissions from all past approved phases, will not result in ROG or NO_x emissions in excess of ~~82~~10 lbs/day. Compliance with this threshold may be achieved through project design and/or other "on-site" measures, which may include any of the project-level reduction measures listed below. Alternatively, the project applicant may demonstrate compliance with this mitigation measure, partially or wholly, through off-site measures (i.e., emission reductions not directly associated with the proposed project but funded/implemented by the applicant, such as reducing emissions associated with ski operations) and/or purchase of offset credits identified below.

Placer County Planning Services Division shall maintain a file for the charts to provide future applicants with the historical emissions record and approved tracking methodology.

The project applicant shall be responsible for the funding and implementation of all identified reduction measures. The ROG and NO_x reduction benefits achieved by all measures must occur during the ozone season (May through October). The method used to quantify the reduction or offset amount achieved by each measure must be approved by the County and PCAPCD.

Subsequent to the implementation of all selected reduction measures, the project applicant shall evaluate and report the effectiveness of the measures annually to the County and PCAPCD to verify that the suite of measures result in the combined reduction in ROG and NO_x that was expected. This annual reporting shall be completed and submitted to the County and PCAPCD within 30 days of the end of each ozone season. If it is determined that the effectiveness of reduction measures has been

overestimated, then additional reduction measures must be implemented. Similarly, if it can be verified that reduction measures achieve better than anticipated results, or previous emission estimates were above actual emission levels, the overall emission reduction approach can be adjusted accordingly.

Types of reduction and offset measures implemented by the project applicant may include, but are not limited to, the measures listed below, so long as the combination of selected measures results in calculated emissions below the target threshold. Note that not all of these measures need to be implemented; rather, the project applicant will be required to implement a combination of those measures needed to reduce ROG and NO_x emissions below the ~~82~~10 lbs/day threshold:

In response to comment L2-3, Mitigation Measure 10-2 on pages 10-17 through 10-21 of the DEIR is revised as follows with respect to reactive organic gases (ROG) and oxides of nitrogen (NO_x):

OFFSET MEASURES

- ▲ Establish mitigation off-site within the portion of Placer County that is within the MCAB by participating in an off-site mitigation program, coordinated through PCAPCD. Examples include, but are not limited to retrofitting, repowering, or replacing heavy duty engines from mobile sources (e.g., busses, construction equipment, on-road haulers, boilers, ski lift equipment, grooming equipment); or other programs that the project proponent may propose to reduce emissions.
- ▲ Participate in PCAPCD's Off-site Mitigation Program by paying the equivalent amount of fees for the project's contribution of ROG and NO_x that exceeds the 82 lbs/day. The applicable fee rates changes over time. At the time of writing this EIR, the fee rate is ~~\$17,720~~ \$18,030 per ton emitted during the ozone season. The actual amount to be paid shall be determined, and satisfied per current California Air Resource Board guidelines, at the time of recordation of the Final Map (residential projects), or issuance of a Building Permit (non-residential projects).

In response to comment L2-1, Mitigation Measure 10-2 on pages 10-17 through 10-21 of the DEIR is revised as follows:

CONSTRUCTION MEASURES

- ▲ Cease or substantially limit ROG- and NO_x-generating construction activity during peak operations (i.e., peak occupancy periods) of buildings and facilities that are already built and operational under the Specific Plan.
- ▲ Prior to approval of Grading or Improvement Plans, whichever occurs first, the applicant shall submit a Construction Emission/Dust Control Plan to PCAPCD. The applicant shall deliver approval from the PCAPCD to the Placer County Planning Services Division.

2.3.11 Revisions to Chapter 11, "Noise"

In response to DEIR comments regarding potential construction noise at Squaw Valley Academy, a boarding school near the East Parcel site (see the Master Response regarding noise), the third full paragraph on page 11-19 of the DEIR is revised as follows:

Existing sensitive receptors that would be exposed to construction-noise include lodging units at the Intrawest Village and Red Wolf Lodge, The Olympic Village Inn, Squaw Valley Chapel, Squaw Valley Lodge, and other scattered residences located around the project site, such as the residences on Indian Trail Court adjacent to the East Parcel, the Tavern Inn Condominiums located at Squaw Valley Road and Tavern Way, and the Squaw Valley Academy across Squaw Valley Road from the East

Parcel (approximately 250 feet between the closest academy buildings and construction activities). Construction activity (e.g., demolition, site preparation, grading, and building construction) could potentially occur at or within 50 feet of most of these existing sensitive receptors, and as close as 250 feet from the Academy for construction of the proposed market. The employee housing development on the East Parcel would be developed in modules, in response to project demands for employees, and is expected to last 24 to 30 months within the total 25-year timeframe over which the project would be constructed. Daytime noise levels could be as high as 85 dB at the exterior of the Academy buildings for short periods during construction at the East Parcel, which could result in disruptive noise within classrooms. In addition, as the Specific Plan is developed over the years, new sensitive land uses would be constructed and potentially occupied while construction continues and; therefore, exposing these new on-site receptors to the same noise levels. Thus, anticipated daytime construction activities could result in noise levels that exceed Placer County's daytime (i.e., 7:00 a.m. to 10:00 p.m.) exterior noise standards of 55 dBA L_{eq} / 70 dBA L_{max} and nighttime (i.e., 10:00 p.m. to 7:00 a.m.) interior standards of 45 dBA L_{eq} / 65 dBA L_{max} and could result in a temporary increase in noise levels in excess of 5 dB.

In response to DEIR comments regarding potential construction noise at Squaw Valley Academy, a boarding school near the East Parcel site (see the Master Response regarding noise), Mitigation Measure 11-1a on page 11-20 of the DEIR is revised as follows:

Mitigation Measure 11-1a: Implement construction-noise reduction measures.

To minimize noise levels during construction activities, construction contractors shall comply with the following measures during all proposed construction work:

- ▲ All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses.
- ▲ All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- ▲ All construction equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an object is detected. The self-adjusting backup alarms shall automatically adjust to 5 dBA over the surrounding background levels. All non self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels. In addition to the use of backup alarms, the construction contractor shall consider other techniques such as observers and the scheduling of construction activities such that alarm noise is minimized.
- ▲ Individual operations and techniques shall be replaced with quieter procedures (e.g., using welding instead of riveting, mixing concrete off-site instead of on-site) where feasible and consistent with building codes and other applicable laws and regulations.
- ▲ When existing and future noise sensitive uses are within close proximity to prolonged construction noise, noise attenuating buffers such as structures, truck trailers, temporary noise curtains or sound walls, or soil piles shall be located between noise sources and the receptor to shield sensitive receptors from construction noise.
- ▲ Construction on the East Parcel shall be designed to avoid intrusive noise, defined as an interior noise level of 45 dBA L_{eq} / 65 dBA L_{max} or greater, during the time when classroom activities take place at the Squaw Valley Academy. The applicant shall coordinate with administrators at the academy and shall achieve these performance standards either by adjusting the timing of construction, adjusting construction methods during times of classroom instruction, temporary screening, and/or improving noise attenuation at the school by replacing windows, increasing

insulation, etc., as needed. The applicant shall prepare and submit to Placer County an acoustical study that demonstrates these criteria will be met prior to approval of each Small Lot Tentative Map for all construction on the East Parcel.

- ▲ The project applicant shall sponsor and create a website that includes information on construction activities and includes when, where, and for how long noise generating construction activities would occur. In addition, prior to the beginning of each construction season written notification of construction activities shall be provided to all noise-sensitive receptors located within 2,500 feet of construction activities. Additional notifications may be provided if there are substantive changes in construction operations or noise generating activities (e.g., need for nighttime construction, special notice for blasting). Notification shall include anticipated dates and hours during which construction activities are anticipated to occur and contact information, including a daytime telephone number, for the project representative to be contacted in the event that noise levels are deemed excessive.

In response to DEIR comments regarding traffic noise impacts to existing sensitive receptors along Squaw Valley Road (see the Master Response regarding noise), Mitigation Measure 11-5 on page 11-33 of the DEIR is revised as follows:

Mitigation Measure 11-5: Reduce transportation noise exposure to sensitive receptors.

~~For new sensitive receptors developed as part of the proposed project and that would be located within 170 feet of the centerline of Squaw Valley Road (i.e., the distance from the centerline that is estimated, based on the noise modelling, to result in exceedance of the Placer County transportation-related exterior noise standard of 60 dBA L_{dn}), the following design criteria shall be adhered to:~~

- ▲ ~~Building materials and design shall be used that achieve, at a minimum, 25 dBA of exterior to interior noise attenuation. In all cases, interior noise levels comply with the Placer County interior noise standard of 45 dBA L_{dn} .~~

Mitigation Measure 11-5: Reduce roadway noise levels on Squaw Valley Road.

To reduce noise levels associated with increased traffic on Squaw Valley Road, the project applicant shall install a rubberized hot mix asphalt overlay (RHMA) or equivalent surface treatment with known noise reducing properties on top of the existing conventional asphalt of Squaw Valley Road along the segment identified below. Sufficient project generated traffic resulting in a significant contribution to the exceedance of noise standards does not occur until the later portions of project implementation. Therefore, the RHMA overlay need not be installed immediately at project initiation. The RHMA overlay shall be installed when development reaches 30 percent of all proposed Hotel/Condo/Cabin Units Land uses (i.e., 255 units or more), which would be the point where current modeling indicates traffic noise may exceed standards. The RHMA overlay shall meet the following conditions:

- ▲ A RHMA overlay shall be installed on top of the existing conventional asphalt on Squaw Valley Road beginning at its' intersection with SR 89 and terminating at its intersection with Christy Lane.
- ▲ The RHMA overlay shall be designed with appropriate thickness and rubber component quantity (typically 15 percent by weight of the total blend), such that traffic noise levels are reduced by an average of 4-6 dB (noise levels vary depending on travel speeds, meteorological conditions, and pavement quality) as compared to current noise levels.
- ▲ Prior to installation of any RHMA overlay, the applicant shall hire a qualified acoustical engineer to review all design parameters to ensure that the RHMA design is adequate, based on most current technology, practices, and availability of products, such that, at a minimum, 4 dB in noise reduction relative to conditions without a RHMA overlay would be achieved.

In response to DEIR comments regarding traffic noise impacts to existing sensitive receptors along Squaw Valley Road (see the Master Response regarding noise), Mitigation Measure 11-5 was revised, above, to require the installation of an RHMA on top of the existing conventional asphalt of a segment of Squaw Valley Road. The conclusions regarding significance after mitigation on page 11-33 of the DEIR are revised as follows from significant and unavoidable to less than significant after mitigation:

Significance after Mitigation

Implementation of Mitigation Measure 11-5 would reduce exposure of traffic generated noise at new sensitive receptors. However, as described below, no feasible mitigation is available for existing sensitive receptors.

Existing sensitive receptors are located within the 60 dBA L_{dn} noise contour of Squaw Valley Road and would continue to be exposed to noise levels that exceed Placer County noise standards (i.e., 60 dBA L_{dn}). Further, during the summer, noise along Squaw Valley Road would increase such that in some locations where modelling indicates existing conditions are in compliance with Placer County exterior noise levels, the addition of project generated transportation noise would result in exceedance of the 60 dBA L_{dn} standard for transportation noise. Exterior noise levels at existing noise sensitive residences could only be remediated by relocating roadways, building sound walls, relocating sensitive receptors, etc., but in the case of the project, this would not be feasible. Homes are located adjacent to the roadway edge and relocating the road would require removal of homes, or if moved in the other direction, would result in loss of habitat and other potential impacts. In most locations the homes are too close to the roadway to add sound walls without affecting safe access to the road (line of sight would be compromised) or views. Further, it is likely that interior noise is within standards of 45 dBA L_{dn} , given the colder climate and likelihood that most (or all) homes already have dual pane windows and insulation. Typical construction of this type provides at least 25 dB exterior to interior attenuation. Therefore, exterior noise levels would need to be at least 71 dBA for the interior noise standards to be exceeded, which would mean that an existing residence would need to be located 20 feet from the centerline of Squaw Valley Road, and this does not currently occur. Nonetheless, existing sensitive land uses (i.e., residences located within the 60 dBA L_{dn} noise contour of Squaw Valley Road) would be exposed to exterior noise levels during days with peak traffic conditions that exceed applicable Placer County noise standards. This impact would remain **significant and unavoidable**.

Implementation of Mitigation Measure 11-5 would reduce interior noise exposure from Squaw Valley Road at new sensitive receptors by designing buildings such that interior noise levels would comply with Placer County noise standards. As described in the *Placer County General Plan*, if all available noise reducing measures have been implemented, the exterior noise level at the outdoor activity area may be 65 dBA L_{dn} , provided that interior noise standards are met (see Table 11-7). The 65 dBA L_{dn} noise contour is located 80 feet from the centerline of Squaw Valley Road. As per the Illustrative Concept Plan included in the VSVSP, no new development is proposed within 80 feet of the centerline of Squaw Valley Road and therefore would not be exposed to exterior noise levels that exceed 65 dBA L_{dn} . Further, an exterior to interior reduction of 25 dBA would ensure that any new sensitive receptors located within the 60 dBA (170 feet), the 65 dBA (80 feet) or the 70 dBA (40 feet) noise contour from the centerline of Squaw Valley Road would not exceed the interior noise standard of 45 dBA L_{dn} . Impacts to new sensitive receptors from traffic noise would be reduced to a **less than significant** level.

Implementation of Mitigation Measure 11-5 would result in a reduction of 4-6 dB along Squaw Valley Road, which would be a clearly noticeable reduction to nearby sensitive receptors. Assuming the more conservative value of 4dB, this reduction would reduce the 60 dBA noise contour associated with Squaw Valley Road from 170 feet to approximately 92 feet. Further, given that the highest noise increase associated with the project is 4.4 dBA L_{dn} (see Table 11-11); this reduction in noise would reduce any increase associated with project-generated traffic to less than 1 dB, which is not perceptible.

Although some residences are located within 92 feet of Squaw Valley Road and therefore still exposed to exterior noise levels above (slightly) 60 dBA, the overall effect of the mitigation would minimize noise exposure, and would reduce it to a point that any increase generated by the proposed project would be imperceptible. With regards to noise levels on SR 89, as described above, noise increases during both the winter and summer as a result of the project would not be noticeable.

Thus, the project would not result in a substantial long-term increase in noise to existing sensitive receptors and this impact would be reduced to a **less-than-significant** level.

As described above, with implementation of Mitigation Measure 11-5, the 60 dBA contour would be reduced from 170 feet to 92 feet from the centerline of Squaw Valley Road. As per the Illustrative Concept Plan included in the VSVSP, no new development is proposed within 92 feet of the centerline of Squaw Valley Road and therefore no new receptors would be exposed to exterior noise levels that exceed 60 dBA L_{dn} .

With regards to interior noise levels, typical construction of a building with a wood frame and stucco or wood sheathing would provide, at a minimum, a 25 dB exterior-to-interior noise reduction with its windows closed (Caltrans 2002). Newly built residences would be constructed to comply with all current California and Placer County building codes, which require dual pane windows to meet energy efficiency standards. As such, newly constructed residences would likely achieve a higher exterior-to-interior noise reduction than 25 dB. Nonetheless, assuming the minimum reduction of 25 dB, a new sensitive receptor would need to be exposed to exterior noise levels of greater than 70 dBA L_{dn} for interior noise standards of 45 dBA L_{dn} to be exceeded. The 70 dBA L_{dn} noise contour with Mitigation Measure 11-5 would be 20 feet from the centerline of Squaw Valley Road. No new residences would be located this close to Squaw Valley Road and therefore no new receptors would be exposed to interior noise levels that exceed 45 dBA L_{dn} . Impacts to new sensitive receptors from traffic noise would be reduced to a **less-than-significant** level.

2.3.12 Revisions to Chapter 12, “Soils, Geology, and Seismicity”

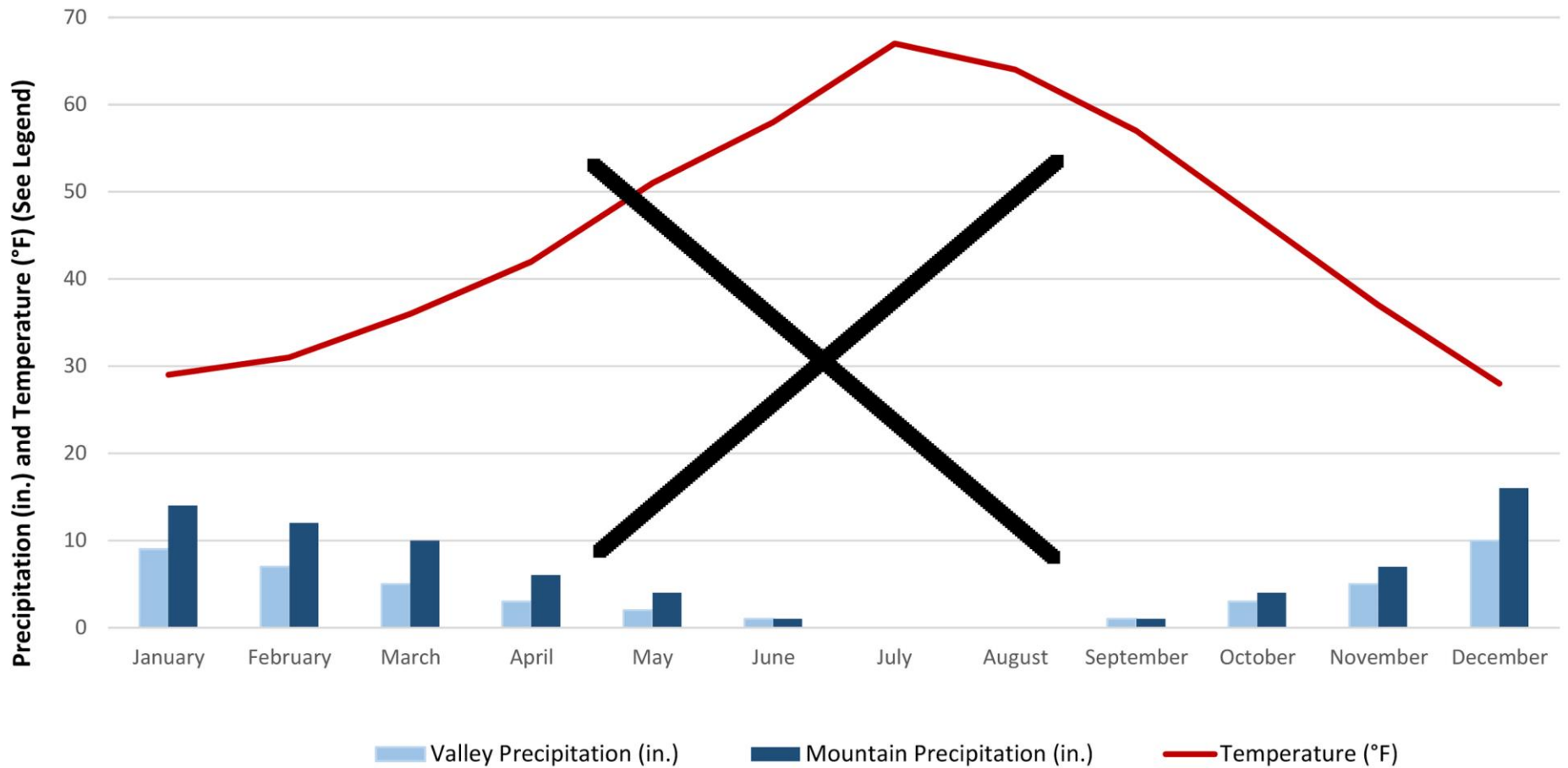
None

2.3.13 Revisions to Chapter 13, “Hydrology and Water Quality”

In response to comments O8a-2 and O8a-4b, Exhibits 13-3 and 13-4 on pages 13-6 and 13-8, respectively, of the DEIR are revised to reflect the incremental precipitation for the SNOTEL Gold Coast Squaw Valley station.

In response to comment O8a-4b, the first paragraph on page 13-7 of the DEIR is revised as follows to address the correct SNOTEL precipitation and recent valley floor precipitation records:

In addition to the distinct seasonal patterns of temperatures and precipitation, conditions also vary year to year as a result of regional weather conditions. Furthermore, the nearly 3,000 foot elevation difference between the valley floor (~6,200 feet) and ridge crests (~9,000 feet) produces local climate diversity. The average total annual precipitation on the valley floor is 47 inches, while the average for surrounding mountains is ~~26376~~ inches (expressed as “snow in water equivalent” meaning the inches of water both as rain and if all snow were melted), and both of these precipitation values represent combined measured precipitation as snowfall and rainfall (Exhibit 13-4). The year-to-year variability in total precipitation for the valley and mountains is large relative to its average, while the variability of total precipitation (including snow in water equivalent) on the mountain is extreme (a minimum around ~~120~~ inches and a maximum over 500 inches). The pattern of years with high versus low precipitation is not consistent for the mountain and valley locations (Exhibit 13-4), which has mixed effects on surface runoff production and groundwater recharge potential.



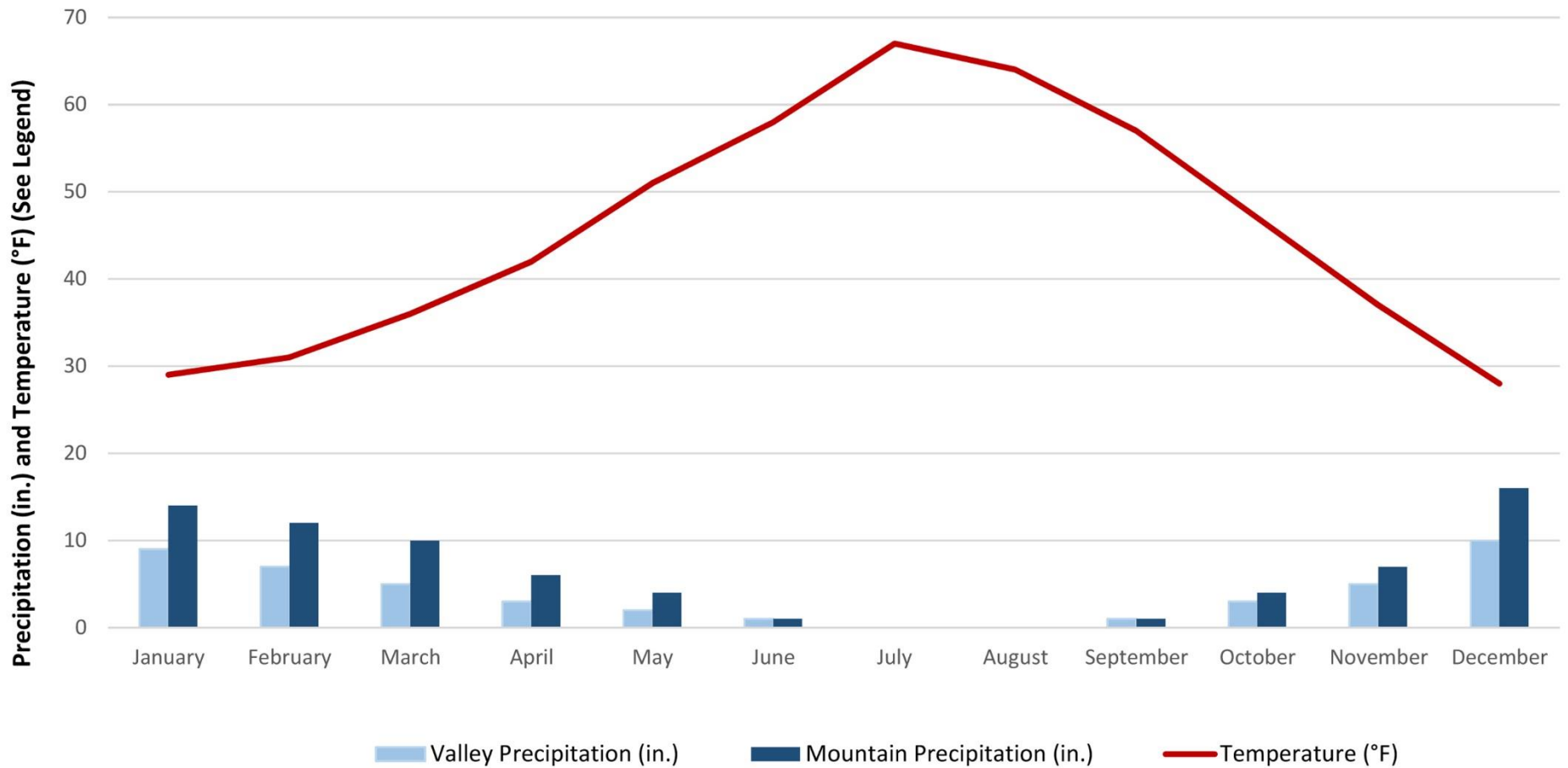
Source: Cardno 2015, using data from Farr West Engineering and Others, July 2015

X11010091 03 037

[Old] Exhibit 13-3

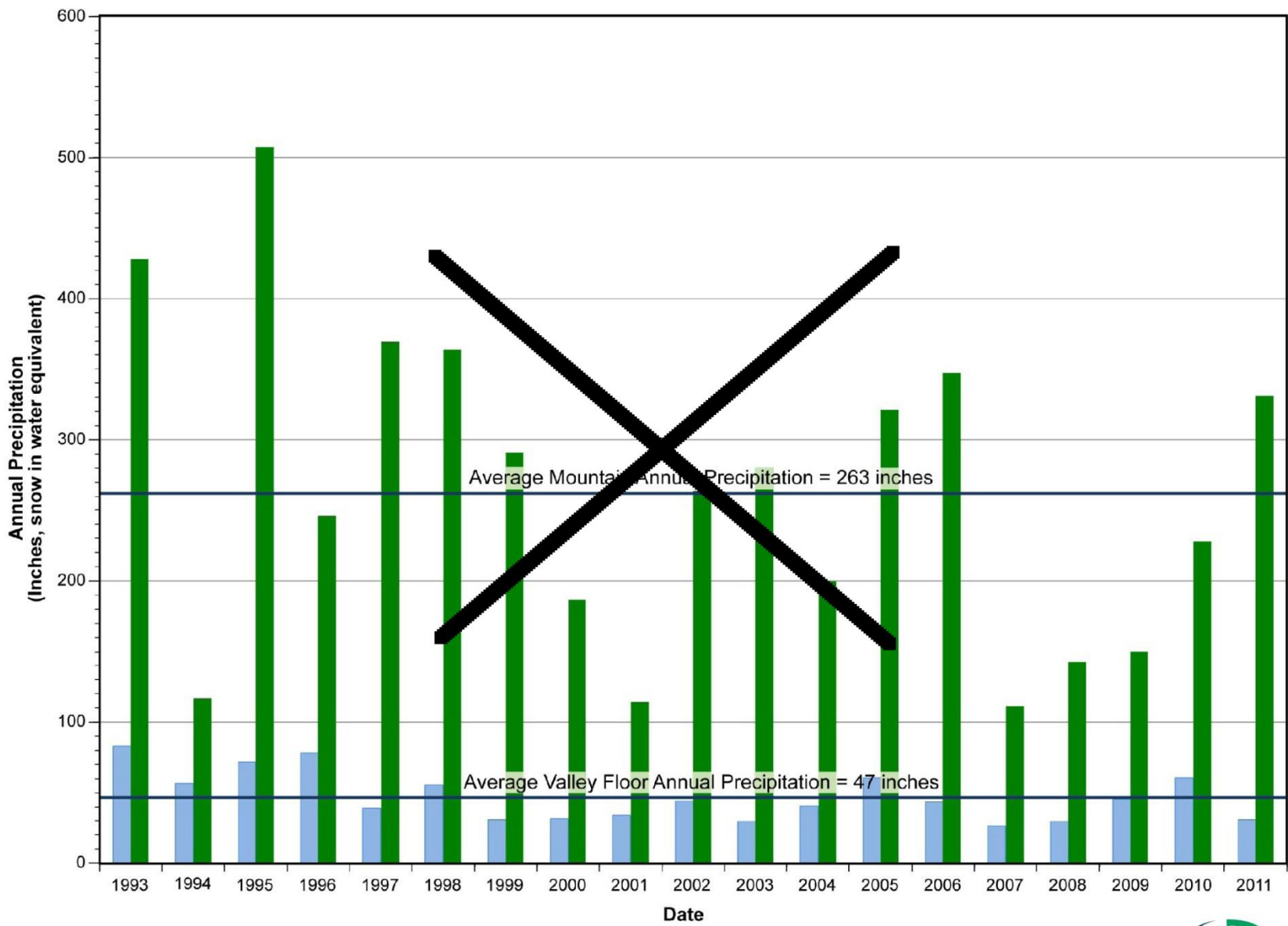
Squaw Valley Monthly Precipitation and Monthly Temperature Averages: 1992–2011





Source: Cardno 2015, using data from Farr West Engineering and Others, July 2015

X11010091 03 037



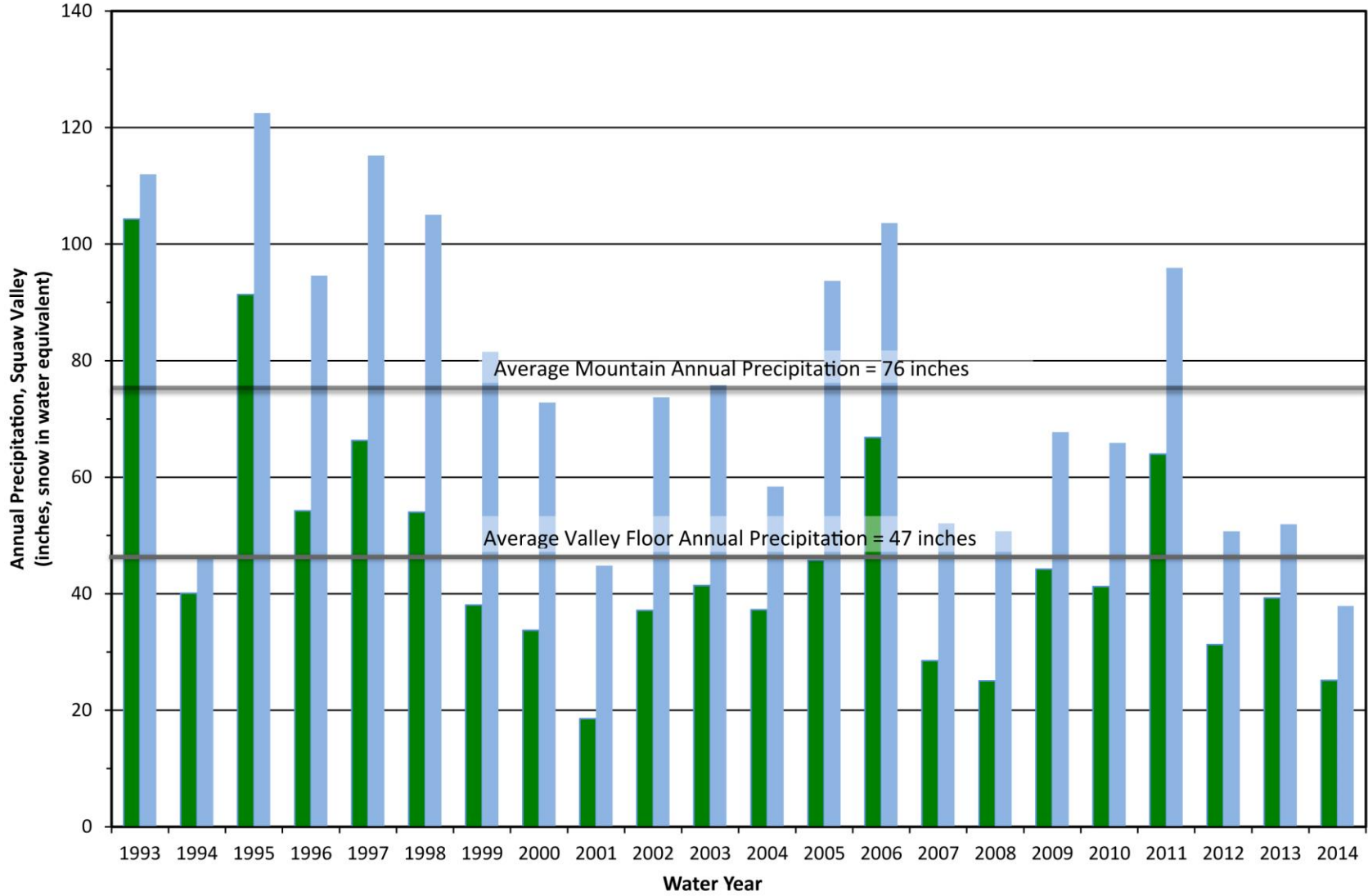
Data Source: Farr West Engineering, Hydrometrics WRI, and TODD Groundwater, July 2014



[Old] Exhibit 13-4

Annual Precipitation in the Squaw Valley Watershed: 1993–2011





Source: Farr West Engineering, Hydrometrics WRI, and TODD Groundwater, July 2016

X11010091 03 038

[Revised] Exhibit 13-4

Annual Precipitation in the Squaw Valley Watershed: 1993–2011



In response to comments L4-28, L4-29, and L4-30, the second paragraph under Section 13.1.3, “Groundwater,” on page 13-11 of the DEIR is revised as follows:

SVPSD uses a numerical model to simulate groundwater conditions in the ~~OVGB-OVGMP area~~. This model uses the U.S. Geological Survey (USGS) MODFLOW computer code and was initially developed in 2001. The model has been updated many times as additional data has been obtained to refine the conceptual framework and improve calibration. The update used in the WSA scenarios (HydroMetrics WRI 2014) incorporated additional data regarding the thickness and extent of the geologic units, made adjustments to the recharge zones and precipitation infiltration timing, corrected unrealistic pipe loss assumptions, and extended the calibrated model period to include additional available data. As of this update, the model incorporates precipitation, withdrawal, and groundwater conditions recorded for the period from May 1992 to December 2011. ~~The calibration statistics show a slight bias towards underestimating average groundwater elevations, but an improved calibration relative to previous model iterations (HydroMetrics WRI 2014). Review of the observed groundwater level data and simulated hydrographs for individual wells (HydroMetrics WRI 2014) indicates that the model does not capture the lowest observations in several of the calibration well records, even as it matches typical and high elevation observations (e.g., Olympic Valley well ID numbers: SVPSD 5S, SVPSD 5R, SVMWC 1, SVMWC 2, RSC 328, RSC 304, RSC 305, RSC 323, RSC 325, RSC 326, RSC 308, RSC 312, RSC 321, RSC 322, RSC 320). Therefore, interpretation of model simulation results for either existing or future conditions should consider that the model may have a small bias that does not reflect extreme drawdowns at local wells (i.e., the simulated ‘lowest’ elevations could be a few feet too high), but does reflect the regional aquifer conditions.~~

In response to comment O8a-28a, the first paragraph on page 13-17 of the DEIR is revised as follows:

The WSA for the proposed project (Farr West Engineering et al. 2014) concludes that in all years there is ample runoff produced in the watershed, but much of it is generated during times when the groundwater basin is already ‘full’ and therefore it is rejected as recharge and leaves the watershed as surface runoff in Squaw Creek. Regardless of some uncertainty about how readily and completely recharge occurs under various water year types, no studies of the OVGB indicate that the aquifer has been or is now experiencing overdraft. Rejected recharge could occur due to two mechanisms: high groundwater elevations and/or limited soil or sediment permeability relative to potential rainfall, snowmelt or surface water recharge rate. When groundwater elevations are at or near ground surface, limited storage capacity is available in the soil or unsaturated zone for additional inflow to the aquifer. Soil moisture does not need to be uniformly at 100 percent saturation for extended periods of time for this to occur. High groundwater elevations could temporarily be high due to recent rains or locally high due to inflow from the creek or other recharge source. While the model was developed to simulate rejected recharge, it only adjusted recharge on a monthly time step. Small daily variations in flow that prevent additional recharge would be smoothed.

During high flows and/or heavy precipitation events, the potential recharge rate may exceed the percolation rate at a specific location resulting in additional runoff.

In response to comment O8a-28b and to provide additional context on how pumping can affect streamflow, the paragraph on pages 13-18 and 13-19 of the DEIR is revised as follows:

Aquifer tests have indicated that pumping from existing wells during periods when Squaw Creek is flowing ~~(typically winter/spring/early summer)~~ captures only a small amount of extracted water directly from the creek (<2 percent, <0.2 cfs) (HydroMetrics 2013a); ~~that is, during periods of the year when the creek is flowing, pumping of groundwater from existing wells results in only a small amount of creek surface flows being “pulled” into the groundwater aquifer. Under these conditions, current groundwater pumping does not substantially alter stream flow. However, during periods when there are lower flows in the creek (typically summer and fall), pumping from existing wells would capture a higher overall percentage of the reduced flow and existing pumping operations can have a greater influence on observed stream surface flows. Pumping induces some flow from Squaw Creek~~

to groundwater when water elevations in the creek (primarily winter to late spring) are higher than surrounding groundwater elevations. The rate of flow in Squaw Creek during these times is generally high, and the rate of recharge from the creek to the aquifer is small as a percentage of the overall flow (HydroMetrics 2013a). In periods when there are lower flows in the creek (typically summer and fall), pumping from existing wells captures a higher overall percentage of the reduced flow and existing pumping operations can have a greater influence on observed stream surface flows.

In response to comment L4-16, the third paragraph on page 13-37 of the DEIR is revised as follows:

On December 15, 2014, DWR announced its official “initial prioritization” of the state’s groundwater basins for purposes of complying with the SGMA and this priority list became effective on January 1, 2015 (DWR 2014). DWR has ranked the Olympic Valley Groundwater Basin as “low priority.” Groundwater sustainability plans are not required for low and very low priority basins. While the County and/or the SVPSD will still need to ~~take steps~~ decide whether to designate and/or form a groundwater sustainability agency for the Olympic Valley Groundwater Basin, these administrative obligations will not impact the availability of water to serve the proposed project or require revisions to the WSA prepared for the proposed project.

To ensure that cross-referencing of all relevant mitigation is clear, and in response to comment S4-8, Mitigation Measure 13-1 on page 13-47 of the DEIR is revised as follows:

Mitigation Measure 13-1: Implement water and sewer infrastructure water quality protection measures.

The project applicant shall implement the following actions, including standard mitigation measures as required by the County, to protect water quality during the design, installation, and destruction/abandonment of wells and sewer lines:

- ▲ Prior to providing final authorization for drilling of a well (e.g., initiating an applicant directed test well, providing access to property for a well drilled by another entity, final agreement to fund a well drilled by another entity), the project applicant shall confirm that required fees are paid and a drilling permit is obtained from Environmental Health Services for each well and that the location of the well meets applicable DWR criteria for distances from utility infrastructure (e.g., stormwater, sewer, and petroleum pipelines and petroleum storage tanks).
- ▲ Prior to approval of a Final Subdivision Map, the applicant shall provide to Placer County Environmental Health Services final design drawings indicating that separation between any planned or existing wells in the map area and any planned or existing stormwater, sewer, and petroleum pipelines and petroleum storage tanks is sufficient to meet applicable DWR separation requirements.
- ▲ Prior to approval of a Final Small-Lot Subdivision Map, complete or provide for the proper destruction under permit and inspection, of existing wells and abandonment of sewer lines located within the project site.
- ▲ Prior to approval of an Improvement Plan that includes the need for well destruction or sewer line abandonment, well destruction and/or sewer line abandonment shall be shown on the Improvement Plans; the actions shall be included in the engineers’ estimate of costs for subdivision improvements; and the Improvement Plan will include a Plan Note indicating proper destruction, under permit and inspection, of the existing wells and abandonment of sewer lines located within the Improvement Plan area.

The project applicant shall also implement relevant provisions of Mitigation Measures 13-2a and 13-2b.

In response to comment L4-28, the second full paragraph on page 13-73 of the DEIR is revised as follows:

Specific to changes in surface hydrology, this impact would be **less than significant** because the project would not substantially alter the existing drainage pattern or surface water body of a site or area. ~~There is some uncertainty about the ability of the model to accurately represent minimum water levels, as the model calibrations to date have not emphasized matching observed minimums. As a result, the model may underestimate extreme lows. Also, b~~Because 'all wells were modeled' the actual number of future wells could be fewer and the effect more locally severe in the vicinity of some wells than modeled. Modelling of a six-well scenario indicated that even with fewer wells, the water demand could be met and impacts would not be substantially more severe. Further, However, construction and operation of the well system would be implemented by the SVPSD (or other water provider) who would site wells and operate the system in a manner that minimizes groundwater effects and achieves results consistent with the groundwater modelling and WSA. Therefore, if the system is constructed and operated as planned, minimum water level conditions where there is uncertainty in the model accuracy would not occur, and well system development would match WSA performance expectations.

2.3.14 Revisions to Chapter 14, "Public Services and Utilities"

In response to comment L4-32, the first paragraph in Section 14.1.2, "Wastewater," on pages 14-7 and 14-8 of the DEIR is revised as follows:

The SVPSD owns and operates the wastewater collection system that serves Squaw Valley. The SVPSD collection system is comprised of gravity sewer lines and two siphons. The existing SVPSD sewer system serving the plan area consists of a network of private and public minor collector lines, 8 inches or less, serving the previously developed areas. These minor collector lines connect to a number of 10-inch major collector lines, and the wastewater within the major collectors flows into a 15-inch trunk line located primarily along Squaw Valley Road. This 15-inch pipe serves customers within the eastern portion of the Valley as it flows towards SR 89. The current average dry weather flows (ADWF) generated by the plan area are ~~0.632473~~ million gallons per day (MGD) while current peak wet weather flows (PWWF) are ~~0.4505~~ 2.007 MGD (~~MacKay & Soms 2012b~~ Farr West Engineering 2014: 4). On the east side of the highway, the system discharges to the Truckee River Interceptor (TRI), which is maintained by the Tahoe-Truckee Sanitation Agency (T-TSA). The T-TSA is a regional entity that provides wastewater transmission, treatment, and disposal services to the SVPSD as well as the North Tahoe Public Utility District, Tahoe City Public Utility District, Alpine Springs County Water District, Truckee Sanitary District, and Truckee River Canyon area (MacKay & Soms 2012b).

To more accurately describe the remaining capacity of the TRI and in response to comment L5-6, the first full paragraph on page 14-8 of the DEIR is revised as follows:

The 17-mile TRI sewer line transports wastewater flows to the wastewater treatment facility located east of Truckee in the Martis Valley, which is also operated by T-TSA. The capacity of the treatment facility is 9.6 MGD on a seven day dry weather average flow basis and the capacity at the upstream end of the TRI is 6.0 MGD. ~~Both the treatment plant and TRI are operating at approximately 80 percent of capacity. Based on this information, In 2012,~~ the remaining available capacities at the treatment plant and in the TRI ~~are were~~ estimated to be 1.92 MGD and 1.20 MGD, respectively (MacKay & Soms 2012b). Therefore, the treatment plant is operating at approximately 80 percent of capacity. The capacity of the TRI is limited by existing bottlenecks, and T-TSA is currently studying the possibility of upsizing and replacing sections of the TRI.

In response to comment L5-7, the first paragraph under “Impact 14-2: Increased demand for wastewater collection, conveyance, and treatment” on page 14-36 of the DEIR is revised as follows:

The SVPSD owns and operates the wastewater collection system that serves Squaw Valley. The project would connect to existing SVPSD transmission lines. T-TSA would provide wastewater treatment at its existing water reclamation plant, located in Nevada County along the Truckee River, east of the Town of Truckee. The plant, which has a capacity of 9.6 MGD, provides primary and secondary treatment, phosphorus removal, biological nitrogen removal, disinfection, and effluent filtration (T-TSA 2012). The project could generate 0.350 MGD of ADWF and 0.852 of PWWF at buildout (MacKay & Soms 2014d). In 2012, the remaining capacity at the treatment plant is was estimated to be 1.92 MGD. Therefore, the treatment plant has sufficient capacity to serve the project at buildout, even at peak wet weather flows. As of 2012, the treatment plant was operating at 80 percent of capacity (7.68/9.60 MGD) (MacKay & Soms 2012b). The WRP currently has sufficient capacity to serve a development as large as the proposed project. However, capacity allocations for customers and projects in T-TSA’s service areas are made in the order that applications are received. As specific elements of the The project are proposed, they would be required to obtain a Will Serve letter from SVPSD T-TSA and a SVPSD T-TSA representative’s signature shall be provided on the Improvement Plans.

In response to comments L4-34, L5-5, and O12b-2, Mitigation Measure 14-2a on pages 14-36 and 14-37 of the DEIR is revised as follows:

Mitigation Measure 14-2a: Provide sufficient on-site wastewater storage.

In the event that T-TSA finds that project-generated peak wastewater flows may exceed the capacity of the TRI during peak flows, wastewater detention facilities, such as enlarged pipes, vaults, or tanks, shall be incorporated into the Specific Plan to time wastewater flows to off-peak conditions when the TRI has sufficient capacity. These facilities will be located within the plan area and will be underground or otherwise incorporated into project’s development footprint (e.g., incorporated into a building podium). All facilities will be designed and maintained according to applicable design standards such that effluent would be fully contained. The project applicant shall work directly with T-TSA to determine a sufficient volume of detention capacity for the project and to define the methodology for determining when wastewater detention facilities should be used, and timing for releases from these facilities. The capacity of the on-site storage shall only be sufficient to meet the peak capacity needs associated with the project. A SVPSD representative’s signature ~~from T-TSA~~ shall be provided on the Improvement Plans.

In response to comment F2-2, the third paragraph under Impact 14-6 (Increased demand for parks and recreational facilities) on page 14-42 of the DEIR is revised as follows:

The project would create new and expanded public recreational facilities within and outside of the plan area, including: extension of a Class I bicycle trail through the plan area; public trail connections within and outside the plan area; ~~public access to backcountry trails;~~ safety improvements to existing private trails and USFS trails (compaction, erosion control, stepping, obstacle removal); construction of a new trail connection between Granite Chief Trail and Shirley Canyon Trail; a meadowlands interpretive park and stream restoration area; and the physical construction or payment of in-lieu fees for improvements to the Squaw Valley Community Park that may include new flush restrooms, sewer hookup, and/or other amenities. The project would include a network of village pedestrian spaces, trails, and bike paths that would provide enhanced access to existing public amenities, and would include features such as picnic areas, employee recreational areas, interpretive graphics, signage, trailheads, and new restrooms. Improvements to the Granite Chief and Shirley Canyon trailheads, as part of the project, would include parking, signage, and bike parking. ~~A hiking trail and Class I path would be constructed through along frontage of the East Parcel to connect to an existing trail.~~ Improvements to other existing trails, such as the World Cup Trail and Thunder Mountain Trail, at the base of the resort, would include new signage and trail improvements designed to enhance

the visitor experience (safety improvements, as described above). Bike lanes would be provided on all primary roads and a Class I bike path would be provided along Squaw Creek to provide a non-vehicular route with gathering spots, interpretive signage, and informational graphics on restoration areas.

2.3.15 Revisions to Chapter 15, “Hazardous Materials and Hazards”

To provide additional information related to the Emergency Preparedness and Evacuation Plan that is being prepared by the applicant, Impact 15-4 on page 15-19 is revised as follows:

Impact 15-4: Interference with an adopted emergency evacuation plan.

The existing surface parking lots at the Squaw Valley Ski Resort are currently used as the emergency rally point during emergencies, and would continue to be used as such during project construction. In the long-term, the new parking structures on Lots 11 and 12 would serve as the emergency rally point. During project construction and peak operational days, increased traffic congestion along Squaw Valley Road and SR 89 could interfere with the use of these main roadways for emergency evacuation routes. Although this impact would be temporary and intermittent over the 25-year construction period, this impact would nonetheless be **significant**.

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 (Squaw Valley Road), and a single road (SR 89) connects Squaw Valley to adjoining communities. The *Wildland Fire Evacuation Plan* (SVPSD 2014; Appendix J), which applies to all development in Squaw Valley, includes evacuation protocols, 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. The project includes changes to the parking lots, including the construction of podium (second story) parking structures on Lots 11 and 12. During construction, the surface parking lots would continue to be used as the emergency rally point, should evacuation be required. After the parking structures are constructed and opened for use, the emergency rally point would be located at the new parking structures.

The VSVSP is also subject to State and SVFD requirements for managing fuel loads (e.g., dense vegetation) and maintaining “defensible space” within the plan area. These measures would reduce the risk of fire starting or spreading within the plan area.

The applicant is preparing an Emergency Preparedness and Evacuation Plan (EPEP), which will address the potential risks from wildfire, seismic risks, avalanches, and flooding hazards within the plan area, as well as evacuation. The completed EPEP will be submitted to the Board of Supervisors when the Board considers project approval; it will be adopted as part of the VSVSP. The EPEP is intended to provide a coherent road map for which to prepare and guide VSVSP staff in the unlikely event of an emergency. In addition to compliance with State, County, and other local laws and regulations, such as the defensible space and fuel maintenance requirements mentioned above, the EPEP will include:

- ▲ Descriptions of existing conditions pertaining to wildfire, seismic hazards, avalanche, and flooding. A discussion of topography, vegetation, climate, fire history, fire hazard severity zones, and the capabilities of the SVPSD/SVFD and other resources will be provided.
- ▲ On overview of the regulatory requirements that apply to the VSVSP, including such topics as fuel maintenance, defensible space, structural and infrastructure requirements (e.g., fire flow minimums, emergency access road standards), building code requirements, and the County’s ordinances for construction in avalanche zones and flood damage prevention.

- ▲ Emergency planning measures that will be implemented with the VSVSP, including fire prevention measures, wildfire education, measures to protect people and buildings from avalanches, seismic activity and flood damage, and an evacuation plan. The evacuation plan will be designed to integrate with the County’s East Side Emergency Evacuation Plan, which 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. The VSVSP plan will define staff roles and responsibilities, including staff responsible for communicating with emergency service providers, and, in case of evacuation, the County’s incident command, the managers of hotels and other facilities, staff, and guests. Communication protocols will also be included to ensure that staff and guests are provided information about potential emergencies, as well as for notifying staff and guests when there may be a need to take action due to an emergency, up to and including evacuation of the plan area.

In addition, a dedicated emergency helipad would be provided within the main Village area. The helipad would only be used for emergency services. Currently, emergency helicopter landing areas are available on an as-needed basis in parking lots and other open areas on the Valley floor and level areas on the mountain, but these areas are not always available. The proposed helipad is anticipated to be located on a raised structure on the existing Preferred Parking lot (this parking lot is shown on Exhibit 3-8 in Chapter 3, “Project Description”). The helipad design and construction would incorporate a dedicated elevator that could accommodate a medical gurney, proper aeronautical markings, and snow clearing operations. (See Chapter 11, “Noise,” for a discussion of noise impacts from the proposed helipad). Therefore, emergency helicopter access in the main Village area would not be reduced by the proposed project, and could be enhanced by creation of a dedicated helipad.

The project would increase traffic on local roadways associated with construction trips. In addition, temporary lane/road closures associated with project construction could cause or contribute to temporary increases in traffic levels as traffic is detoured or slowed on some local roadways, Squaw Valley Road, and SR 89. Increased traffic congestion along Squaw Valley Road and SR 89 could interfere with the use of these main roadways for emergency evacuation routes. See Chapter 9, “Transportation and Circulation,” for further discussion of traffic-related impacts. This impact would be significant.

2.3.16 Revisions to Chapter 16, “Greenhouse Gases and Climate Change”

In response to the recent California Supreme Court decision, *CBD v CDFW*, and as explained in detail in Section 3.1, “Master Responses,” of this FEIR, the regulatory setting on page 16-4 of the DEIR is revised as follows:

EXECUTIVE ORDER S-3-05

Executive Order S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California’s air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets for the State. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

As described below, legislation was passed in 2006 (Assembly Bill 32) to limit GHG emissions to 1990 levels by 2020 with continued “reductions in emissions” beyond 2020, but no specific additional reductions were enumerated in the legislation. Further, Senate Bill 375 (sustainable community strategies/transportation) established goals for emissions from light duty truck and automobiles for 2020 and 2035.

A recent California Appellate Court decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) Cal.App.4th, further examined the executive order and whether it should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. The case has been accepted for review by the California Supreme Court, and therefore is not currently considered a precedent.

EXECUTIVE ORDER B-30-15

On April 20, 2015 Governor Edmund G. Brown Jr. signed Executive Order B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union which adopted the same target in October 2014. California is on track to meet or exceed the current target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2°C, the warming threshold at which there will likely be major climate disruptions such as super droughts and rising sea levels.

In response to the recent California Supreme Court decision, *CBD v CDFW*, and as explained in detail in Section 3.1, "Master Responses," of this FEIR, the regulatory setting on page 16-6 of the DEIR is revised as follows:

SENATE BILL X1-2, THE CALIFORNIA RENEWABLE ENERGY RESOURCES ACT OF 2011 AND CLEAN ENERGY AIR POLLUTION REDUCTION ACT OF 2015 (SENATE BILL 350)

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond.

SB 350 of 2015 requires all California utilities to generate 50 percent of their total electricity from renewable resources by 2030.

In response to the recent California Supreme Court decision, *CBD v CDFW*, and as explained in detail in Section 3.1, "Master Responses," of this FEIR, the significance criteria on page 16-9 of the DEIR is revised as follows:

PLACER COUNTY

Appendix G of the State CEQA Guidelines indicates that a proposed project would result in a potentially significant impact on climate change if it would:

- ▲ generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- ▲ conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

PCAPCD recently developed the following recommendations for thresholds of significance for evaluating construction- and operation-related GHG emissions for proposed land use development projects in its jurisdiction. These thresholds were developed in collaboration with the Sacramento Metropolitan Air Quality Management District (SMAQMD), the Yolo Solano Air Quality Management District (YSAQMD), and the Feather River Air Quality Management District (FRAQMD) (Green, pers. comm., 2014a). These thresholds are intended to evaluate a project for consistency with GHG targets established in AB 32, particularly for emissions occurring by 2020. The term “no action taken” is used here to reflect conditions, including regulations, in place when GHG reduction targets were established by ARB; ARB evaluated the potential statewide level of GHGs in 2020 if no actions were taken, and determined the level of reduction that would be needed to attain 2020 targets.

- ▲ for the evaluation of construction-related emissions, PCAPCD recommends using the mass emission threshold of 1,100 metric tons of carbon dioxide-equivalent per year (MTCO_{2e}/year);
- ▲ for the evaluation of operational emissions PCAPCD recommends a 2-tier approach:
 - (Tier I) Operational emissions of a project would not have a significant impact on the environment if they are less than 1,100 MTCO_{2e}/year, and
 - (Tier II) Projects with operational emissions that exceed 1,100 MTCO_{2e}/year, but are able to demonstrate a 21.7 percent reduction from a “no action taken” (NAT) scenario compared to the proposed project operating in 2020 would not conflict with ARB’s Scoping Plan.

The Tier II criterion is based on the “business as usual” (BAU) model (BAU is the same as NAT) in the Scoping Plan, which found that GHG emissions statewide would need to be reduced by 21.7 percent compared to their trajectory at that time (in 2011) in order to meet the AB 32 target for 2020, that is, attain 1990 GHG emission levels by 2020. Based on the California Supreme Court case, *Center for Biological Diversity v. California Department of Fish and Wildlife (CBD v CDFW)*, the Tier II criteria (21.7 percent below NAT) may continue to be used if a direct connection can be made between the Scoping Plan model and a project in a specific location. Because this connection has not been established and may not be able to be established for any specific project in California given the statewide nature of the Scoping Plan, SMAQMD no longer recommends using the NAT-based approach as a sole threshold criterion (Green, pers. comm., 2016); Tier II is not considered a significance criterion for this project. For projects with operational emissions that exceed 1,100 MTCO_{2e}/year, but are able to demonstrate a 21.7 percent reduction from the NAT scenario, PCAPCD allows lead agencies discretion about whether an exceedance of the Tier I threshold (i.e., 1,100 MT/year) constitutes a significant impact (Green, pers. comm., 2014a).

For the evaluation of this project, the County ~~bases its significance determination for operational emissions on the two tier method above, but~~ considers that an impact would be significant if the ~~both~~ Tier I and Tier II threshold is exceeded.

~~The County’s impact conclusion is based on the A GHG-efficiency analysis of the proposed project is provided for informational purposes, and is based on full buildout during the state’s current AB 32 target threshold year of 2020, as well as estimation of operational GHG emissions in 2037, which is the projected year for full project buildout. This methodology is explained in further detail below. Because full buildout would not occur until after the 2020 comparison year, this analysis also includes a qualitative discussion of potential GHG impacts in the timeframe beyond 2020, a period for which there is currently no state-adopted GHG emissions reduction target.~~

In response to the recent California Supreme Court decision, *CBD v CDFW*, to update the analysis to more current emissions data, and as explained in detail in Section 3.1, “Master Responses,” of this FEIR, the estimation of GHG emissions (third paragraph on page 16-13 of the DEIR) is revised as follows:

Indirect emissions associated with electricity consumption were calculated based on utility emission factors for Sierra Pacific Resources (doing business as NV Energy) for CO₂, N₂O, and CH₄ as contained in CalEEMod, also factoring in reductions in those emissions attributed to compliance with the Renewable Portfolio Standards requirements for 2020 (33 percent of electricity from renewable sources) and 2030 (50 percent of electricity from renewable sources) and estimates of project-related electricity consumption estimated by the dry utilities study prepared for the Specific Plan (MacKay & Somps 2015:15). The amount of electricity used to operate the ground water wells that would serve the Specific Plan area was estimated based on the volume of water that would be required by the Specific Plan and the average well depth, as determined by the water supply assessment (Farr West Engineering et al. 2014:ES-4; included as Appendix C) and energy intensity factors for well operation published by CEC (CEC 2006:40). Indirect GHG emissions associated with the treatment of wastewater generated by the project were estimated using emission factors from the wastewater module of CalEEMod and the volume of wastewater generation estimated in a sewer report prepared for the Specific Plan (MacKay & Somps 2014:5). Indirect GHG emissions associated with the quantity of solid waste generated by the land uses was estimated using the applicable module in CalEEMod.

In response to the recent California Supreme Court decision, *CBD v CDFW*, to update the analysis to more current emissions data and as explained in detail in Section 3.1, “Master Responses,” of this FEIR, the GHG efficiency analysis (first, second, and third full paragraphs on page 16-14 of the DEIR) is revised as follows:

GREENHOUSE GAS EFFICIENCY ANALYSIS

For this DEIR, a GHG efficiency analysis is conducted to illustrate the GHG efficiency of the project, compared to how similar projects would have performed prior to AB 32 and related GHG targets and regulatory measures were established. This type of analysis, generally accepted prior to CBD v CDFW as a means for determining impact significance, is provided in this FEIR only for the purposes of providing a metric by which Placer County can determine if the project’s generation of GHGs are relatively efficient. The analysis was conducted by estimating emissions for two separate emission scenarios, as previously recommended by PCAPCD (Green, pers. comm., 2014a, 2014b). One is a “no action taken” (NAT) scenario, a hypothetical scenario which estimates operational GHG emissions in 2020 (assuming buildout by that year) without implementation of regulations that were put in place since 2006 to help achieve the statewide GHG reduction goal mandated by AB 32. Regulations that have been put in place under the AB 32 mandate, but not accounted for in the NAT scenario include the Low-Carbon Fuel Standard for transportation fuels; the fuel economy standards of the Advanced Clean Cars regulation that result in new vehicles being increasingly more GHG-efficient; the renewable electricity standard which requires California utilities to generate 33 percent of their electricity from renewables by 2020; and the California Building Efficiency Standards (Title 24, Section 6) that result in increased efficiency in heating and cooling of buildings. The other scenario, referred to in this DEIR as the full-buildout 2020 scenario, estimates operational GHG emissions with implementation of these regulations if the project were built out and became fully operational in 2020. This scenario is also hypothetical because full buildout of the Specific Plan would occur no sooner than 2037. The 2020 analysis year is used to compare these two scenarios because 2020 is the target year for achieving the GHG reduction goal identified by AB 32. As described in Section 16.2.2, “State,” of the Regulatory Setting above, AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. However, in recognition of these unrealistic buildout assumptions, this EIR also examines what may occur beyond 2020, including a discussion of GHG reduction targets that may be established by ARB and/or the California State Legislature beyond 2020, what specific regulations may be developed to achieve those targets, and the ability and likelihood the project would comply with those regulations to meet those targets.

The purpose of the efficiency analysis is to determine whether the full-buildout 2020 scenario is at least 21.7 percent more GHG efficient than the NAT scenario. An efficiency target of 21.7 percent is used because, as explained in Section 16.2.2, “State,” of the Regulatory Setting, above, ARB

calculated that a reduction of 21.7 percent from 2020 NAT emissions is needed for California to reach 1990 emission levels (ARB 2011). This should not be implied to mean that a 21.7 percent reduction in GHG emissions compared to 2020 NAT is not significant; rather, it is only intended to reflect if the project is as efficient as the state, as a whole, is expected to be in order to attain AB 32 requirements. In reality, new projects, such as this project, may need to perform more efficiently than the state, as a whole, in order for such projects to help the state attain its goals. This is because new projects may be more capable of being GHG-efficient than existing development in the statewide economy, wherein the existing development could require significant modifications to hit efficiency targets. There are no current mechanisms available to determine the level of GHG-efficiency needed on a single project in order to determine if it fits within the State’s Scoping Plan targets.

Refer to Appendix H G of this DEIR FEIR for a detailed description of all calculations, model runs, and assumptions used to support the efficiency analysis.

In response to DEIR comments regarding GHG emissions associated with the upgrade to the existing approximately 1.87-mile-long sewer line between the existing Village and SR 89 (see the Master Response regarding construction emissions), Table 16-1 on page 16-15 of the DEIR is revised as follows to include these GHG emissions:

Table 16-1 Summary of Maximum Annual GHG Emissions Associated with Project Construction Activities

Construction Activity	MT CO _{2e} /year
<u>Village and East Parcel</u>	
Demolition	59
Site Preparation	56
Grading	87
Paving	33
Building Construction	624
Architectural Coatings	81
<u>Upgrade to Utility Line Connection</u>	<u>95</u>
Total Maximum Annual Emissions	940 1,036
PCAPCD Tier I Threshold of Significance	1,100

Notes: Modeled values represent maximum GHG emissions that could occur if up to 20 percent of the land uses are under construction during any single year. See Appendix H for detail on model inputs, assumptions, and project specific modeling parameters.
 MT CO_{2e}/year = metric tons of carbon dioxide-equivalent per year, PCAPCD = Placer County Air Pollution Control District
 Source: Modeling conducted by Ascent Environmental in 2014 2015

In response to the recent California Supreme Court decision, *CBD v CDFW*, to update the analysis to more current emissions data and as explained in detail in Section 3.1, “Master Responses,” of this FEIR, Impact 16-2 on pages 16-15 through 16-18 of the DEIR is revised as follows:

IMPACT 16-2: OPERATIONAL GREENHOUSE GAS EMISSIONS.

GHGs associated with operation of the Specific Plan would exceed the Tier I mass-emission threshold of 1,100 MT CO_{2e}/year; however, operational GHGs would not exceed the GHG efficiency based Tier II threshold recommended by PCAPCD for 2020. Nevertheless, GHG emissions would be substantial and may be less efficient than needed to achieve GHG reduction targets that could be in place after 2020, when the project is completed. Therefore, operation of the Specific Plan has the potential to result in a substantial contribution to GHG emissions. This impact would be **potentially significant**.

Operation of the facilities developed under the Specific Plan would result in GHG emissions associated with motor vehicle trips to and from the Specific Plan area, the combustion of propane for space and water heating, the consumption of electricity and water, the generation of wastewater and solid waste, and equipment used for landscaping and snow removal. The removal of vegetation would also result in the loss of sequestered carbon. Table 16-2 summarizes all the direct and indirect sources of GHG emissions associated with the Specific Plan upon full buildout in 2037. The emissions estimates are based on the application of existing regulations pertaining to vehicle emissions, building standards, and electricity generation.

The analysis is updated from the DEIR to reflect more precise calculations of electricity consumption for the project based on three years of data, the protocol recommended by ARB, rather than a single year as used in the DEIR. The RPS (33 percent use of renewables in 2020) were not assumed in the DEIR because the utility serving the project was undergoing ownership transition, and it was unknown whether some or all of the electricity would be sourced from California. As described in Appendix G1 of this document (see footnote 5 of the RPS table), Liberty Utilities purchased the electricity supplier to the project in 2012, and will meet RPS standards. Therefore, GHG reductions of 33 percent (2020) and 50 percent (2030 and after) can be applied to the electricity-related indirect GHG emissions associated with the project. This is explained further below.

Table 16-2 Summary of Annual Greenhouse Gas Emissions Associated with the Specific Plan at Full Buildout in 2037

Emissions Activity	MT CO ₂ e/year
Vehicle Trips (mobile sources)	14,241
Propane Combustion	19,732
Electricity Consumption ²	10,941 4,514
Water Consumption	25
Wastewater Treatment	147
Solid Waste Generation	92
Landscaping Equipment	10
Snow Removal Equipment	56
Construction ¹	118
Loss in Carbon Sequestration from Vegetation Removal ¹	40
Total Maximum Yearly Emissions	45,403 38,975
PCAPCD's Tier 1 Threshold of Significance	1,100

Notes: See Appendix H of the DEIR for detail on model inputs, assumptions, and project specific modeling parameters, with the electricity consumption modified to reflect RPS standards (see Appendix G of this document).

MT CO₂e/year = metric tons of carbon dioxide-equivalent per year

¹ Construction emissions and the loss in sequestered carbon from removed vegetation are amortized over an estimated 25-year build out period of the Specific Plan.

² The electricity emission factor uses the 2006 through 2008 average non-renewable emissions from Sierra Pacific Company, with the application of 50% renewables due to the Renewable Portfolio Standard goal for 2030. Three-year average based on ARB guidance for 2020 Business-as-Usual (BAU) projections: <http://www.arb.ca.gov/cc/inventory/data/bau.htm>.

Source: Modeling conducted by Ascent Environmental in 2014 and Ramboll in 2016

As shown in Table 16-2, upon full buildout, GHG emissions associated with operation of the proposed project would exceed the Tier I mass emission threshold of 1,100 MT CO₂e/year, which is a significant impact. Therefore, To help characterize the nature of the impact, this analysis evaluates

the GHG efficiency in which the proposed project would operate compared to the NAT scenario in 2020 (Tier II). Table 16-3 summarizes the results of emissions estimates for both scenarios.

As shown in Table 16-3, emissions from many sources would be less under the full-buildout scenario than the NAT scenario due to the GHG regulations under the AB 32 mandate that would decrease operational GHG emissions. Emissions from project-related vehicle trips would be less in the full-buildout scenario due to implementation of regulations governing vehicle emission standards for GHGs, including the GHG vehicle standards in Advanced Clean Cars and the Low-Carbon Fuel Standard. Approximately 25 percent less propane would be needed for space and water heating and 25 to 30 percent less electricity would be needed to power appliances and lighting in the full-buildout scenario due to implementation of the California Building Efficiency Standards (Title 24, Section 6) (Green, pers. comm. 2014b). It is noted that the emissions in 2020 full-buildout scenario are slightly higher than estimated for full buildout in 2037, although the same GHG reduction regulatory standards are applied. This is because a certain percentage of older vehicles projected to be on the road in 2020 would be replaced by newer vehicles over time that better meet emissions standards and have higher gas mileage, resulting in less GHG emissions from the overall vehicle fleet in later years, and the RPS requirements for electricity increase from 33 to 50 percent.

Overall, the total GHG emissions under the full-buildout scenario in 2020 would be approximately ~~25~~ 29 percent less than the NAT scenario. This level of GHG efficiency is viewed in light of the overall Scoping Plan goals of a 21.7 percent reduction needed for the state, compared to NAT. Thus, the project appears to be relatively GHG-efficient, although the emissions substantially exceed the 1,100 MT CO₂e/year threshold of significance. Therefore, GHG emissions associated with operation of the proposed project would not conflict with ARB's Scoping Plan for 2020 targets.

Table 16-3 Summary of Annual Greenhouse Gas Emissions Associated with the No Action Taken (NAT) and Full-Buildout Scenarios in 2020 (MT CO₂e/year)

Emissions Activity	No Action Taken Scenario	Full-Buildout 2020 Scenario
Vehicle Trips (mobile sources) ¹	21,004	15,832
Propane Combustion ²	26,309	19,732
Electricity Consumption ^{2,3}	14,588 <u>11,175</u>	10,941 <u>6,042</u>
Water Consumption ⁴	25	25
Wastewater Treatment ⁵	147	147
Solid Waste Generation ⁵	92	92
Landscaping Equipment ⁵	10	10
Snow Removal Equipment ⁵	56	56
Construction ⁶	118	118
Loss in Carbon Sequestration from Vegetation Removal ⁶	40	40
Total Maximum Yearly Emissions	62,931 <u>58,976</u>	46,994 <u>42,094</u>
Percent Less than Building-As-Usual Scenario	—	25.3% <u>28.6%</u>

Notes: See Appendix H for detail on model inputs, assumptions, and project specific modeling parameters.

MT CO₂e/year = metric tons of carbon dioxide-equivalent per year

¹ Emissions from vehicle trips would be less in the full-buildout scenario due to implementation of regulations governing vehicle emission standards for GHGs, including the vehicle emission standards from Advanced Clean Cars and the Low-Carbon Fuel Standard. These regulations provide increasingly stringent emission standards over time.

² In the full-buildout scenario, consumption of both propane for space and water heating and electricity for powering appliances and lighting would be approximately 25 percent less due to implementation of the California Building Efficiency Standards (Title 24, Section 6) (Green, pers. comm. 2014b).

³ Emissions associated with electricity consumption would be lower in the full-buildout scenario due to implementation of renewable requirements in the electric power generation industry; however, this reduction is not accounted for in this analysis because complete information about the GHG intensity factors (historical and projected) for the local utility, California Pacific Electric Company (CalPeco), are not available. CalPeco became the electric service

Table 16-3 Summary of Annual Greenhouse Gas Emissions Associated with the No Action Taken (NAT) and Full-Buildout Scenarios in 2020 (MT CO₂e/year)

provider to Olympic Valley in 2011 after it acquired assets from Sierra Pacific Power Company (Liberty Energy 2010). For both scenarios, emissions associated with electricity consumption were estimated using the GHG intensity factor for Sierra Pacific Company for 2008 in CalEEMod. The electricity emission factor for the NAT scenario uses the 2006 through 2008 average emission factor from Sierra Pacific Company (dba NV Energy), which was the electric service provider to Olympic Valley until 2010. Information about GHG intensity factors (historical and projected) for the local utility, California Pacific Electric Company (CalPeco), are not available. For the Full-Buildout 2020 scenario, the average non-renewable emissions were used with the application of 33% renewables due to the Renewable Portfolio Standard requirement for 2020.

- ⁴ Emissions associated with water consumption would not differ among the two scenarios because the level of water consumption is ultimately determined by the limited supply of groundwater in Olympic Valley as discussed in the water supply assessment (Farr West Engineering et al. 2014), and water conservation measures would be implemented under both the NAT and full-buildout scenarios.
- ⁵ No substantial difference would be expected in emissions associated with wastewater treatment, the generation of solid waste, landscaping and snow removal activities, construction, or the loss in carbon sequestration associated with removal of vegetation during construction.
- ⁶ Construction emissions and the loss in sequestered carbon from removed vegetation are amortized over an estimated 40-year operational life of the Specific Plan.

Source: Modeling conducted by Ascent Environmental in 2015

Post 2020 Considerations

As described in Section 16.2.2, ARB is working toward recommending goals that extend beyond 2020 and, further, Executive Order SB-3-05 set a target of reducing emissions to 80 percent below 1990 levels by 2050 and Executive Order B-30-15 set and interim (before 2050) target to reduce emissions 40 percent below 1990 levels by 2030. New legislation is proposed to establish post-2020 goals, but no action on the legislation has been taken as of this writing (~~May 2015~~ March 2016). While project design and specific plan policy implementation contribute to reducing potential GHG emissions from the project, achievement of future GHG efficiency standards is largely dependent on regulatory controls applied to all sectors of the California economy. As stated above in the summary of the updated Scoping Plan and repeated here:

California will develop a mid-term target to frame the next suite of emission reduction measures and ensure continued progress toward scientifically based targets. This target should be consistent with the level of reduction needed [by 2050] in the developed world to stabilize warming at 2 °C (3.6 °F) [above pre-industrial levels] and align with targets and commitments elsewhere. The European Union has adopted an emissions reduction target of 40 percent below 1990 levels by 2030. The United Kingdom has committed to reduce its emissions by 50 percent below 1990 levels within the 2022–2027 timeframe, and Germany has set its own 2030 emissions target of 55 percent below 1990 levels. The United States, in support of the Copenhagen Accord, pledged emission reductions of 42 percent below 2005 levels in 2030 (which, for California, translates to 35 percent below 1990 levels).

This level of reduction is achievable in California. **In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050.** Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions (ARB 2014b:34, **emphasis added**).

Thus, the ability of this project—and all land use development—to achieve any goals beyond 2020 is partially out of the control of the project and its developer. First, a specific goal has not been established, beyond the Executive Order Goal of 80 percent below 1990 GHG levels by 2050. ARB has stated in its Update, cited above, that additional “mid-term” targets (such as when this project is expected to buildout) must still be established, and it would be speculative to do so for this DEIR.

There is a question as to whether the SACOG MTP/SCS, which establishes GHG emissions goals for automobiles and light duty trucks for 2020 and 2035, establishes an overall GHG target for the project past 2020. As previously described, SACOG was tasked by ARB to achieve a 9 percent per capita reduction compared to 2012 vehicle emissions by 2020 and a 16 percent per capita reduction by 2035, which ARB confirmed the region would achieve by implementing its SCS (ARB 2013). However, this target cannot be directly translated to an overall threshold, given it only concerns GHG emissions from transportation. The project area, including the project site, is shown in the SCS as “Lands Not Identified for Development” in the SCS planning period (through 2035). While the MTP/SCS acknowledges it cannot predict land use on a parcel-by-parcel basis throughout the SACOG region, the project is apparently not included in the SCS growth predictions. If development follows the trends and predictions for growth in the SCS for the SAGOC region over the next 20 years, development at the project site would be additional to SCS assumptions.

The project would produce substantial levels of GHG emissions. Implementation of Mitigation Measure 10-2, which requires construction and operation of land uses and facilities developed under the Specific Plan to not generate emission of ozone precursors that exceed PCAPCD’s mass emission thresholds, would likely have the co-benefit of reducing project-related GHG emissions as well. Also, as previously stated, the Specific Plan contains many policies that, if strictly implemented, would result in additional GHG reductions, including the requirement that a minimum of 25 percent of new shuttle services within the Olympic Valley will use alternative fuels (Policy CP-5), that individual buildings would be designed to a level equivalent to at least the Silver rating of the U.S. Green Building Council’s Leadership in Energy & Environmental Design (LEED) certification program or other comparable rating, and other actions are taken to reduce GHG emissions (Policies CC-13 and CC-15). The efficacy of the Specific Plan policies cannot be predicted, in large part because several are not mandatory (in some instances, actions are “encouraged,” “should” be implemented, would be implemented “if feasible,” etc.). The implementation of these policies, as well as Mitigation Measure 10-2, would result in additional GHG efficiency beyond what is shown in Table 16-3. ~~While the proposed project would meet the GHG efficiency standard tied to the current 2020 statewide GHG emissions target,~~ This DEIR cannot determine if the project would meet future thresholds that have not been established because it would be purely speculative to do so.

Therefore, the ability of the project to meet GHG targets beyond 2020 is unknown, and cannot be known because these targets have not been established and, further, attainment would at least be partially reliant on potential new regulations that would be adopted in the future, as well, potentially, on the degree to which Cap-and-Trade regulations are assumed by ARB to already reduce GHG emissions subject to the program (gasoline/other fuel, propane, electricity) on a project-by project basis. It is unlikely that the project could meet long-term GHG efficiency aspirations, such as those expressed in EO-3-05 (80 percent below 1990 GHG levels in 2050) without substantial statewide regulations, such as those that may result in more electric vehicles in the fleet mix, more stringent energy efficiency standards for buildings, higher Cap-and-Trade reduction requirements, and an increase in the generation of renewable electricity. In addition, the project would generate emissions well above PCAPCD’s current Tier 1 level. Because the project would generate substantial GHG emissions, and because it is not known if the project would be consistent with future GHG reduction targets, the impact would be **potentially significant**.

In response to the recent California Supreme Court decision, *CBD v CDFW*, to update the analysis to more current emissions data and as explained in detail in Section 3.1, “Master Responses,” of this FEIR, Mitigation Measure 16-2 on page 16-19 of the DEIR is revised as follows:

Mitigation Measure 16-2: Implement ongoing operational greenhouse gas review and reduction program.

The state legislature or Governor’s Office may establish new GHG targets or other programs or metrics that apply ~~for the period~~ both before and after 2020, as discussed in the *First Update to the Climate Change Scoping Plan*, released by ARB in May 2014 (and discussed above in Section 16.2.2) and in

response to *CBD v CDFW* as it relates to connecting Scoping Plan targets to individual projects. Any projects processed by the County after 2020 will be required to reduce, to the extent needed and feasible, GHG emissions such that the project operates within the targets or adopted plan established at the time the project is submitted for approval, as explained below.

The County shall require the following actions for all subdivision maps submitted for approval ~~after December 31, 2020:~~

- ▲ In consultation with the PCAPCD and Placer County, the applicant shall demonstrate, based on currently adopted regulations and industry-accepted GHG calculation methods, whether operation of the subdivision would be consistent with GHG targets adopted by the State. “Adopted” means that a specific GHG reduction target, such as is currently specified in the Global Warming Solutions Act of 2006 (achieve 1990 levels by 2020), is required by state legislative action, state administrative action, by legislative action of Placer County, or an applicable qualified Climate Action Plan or similar GHG reduction plan approved by Placer County. The target or plan shall be based on a substantiated linkage between the project (or Placer County projects in general if a countywide qualified GHG reduction plan is approved) and statewide GHG reduction goals. ~~“Within GHG targets” means that the subdivision, using methods such as a comparison between No Action Taken and the subdivision as proposed scenarios, would achieve or exceed the target.~~
- ▲ If the subdivision achieves or exceeds the reduction target or plan, no further actions shall be required.
- ▲ If the subdivision does not meet the target, then measures shall be incorporated into the subdivision to reduce GHG emissions to the target or plan level and to the extent, if it is feasible to do so. Emissions reductions provided by these measures shall be calculated to determine if targets can be achieved. These measures may include any combination of GHG reduction actions needed to achieve the target, including:
 - Actions included in Mitigation Measure 10-2 that also reduce GHG emissions (menu of options to reduce ROG and NO_x emissions to a specified level such as trip reduction and energy management; nearly all of these measures would similarly reduce GHG emissions);
 - Actions specified in Specific Plan Section 7.6, “Climate Change Initiatives,” but with mandated actions (instead of “should” or “encourage” the actions, use “shall”), such as requiring that all buildings exceed Title 24 energy-efficiency requirements by 15 percent; requiring incorporation of on-site renewable energy production to meet at least 25 percent of the subdivision’s electricity needs.
 - Payment of GHG offset fees to an ARB-approved GHG reduction program. Project applicant will consent to any GHG reduction fees that may be applicable after January 1, 2020.

Significance after Mitigation

Appendix G of this document provides a toolbox of GHG reduction measures, based on this mitigation measure, with potential effectiveness of each. The reduction measures are based on the policies in the VSVSP, and additional measures, and include:

- ▲ Installing solar panels on rooftops
- ▲ Installing Energy Star® appliances instead of conventional appliances
- ▲ Third party HVAC commissioning of non-residential buildings
- ▲ Replacing low-efficacy street or building lighting with LED lighting
- ▲ Exceeding Title 24 Building Energy Efficiency Standards
- ▲ Reducing the number of propane hearths
- ▲ Adding insulating covers on all pools and spas
- ▲ Installing electric vehicle charging stations for visitors

- ▲ Replacing diesel or gasoline transit buses with electric transit buses
- ▲ Planting additional trees

A careful analysis was conducted in Appendix G of this document, and it was prepared to ensure that GHG reduction potential of these various measures, especially those with potential co-benefits, was not double counted, nor was additional credit taken for GHG reductions that would result from various regulatory actions already considered in Tables 16-2 and 16-3. As shown in Appendix G, GHG reductions from employing these and other measures could reduce GHG emissions by as much as 5,627 MT CO₂e/year in 2020 (under the “2020 buildout” scenario) and 5,097 MT CO₂e/year in 2037. The 2020 reduction of 5,627 MT CO₂e/year from the projected (Table 16-3) generation of 42,094 MT CO₂e/year would result in net GHG emissions of 36,467 MT CO₂e/year after mitigation. Compared to the NAT of 58,976 MT CO₂e/year, this results in a mitigated GHG efficiency of 38 percent below the 2020 NAT scenario. For the reasons stated previously, it is not possible to link this project-specific reduction to the statewide goal of 21.7 percent below NAT in the Scoping Plan, but it is also difficult to argue that this project conflicts with Scoping Plan targets and policies.

~~As stated above, the proposed project would achieve a reduction in greenhouse gas emissions of 24.7 percent by 2020, which would be a less than significant impact. However Given the current date and timing for potential project approval (mid 2016) and the 25 year project buildout, it is doubtful that much of the project would be constructed prior to 2020. It is not known whether the proposed project would achieve threshold targets identified for the years after 2020, because such targets do not yet exist and it would be speculative to assume what they might be and/or what regulations will be in place to help achieve them. Implementation of Mitigation Measure 16-2 would reduce GHG emissions associated with subsequent project subdivisions proposed after 2020. However, important factors are not currently known: the GHG emissions target in effect at the time that subdivisions are submitted after 2020; the effectiveness of regulatory actions already adopted as part of the implementation of the Global Warming Solutions Act of 2006; consideration by ARB as to whether Cap-and-Trade regulations already mitigate the emissions associated with regulated sources (fuel, electricity), and the potential for application of new regulations and their effectiveness. Further, the cost and feasibility of certain policies that would be mandated as mitigation are not known. Therefore, it would be speculative to determine that GHG impacts, if they were to occur, would be feasibly mitigated to adopted GHG target levels beyond 2020. Further, unless Cap-and-Trade regulated sources are considered already mitigated by ARB, the project could not feasibly reduce emissions to below the 1,100 MT CO₂e/year mass emission threshold established by PCAPCD (see discussion above regarding the mitigation toolbox). For this reason, and because the project would emit a substantial level of GHG emissions, the residual impact is **potentially significant and unavoidable**.~~

2.3.17 Revisions to Chapter 17, “Alternatives”

Due to a changed and improved condition since publication of the DEIR, Impact 9-3 is no longer a significant and unavoidable impact (see Revisions to Chapter 9, “Transportation and Circulation,” above). Therefore, as shown below, has been removed from the summary discussion of the transportation and circulation impacts associated with the Reduced Density Alternative on page 17-29 of the DEIR as follows:

Overall, traffic impacts would be less under this alternative; however, impacts would remain great enough that most, if not all of the mitigation measures required for the proposed project would likely also be required for this alternative. In addition, significant and unavoidable impacts identified for the proposed project (Impacts 9-2, ~~9-3~~, 9-4, and 9-5) would remain significant and unavoidable under this alternative. (Less)

2.3.18 Revisions to Chapter 18, “Other CEQA Sections”

To provide clarification to this issue and in response to comment 09-296, the last paragraph in Section 18.1.3, “Cumulative Impact Analysis,” on page 18-7 of the DEIR is revised as follows:

18.1.3 Cumulative Impact Analysis

For purposes of this EIR, the project would result in a significant cumulative effect if:

- ▲ the cumulative effects of related projects (past, current, and probable future projects) are not significant and the incremental impact of implementing the VSVSP project is substantial enough, when added to the cumulative effects of related projects, to result in a new cumulatively significant impact; or
- ▲ the cumulative effects of related projects (past, current, and probable future projects) are already significant and implementation of the VSVSP project makes a considerable contribution to the effect. The standards used herein to determine a considerable contribution are that either the impact must be substantial or must exceed an established threshold of significance.

This cumulative analysis assumes that all mitigation measures identified in chapters 4 through 16 to mitigate project impacts are adopted. The analysis herein analyzes if the project, in combination with other related development, would result in a cumulatively significant effect before mitigation, and whether, after adoption of project-specific mitigation, the residual impacts of the project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects. Where the project would so contribute, additional mitigation is recommended where feasible.

In response to comment 08b-46, the discussion under Impact 18-6 on page 18-10 of the DEIR is revised as follows to clarify the combined effects of the contribution of other projects and the Specific Plan:

Impact 18-6: Cumulative effects on sensitive habitats.

Implementing the proposed project would result in removal and disturbance of the following sensitive habitat types: riparian, meadow, seasonal wetland, and stream corridors. Decades of growth and development, Comstock-era logging, hydrologic modification, livestock grazing, and fire suppression activities in the Tahoe-Truckee region have resulted in an overall significant cumulative effect on these sensitive habitat types. It is estimated that 75 percent of marsh habitat and 50 percent of meadow habitats in the Tahoe Basin have suffered some level of functional degradation since 1900 (USDA 2001). Current development projects outlined in Table 18-2 could further contribute to losses of these sensitive habitats in the Sierra Nevada and the Tahoe-Truckee region. Developments such as those in Truckee, Alpine Meadows, and North Star could permanently degrade or remove existing riparian and meadow areas. Development projects could either remove habitat or degrade it through long-term impacts from changes in hydrology or invasive species brought in by human traffic; such a changes species composition. Considering only past and present projects, a significant cumulative impact has occurred in the region.

Specific Plan impacts on sensitive habitats would be permanent (resulting from direct removal and disturbance of sensitive habitats) and temporary (resulting from Squaw Creek restoration). Construction related impacts would remove and/or disturb sensitive habitat vegetation for development, while Squaw Creek restoration impacts would temporarily remove vegetation, and then, over the long term and with Mitigation Measures 6-1a through 6-1d, increase meadow, stream, and riparian habitat within the Squaw Creek watershed and the surrounding area. Construction activities would be required to comply with existing federal, state, and local regulations and

permitting requirements that protect wetland, riparian, and other sensitive habitats. Conservation of creek, riparian, wetland, and wet meadow habitats within the plan area would occur within identified Conservation Preserves as outlined in the Specific Plan. Mitigation Measures 6-1a through 6-1d would ensure that project impacts on sensitive habitats are reduced to a less-than-significant level because these measures would ensure that the Specific Plan results in no net loss of sensitive habitats in the Sierra Nevada and the Tahoe-Truckee region (defined as jurisdictional wetlands, wet meadows, and riparian vegetation, and waters of the United States and waters of the state, as well as non-jurisdictional features considered sensitive by the County).

Future projects as detailed in Table 18-2 would be subject to similar mitigation requirements which would avoid, minimize, and mitigate for sensitive habitats in the Sierra Nevada bioregion. Climate change effects throughout the Tahoe-Truckee region could result in increased average temperatures, altered growing season timing and length, and altered timing and form of precipitation. This could in turn increase water stress on plants, shift plant species composition, increase invasive plant populations, increase fire probability and intensity, and increase flooding and erosive event (Stillwater Sciences 2012, Sierra Nevada Alliance 2010). Many Sierran meadows are dependent on snowmelt. A reduction in available spring snowpack, along with increased evaporative demand due to higher temperatures, could result in moist meadows converting to drier systems (drier meadow or upland). The loss or degradation of sensitive habitats from project-related groundwater reduction could be intensified by climate change effects in the future. However, given the uncertainties regarding the timing, form, and intensity of climate change effects, particularly at a localized or regional level, it would require significant speculation to make any detailed predictions regarding responses of biological systems to climate change effects. However, mitigation measures to ensure project specific impacts are addressed, including long-term monitoring of wetland and riparian areas potentially affected by operational groundwater reductions along Squaw Creek (the monitoring period extends at least 5 years after full project buildout, or at least an estimated 30-years into the future) and corrective actions if adverse effects are observed, would capture and address potential future climate change effects.

Based on the no net loss standard required by state and federal laws as well as County policies, and mitigation measures included in the is DEIR, the Specific Plan would not contribute considerably to the overall significant cumulative effect on sensitive habitats in the Tahoe-Truckee Region. This cumulative impact would be **less than significant**.

To provide clarification, Mitigation Measure 18-20 on pages 18-23 and 18-24 of the DEIR is revised as follows:

Mitigation Measure 18-20: Implement Mitigation Measures 9-2a through 9-2d.

Implementation of Mitigation Measures 9-2a through 9-2d, which include conducting traffic management along Squaw Valley Road, would reduce this cumulative impact to a **less-than-significant** level because operations would be restored to acceptable levels. The traffic management procedures recommended for the Squaw Valley Road/Wayne Road and Squaw Valley Road/Squaw Creek Road intersections were analyzed to determine how the LOS would change. With the use of traffic management personnel, they would each operate similar to a two-phased signalized intersection. Traffic conditions would be improved at the Squaw Valley Road/Far East Road/Christy Hill Road intersection by restricting turning movements on Far East Road during peak periods. Based on the cumulative plus project traffic volumes and anticipated right-of-way allocations, these intersections would operate at LOS C or better with traffic management.

To correct an error (significant impacts were not bolded as they should be), Table 18-6 on page 18-28 of the DEIR is revised as follows:

Table 18-6 State Highway Segment Level of Service – Cumulative Conditions

Segment ¹	LOS Standard	Cumulative No Project Conditions									Cumulative Plus Project Conditions								
		Winter Saturday a.m. Peak Hour			Winter Sunday p.m. Peak Hour			Summer Friday p.m. Peak Hour			Winter Saturday a.m. Peak Hour			Winter Sunday p.m. Peak Hour			Summer Friday p.m. Peak Hour		
		Peak Direction & Volume (veh/hr)	V/C/ Avg. Speed	LOS	Peak Direction & Volume (veh/hr)	V/C/ Avg. Speed	LOS	Peak Direction & Volume (veh/hr)	V/C/ Avg. Speed	LOS	Peak Direction & Volume (veh/hr)	V/C/ Avg. Speed	LOS	Peak Direction & Volume (veh/hr)	V/C/ Avg. Speed	LOS	Peak Direction & Volume (veh/hr)	V/C/ Avg. Speed	LOS
SR 89 south of Deerfield Dr	F / D ²	SB 950	0.59 30.1	E	NB 1460	0.95 25.3	E	NB 830	0.51 29.1	E	SB 1005	0.62 29.5	E	NB 1558	1.02 24.4	F	NB 991	0.61 26.7	E
SR 89 between West River St and Squaw Valley Rd	E	SB 1200	0.75 44.5	E	NB 1550	1.02 41	F	NB 830	0.52 45.1	E	SB 1259	0.78 43.9	E	NB 1656	1.09 40	F	NB 1014	0.64 42.5	E
SR 89 between Squaw Valley Rd and Alpine Meadows Rd	E	NB 770	0.51 36.2	E	NB 761	0.51 36.6	E	NB 801	0.51 35.3	E	NB 803	0.53 35.9	E	NB 771	0.51 36	E	SB 928	0.59 33.5	E
SR 89 between Alpine Meadows Rd and SR 28	E	NB 1050	0.65 35.3	E	SB 910	0.57 34.9	E	SB 820	0.52 33.6	E	NB 1087	0.68 34.9	E	SB 962	0.60 34.5	E	SB 952	0.60 31.8	E
SR 89 south of SR 28	E	NB 840	0.55 N/A ³	E	SB 620	0.43 N/A ³	D	SB 990	0.61 N/A ³	E	NB 847	0.55 N/A ³	E	SB 634	0.44 N/A ³	D	SB 1036	0.64 N/A ³	E
SR 28 east of SR 89 ⁴	D	Both 1430	0.87 N/A	E	Both 1410	0.86 N/A	D	Both 1750	0.98 N/A	E	Both 1463	0.89 N/A	E	Both 1454	0.89 N/A	D	Both 1910	1.07 N/A	F

Notes: N/A = not applicable; LOS = level of service; NB = northbound; SB = southbound; vph = vehicles per hour. This table replaces percent time spent following (PTSF) in favor of V/C (Volume to Capacity) ratio for purposes of impact identification. **Bolded** cells represent significant impacts.

¹ Refer to Section 9.1.7, "Level of Service," for description of facility types and analysis methods.

² LOS F applies as the LOS standard for winter conditions, while LOS D applies as LOS standard for summer Friday conditions.

³ Average travel speed not applicable for Class II two-lane highways.

⁴ Segment analyzed using Chapter 16 (Urban Street Facilities) of the HCM (Transportation Research Board 2010) with LOS traffic volumes thresholds in DEIR Table 9-7.

Source: Appendix G

In response to comment L2-2, Impact 18-26 on pages 18-30 and 18-31 of the DEIR is revised as follows with respect to PCAPCD's thresholds:

Impact 18-26: Cumulative emissions of ozone precursors.

The nonattainment designation of Placer County with respect to ozone is the result of the emissions of ozone precursors, reactive organic gasses (ROG), and oxides of nitrogen (NO_x), generated by cumulative development projects in the region, as well as from transport of these same pollutants from outside the region. When all sources of ROG and NO_x throughout the region are combined they can result in a severe ozone problem, as expressed by the nonattainment status with respect to the California Ambient Air Quality Standards (CAAQS) and/or National Ambient Air Quality Standards (NAAQS) for ozone, which is considered to be a significant cumulative impact.

In its *CEQA Air Quality Handbook*, which has not been formally adopted by its Board of Directors, the Placer County Air Pollution Control District (PCAPCD) offers mixed guidance about how to determine whether an individual project's emissions of ozone precursors are cumulatively significant. On the one hand, PCAPCD recommends the use of 10 pounds per day (lb/day) as the cumulative level at which a project should mitigate for impact threshold for evaluating operational emissions of ROG and NO_x (PCAPCD 2012:2-3). PCAPCD's recommendation to use 10 lb/day is based on its New Source Review rule (Rule 502) that applies to stationary sources and requires Best Available Control Technology (BACT) to be implemented on any stationary source that emits more than 10 lb/day of ROG and NO_x (PCAPCD 2012:2-3 and 2-4). On this basis, PCAPCD recommends that any project that emits more than 10 lb/day should implement mitigation measures to reduce cumulative impacts (PCAPCD 2012:2-4). On the other hand, also in its CEQA guide, PCAPCD states that it

does not recommend the use of this cumulative threshold to determine the need for an EIR. Rather, this threshold is used by [PCAPCD] to recommend mitigation measures to offset the project's cumulative air quality impacts. Local governments acting as lead agencies have the responsibility to determine the type of environmental document that should be prepared and should determine when a project's impacts, even after complying with the [PCAPCD's] offsite and/or fee programs, are potentially significant as defined under CEQA. (PCAPCD 2012:2-4).

PCAPCD provides no guidance about what level of mitigation is sufficient for a land use development project that exceeds 10 lb/day or whether a project that reduces its emissions to less than 82 lbs/day would result in a cumulatively considerable contribution to the nonattainment ozone status of the region. PCAPCD leaves decisions on this matter to the discretion of the lead agency (PCAPCD 2012:1-3 and 1-4). (Furthermore, PCAPCD's guide does not include any discussion about cumulative emissions from construction activity.)

For this analysis, the County exercises this discretion and employs the approach recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and presented in its *CEQA Guide to Air Quality* (SMAQMD 2014). This guidance is the same as employed among air districts throughout California, including the Bay Area Air Quality Management District and the San Joaquin Valley Air Pollution Control District. Like these other districts, SMAQMD recognizes that nonattainment of the CAAQS and NAAQS is based on cumulative development that has affected air quality. The project impact threshold is the same as the cumulative impact threshold, recognizing the cumulative nature of the impact. Invariably, if a project complies with the project threshold, the cumulative impact is also less than significant. In large part, this assumption is based on overall inputs to the air quality attainment plans for the various air districts, which consider general plans of the jurisdictions within their boundaries and how well planned development, coupled with improving emissions standards and mitigation, can result in long term attainment of air quality standards.

SMAQMD's guidance about how to address potential cumulative impacts of ozone precursors is also relevant to the proposed project because SMAQMD also has jurisdiction over portions of the Sacramento federal nonattainment area for ozone and is one of the key agencies that developed,

adopted, and is now implementing the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Ozone Attainment Plan)* (Sacramento Region Air Districts 2013:1-5), as discussed in Chapter 10, "Air Quality." In its approach, SMAQMD considers a project's individual emissions that do not exceed its Board-adopted project level, mass emission thresholds (i.e., 85 lbs/day for construction emissions of NO_x, 65 lb/day for operational emissions of NO_x, and 65 lbs/day for operational emissions of ROG) to not result in a cumulatively considerable contribution to a significant cumulative impact (SMAQMD 2014:8-1). As explained above, the mass emission thresholds SMAQMD uses for project level analysis are also used to determine whether a project would be cumulatively significant.

Herein, the County applies the same reasoning in its evaluation of ozone precursors generated by the proposed Village at Squaw Valley Specific Plan. As described in Impacts 10-1 and 10-2, project construction emissions would not exceed significance thresholds for any pollutants, but operational emissions of ozone precursors, ROG, and NO_x, would be substantially higher than PCAPCD's cumulative thresholds established for ROG and NO_x. The significance PCAPCD's cumulative threshold for operational emissions of ROG and NO_x is 82 10 lb/day; at buildout, project operation would emit 181.7 lbs/day of ROG and 86.5 lbs/day of NO_x during the summer ozone season. With implementation of Mitigation Measure 10-2, construction and operation of land uses and facilities developed under the Specific Plan would not generate emission of ozone precursors that exceed PCAPCD's mass emission thresholds. Furthermore, total development allowable under the Specific Plan would be within (and substantially less) than overall development allowable by current zoning and the land use designations established in the County General Plan and the Squaw Valley General Plan and Land Use Ordinance. This is noteworthy because, as with other air districts, the amount of development anticipated by the County General Plan, as well as the general plans of other counties and cities located in the region, is used to inform air quality planning efforts including the Ozone Attainment Plan. Thus, this impact would be **cumulatively significant**. Because Mitigation Measure 10-2 includes a menu of actions that, in combination, would reduce the project's net emissions of ROG and NO_x to less than 82 10 lb/day, this cumulative impact would be reduced to a **less-than-significant** level.

In response to several comments and as discussed in the Master Response regarding noise, Mitigation Measure 11-5 was revised to require the installation of an RHMA on top of the existing conventional asphalt of a segment of Squaw Valley Road, which also mitigated cumulative traffic noise impacts. Accordingly, Impact 18-32 on pages 18-34 and 18-35 of the DEIR is revised as follows:

Impact 18-32: Cumulative long-term ambient noise levels.

Cumulative noise levels could be affected by additional build-out of surrounding land uses and increases in vehicular traffic on affected roadways. Several new large developments (e.g., Gregory Creek Subdivision, Coldstream Specific Plan, Joerger Ranch Specific Plan) and others (see Table 18-2 for a complete list) are planned in the Tahoe Basin, surrounding the project area.

These projects could result in additional traffic-related noise on surrounding roadways and would contribute to an already existing cumulative traffic-noise condition (i.e., existing traffic-noise levels exceed applicable noise standards throughout the Tahoe Basin). Therefore, and as shown in Table 18-7, roadways under the cumulative conditions exceed Placer County noise standards as well. Thus, project-generated traffic under the cumulative condition would further increase traffic noise (Table 18-7). In addition, because the project would cause traffic-related noise increases on certain roadways during certain circumstances (i.e., Squaw Valley Road during certain peak days in the summer) to exceed applicable standards where they currently do not, the project would contribute to the cumulative impact related to traffic-noise in the Olympic Valley (i.e., traffic noise levels on Squaw Valley Road could result in noise increases of up to 4.3 A-weighted decibels [dBA] as shown in Table 18-7). However, Mitigation Measure 11-5 would require the installation of a rubberized hot mix asphalt overlay (RHMA) on portions of Squaw Valley Road that would experience the greatest noise increases. Implementation of this mitigation measure would reduce traffic-related noise on Squaw

Valley Road (the road experiencing the highest traffic-noise increase and thus responsible for the significant impact) by at least 4 dB. As such, Mitigation Measure 11-5 would reduce the project-generated traffic-noise level increase to below 1 db, a level that is imperceptible to the human ear. Traffic noise level increases on other affected roadways would range from 0.5 to 1.6 dB (Table 18-7). A 1-2 dB increase is generally not perceptible. Further, per Placer County Municipal Code, a 5 dB increase in noise would be considered substantial. Therefore, as project-generated traffic noise levels on Squaw Valley Road would be reduced to below 1 dB and all other affected roadways would not experience a traffic-noise increase of more than 2 dB, the project would not contribute substantially to the existing cumulative traffic-noise levels. The project's traffic noise impact would be reduced to a **less-than-significant** level.

With regards to stationary noise increases, the proposed project would result in land use development that typically includes stationary noise sources such as noise from HVAC units, electrical generators, parking lots, commercial loading docks, and outdoor recreational activities. However, these noise sources would be isolated to the project area and therefore would not combine with other stationary noise sources in the geographic scope of cumulative impacts. Impacts from stationary noise sources would be considered **less than significant**.

Nonetheless, increases in traffic noise would exceed applicable noise standards on roads that currently comply with Placer County noise standards. Therefore, project operation would result in a considerable contribution to long term noise. While implementation of Mitigation Measure 11-5 would reduce interior noise from Squaw Valley Road at new sensitive receptors, no feasible mitigation exists to reduce the project's impacts to existing sensitive land uses (i.e., residences located within the 60 dBA day night average noise level [L_{dn}] noise contour of Squaw Valley Road), which would be exposed to exterior noise levels that exceed applicable Placer County noise standards, although only during a select number of days during summer. Therefore, this cumulative impact would be **significant and unavoidable**.

Mitigation Measures

There are no additional feasible mitigation measures available to reduce this cumulative impact to a less than significant level. No additional mitigation is required.

Due to a changed and improved condition since publication of the DEIR, Impact 9-3 on page 18-52 of the DEIR is no longer a significant and unavoidable impact. Therefore, as shown below, it has been removed from the list of significant and unavoidable impacts in Section 18.2, "Significant Environmental Effects Which Cannot Be Avoided."

~~Impact 9-3: Impacts to Caltrans intersections.~~

~~The project would exacerbate unacceptable operations at the SR 89/Alpine Meadows Road intersection during all three analysis peak hours. This would be a significant impact. Mitigation Measure 9-3 requires the construction of the planned traffic signal at this intersection. Once the signal is operational, the effect of added vehicle trips from the project would be less than significant; however, the timing of installation is not known at this time and is not entirely within the County's control (joint effort with Caltrans). Therefore, this impact would be **significant and unavoidable** in the short term if the planned traffic signal is not constructed prior to the project generating sufficient vehicle trips to generate an increase in intersection delay of more than 2.5 seconds.~~

Due to the addition of a new mitigation measure, Impact 11-5 on page 18-53 of the DEIR is no longer a significant and unavoidable impact. Therefore, as shown below, it has been removed from the list of significant and unavoidable impacts in Section 18.2, "Significant Environmental Effects Which Cannot Be Avoided."

Impact 11-5: Exposure of new and existing sensitive receptors to operational project-generated transportation noise sources (potentially significant for existing sensitive receptors).

Implementation of the project could expose existing and future planned sensitive receptors to transportation noise levels that exceed the Placer County day-night average sound level (L_{dn}) standard of 60 dBA at the property line of residential land uses. This impact would be significant.

Implementation of Mitigation Measure 11-5 would reduce interior noise from Squaw Valley Road at new sensitive receptors; however, implementation of this mitigation measure would not ensure that exterior noise levels would comply with Placer County levels of 60 dBA L_{dn} at outdoor activity areas (e.g., balconies, porches). Therefore, as balconies and porches could potentially be included at future sensitive receptors, and it would be considered infeasible and impractical to disallow the construction of these outdoor activity areas, future planned sensitive receptors could potentially be exposed to exterior noise levels that exceed Placer County noise levels for transportation noise sources.

Existing sensitive receptors are located within the 60 dBA L_{dn} noise contour of Squaw Valley Road and would continue to be exposed to noise levels that exceed Placer County noise standards (i.e., 60 dBA L_{dn}) during peak traffic conditions. Further, during the summer, noise along Squaw Valley Road would increase such that the current noise level that modelling indicates is in compliance with Placer County exterior noise levels, the addition of project-generated transportation noise would result in exceedance of the 60 dBA L_{dn} standard for transportation noise. Exterior noise levels at existing noise-sensitive residences could only be remediated by relocating roadways, building sound walls, providing buffer zones, etc., but in the case of the project, this would not be feasible. Homes are located adjacent to the roadway edge and relocating the road would require removal of homes, or if moved in the other direction, would result in loss of habitat and other potential impacts. In most locations, the homes are too close to the roadway to add sound walls without affecting safe access to the road (line of sight would be compromised) or views. Further, it is likely that interior noise is within standards of 45 dBA L_{dn} , given the colder climate and likelihood that many homes already have dual-pane windows and insulation. Typical construction of this type provides at least 25 dB exterior to interior attenuation. Therefore, exterior noise levels would need to be at least 71 dBA for the interior noise standards to be exceeded, which would mean that an existing residence would need to be located 20 feet from the centerline of Squaw Valley Road, and this does not currently exist. Thus, existing sensitive land uses (i.e., residences located within the 60 dBA L_{dn} noise contour of Squaw Valley Road) would be exposed to exterior noise levels during days with peak traffic conditions that exceed applicable Placer County noise standards. This impact would remain **significant and unavoidable**.

Due to the addition of a new mitigation measure, Impact 18-32 on page 18-57 of the DEIR is no longer a significant and unavoidable impact. Therefore, as shown below, it has been removed from the list of significant and unavoidable impacts in Section 18.2, "Significant Environmental Effects Which Cannot Be Avoided."

Impact 18-32: Cumulative long-term ambient noise levels.

Cumulative noise levels could be affected by additional build-out of surrounding land uses and increases in vehicular traffic on affected roadways. Several new large developments are planned in the Tahoe Basin, surrounding the project area. These projects could result in additional traffic-related noise on surrounding roadways and would contribute to an already existing cumulative traffic noise condition (i.e., existing traffic noise levels exceed applicable noise standards throughout the Tahoe Basin). Therefore, and as shown in Table 18-7, roadways under the cumulative conditions exceed Placer County noise standards as well. Thus, project-generated traffic under the cumulative condition would further increase traffic noise (Table 18-7). In addition, because the project would cause traffic-related noise increases on certain roadways during certain circumstances (i.e., Squaw

Valley Road during the summer) to exceed applicable standards where they currently do not, the project would contribute to the cumulative impact related to traffic noise in the Olympic Valley (i.e., traffic noise levels on Squaw Valley Road could result in noise increases of up to 4.3 A weighted decibels [dBA] as shown in Table 18-7). With regards to stationary noise increases, the proposed project would result in land use development that typically includes stationary noise sources such as noise from HVAC units, electrical generators, parking lots, commercial loading docks, and outdoor recreational activities. However, these noise sources would be isolated to the project area and therefore would not combine with other stationary noise sources in the geographic scope of cumulative impacts. Nonetheless, increases in traffic noise would exceed applicable noise standards on roads that currently comply with Placer County noise standards. Therefore, project operation would result in a considerable contribution to long term noise; this cumulative impact would be significant.

While implementation of Mitigation Measure 11-5 would reduce interior noise from Squaw Valley Road at new sensitive receptors, no feasible mitigation exists to reduce the project's impacts to existing sensitive land uses (i.e., residences located within the 60 dBA L_{dn} noise contour of Squaw Valley Road), which would be exposed to exterior noise levels that exceed applicable Placer County noise standards. Therefore, this cumulative impact would be **significant and unavoidable**.

In response to comment O12b-2 and to clarify the growth-inducing analysis, the first, second, and third full paragraphs on page 18-61 of the DEIR are revised as follows:

The construction workers and project-related employees, as well as economic activities associated with the project operations, could result in indirect growth in the region. Demands for tourist-related goods and services (e.g., restaurants, grocery for employees, and other tourist-related activities) could result in demand for new restaurants and other commercial activities. Whether or not this would lead to construction of new facilities or reuse/expansion/more efficient use of existing facilities is speculative. However, if new construction were to occur in the region, it could result in potential environmental impacts depending on where the new construction would occur. Although it would be speculative to forecast the specific locations where development potentially related to indirect growth may occur, it is reasonable to assume that such development may be in proximity to the project. Several projects are proposed in nearby Truckee, Northstar, Alpine Meadows, Tahoe City, and the west shore of Lake Tahoe. While these projects may or may not absorb demands indirectly generated by the project, the environmental impacts associated with these projects are typical of what could occur with development that could be caused by induced growth in the region. The cumulative analysis in Section 18.1, "Cumulative Impacts," fully addresses impacts of development in these areas. These are the types of impacts that could be caused by induced growth from the project, and in fact some of these projects may, in part, be developed to meet demand associated with project-induced growth. As previously discussed, the discretion over whether these impacts occur is the responsibility of those lead agencies that consider approval of those projects.

The project would increase demand for public services and utilities, including water supply, wastewater (collection, treatment, and disposal), storm drainage, electrical power, propane, fire protection, snow removal, and recreational facilities. In fact, some infrastructure and facilities providing these services would be modified as part of the project. Potential impacts to these public services and utilities are discussed in Chapter 14, "Public Services and Utilities," which also notes that increased demands for public services and utilities would be based on population-based demands. The project would not extend infrastructure to areas outside the project boundaries that are not already served, nor would it generally provide additional capacity, in general over and above that needed to serve the proposed project.

The exceptions are water and sewer. As a result of the project, the wellfield serving the project (and Olympic Valley in general) will need to be redesigned to more evenly distribute the locations within the Valley where extraction occurs. Without this redesign, the wellfield would likely not be adequate to serve the project, as well as other development expected to occur in the Valley over the 25-year

project development horizon. Redesign of the wellfield would, therefore, remove a significant obstacle to growth. The amount of other growth that could occur in the Valley without the redesign (if the project did not support the SVPSD's implementation of the redesign) has not been determined; however, it is anticipated that additional wells and potential reorganization of the wellfield would be required for any proposed development of substantial size. Moreover, the project would not assist the SVPSD with funding to install more wells than required to serve the proposed development, and subsequent projects would be required to fund (or construct) wells, as needed, following the proposed wellfield reorganization. It is anticipated that the upgrade of the sewer trunk line implemented to support the proposed project would be sized to also accommodate full-estimated build out of the SVGPLUO so as to avoid the need for future upgrades to the line, or installation of new lines to provide capacity for future development (see further discussion of this issue under Impact 14-2 in Chapter 14, "Public Services and Utilities" and in the cumulative impact analysis's list of foreseeable other projects, Table 18-2). As such, the line would have capacity in excess of the demand anticipated ~~for~~ to be required to serve the proposed project and would remove sewer line capacity as an obstacle to growth in Olympic Valley. The impacts of this growth (in addition to other regional growth) are described in Section 18.1, "Cumulative Impacts."

2.3.19 Revisions to Chapter 19, "Report Preparers"

None

2.3.20 Revisions to Chapter 20, "References and Persons Consulted"

As a result of text revisions made to clarify one of the sources of population data used in the DEIR, the following reference is added to Chapter 20, "References and Persons Consulted," under the heading "5 Population, Employment, and Housing" beginning on page 20-2 of the DEIR:

5 POPULATION, EMPLOYMENT, AND HOUSING

Fisch, Alex. Senior Planner. Placer County Planning Services Division, Auburn, CA. 2014—data provided to Ascent Environmental regarding Olympic Valley Estimated Peak Overnight Population.

As a result of text revisions made in response to comment letter O8b, the following references are added to Chapter 20, "References and Persons Consulted," under the heading "6 Biological Resources" beginning on page 20-3 of the DEIR:

6 BIOLOGICAL RESOURCES

DeBell, D.S. 1990. *Populus trichoarpa* Torr.&Gray.; Black Cottonwood. In: Silvics of North America, V2, Hardwoods. U.S. Forest Service, U.S. Department of Agriculture. Available: http://www.na.fs.fed.us/pubs/silvics_manual/volume_2/populus/trichocarpa.htm. Accessed August 6, 2015.

Lite, S.J. and J.C. Stromberg. 2005. Surface water and ground-water thresholds for maintaining *Populus-Salix* forests, San Pedro River, Arizona Biological Conservation 125 (2005) 153–167.

Mahoney, John M. and Stewart G. Rood. 1998. Streamflow Requirements for Cottonwood Seedling Recruitment – An Integrative Model. Wetlands, Vol. 18, No. 4, December, pp. 634-645

Rood, Stewart G. and John M. Mahoney. 1990. Collapse of Riparian Poplar Forests Downstream for Dams on Western Prairies: Probably Causes and Prospects for Mitigation. Environmental Management Vol. 14, No. 4, pp. 451-464.

Sierra Nevada Alliance. 2010. Sierra Climate Change Toolkit; planning ahead to protect Sierra Natural Resources and Rural Communities. 3rd edition. 123 pp.

Stillwater Sciences. 2012. A Guide for Restoring Functionality to Mountain Meadows of the Sierra Nevada. Technical Memorandum. Prepared by American Rivers, Nevada City, CA. 52 pp.

Stromberg, J.C. and D.T Patton. 1990. Riparian Vegetation Instream Flow Requirements: A Case Study from a Diverted Stream in the Eastern Sierra Nevada, California, USA. Environmental Management 14: 185-194.

. 1992. Mortality and Age of Black Cottonwood Stands Along Diverted and Undiverted Streams in the Eastern Sierra Nevada, California. Madrono 39: 205-223.

. 1996. Instream Flow and Cottonwood Growth in the Eastern Sierra Nevada of California, USA. Regulated Rivers: Research and Management 12 (1): 1-12.

In response to comment O1-20, the following USFWS references on page 20-7 of the DEIR are revised as follows, and a new reference is added:

6 BIOLOGICAL RESOURCES

_____. 2014a. List of Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Tahoe City, USGS 7.5-Minute Quadrangle. Document Number: 140918120932. An online database for building lists of species that may be affected by projects in specific counties of quadrangles. Available: www.fws.gov/sacramento/es_species/Lists/es_species-lists_quad-finder_quick_listcfm?ID=511B. Last updated September 18, 2014. Accessed September 18, 2014.

_____. 2014b (April 29). Endangered and Threatened Wildlife and Plants; Endangered Species Status for Sierra Nevada Yellow-Legged Frog and Northern Distinct Population Segment of the Mountain Yellow-Legged Frog, and Threatened Species Status for Yosemite Toad. Final Rule. Federal Register. Vol 79. No. 82. 50 CFR Part 17 RIN 1018-AZ21.

_____. 2014c. List of Federal Endangered and Threatened Species that Occur in or may be Affected by your proposed project. Consultation Tracking Number: 08ENV00-2014-SLI-0364. An online database for building lists of species that may be affected by projects in specific counties of quadrangles. Available at: <http://www.fws.gov/nevada/es/ipac.html>. Accessed September 18, 2014.

As a result of text revisions made in response to comment L4-32, the following reference is added to Chapter 20, "References and Persons Consulted," under the heading "14 Public Services and Utilities" beginning on page 20-17 of the DEIR:

14 PUBLIC SERVICES AND UTILITIES

Farr West Engineering. 2014 (November 17). Squaw Valley Public Service District VSVSP Sewer Capacity Analysis. Prepared for Squaw Valley Public Service District. Available: <http://www.svpsd.org/documents>.

As a result of text revisions made in response to comment O8b-46, the following references are added to Chapter 20, "References and Persons Consulted," under the heading "18 Other CEQA Sections" beginning on page 20-23 of the DEIR:

18 OTHER CEQA SECTIONS

Sierra Nevada Alliance. 2010. Sierra Climate Change Toolkit; planning ahead to protect Sierra Natural Resources and Rural Communities. 3rd edition. 123 pp.

Stillwater Sciences. 2012. A Guide for Restoring Functionality to Mountain Meadows of the Sierra Nevada. Technical Memorandum. Prepared by American Rivers, Nevada City, CA. 52 pp.

Appendix C

VMT and Transit Assessment in Support
of Village at Palisades Tahoe Revised
EIR

Technical Memorandum

Date: October 24, 2022
To: Sean Bechta & Sarah Henningsen, Ascent Environmental
From: John Gard, Fehr & Peers
Subject: ***VMT and Transit Assessment in Support of Village at Palisades Tahoe REIR***

RS21-4105

This memorandum covers the following topics to assist Ascent Environmental in its preparation of the REIR:

1. Calculation of Average Annual Daily Vehicle Miles Traveled (VMT) generated by the project that would occur within the Tahoe Basin.
2. Information to assist in contextualizing the Project's Average Annual Daily VMT contribution to the Tahoe Basin
3. Comparing project attributes with Tahoe Regional Planning Agency (TRPA) policies for reducing VMT
4. Describing existing transit service available in the project area and planned improvements within the State Route (SR) 89 corridor.
5. A transit demand analysis evaluating the effects of project generated transit ridership on transit service capacity

1. Average Annual Daily VMT Estimate

The evaluation of project generated VMT in the Tahoe Basin included in the 2016 Final EIR focused on VMT generation during a single summer Friday as the VMT threshold in use by the TRPA at the time was based on this summer Friday VMT condition. The 2016 Final EIR also included a calculation of VMT in the Tahoe Basin during a peak winter Saturday. A summary of these single day VMT calculations is provided below in Appendix A of this memo.

As discussed in Chapter 13, "Hydrology and Water Quality" of the Draft Partially Revised Environmental Impact Report (Draft REIR), the single summer Friday TRPA VMT threshold that was used by TRPA when the 2016 EIR was prepared is no longer in effect. In addition, with the objective of assessing the effects of project generated VMT in the Tahoe Basin on Lake Tahoe water quality as well as air quality in the Lake Tahoe Air Basin (LTAB), a single day VMT estimate would not be the most accurate metric for evaluating these impacts. Using a single day VMT estimate to calculate annual or long-term VMT conditions could underestimate or overestimate actual impacts depending on how the single day estimate deviated from average annual daily conditions. As identified in Chapter 10, "Air Quality" and Chapter 13, "Hydrology and Water Quality" of the Draft REIR, an annual daily VMT estimate is used to calculate the effects of project generated VMT in the Tahoe Basin on Lake Tahoe water

quality and air quality in the LTAB. As described further in those sections, use of an average annual daily VMT estimate aligns with regulatory regimes and impact thresholds currently in effect.

Below is a description of how project generated average annual daily VMT in the Tahoe Basin was calculated and the results of those calculations. Part of these calculations involve estimates of monthly project occupancy. See Section 3.1.11 of the 2016 Final EIR titled “Master Response: Occupancy Assumptions” for additional information on these occupancy assumptions.

Appendix H to the DEIR contained estimated average monthly overnight occupancy levels for the project based on the Water Supply Assessment (WSA). Water usage is highly correlated to overnight visitation, and the WSA estimated occupancy levels were based on several years of occupancy rate data. For calculation purposes, May through November were considered summer month activity periods at the site, while December through April were considered winter month activity periods. The winter Saturday VMT estimate (20,960) and summer Friday VMT estimate (23,842) identified in the 2016 Final EIR and explained further below in Appendix A, combined with the WSA occupancy estimates, were used to estimate total monthly VMT generation for each month of the year. This monthly data was then used to develop the project’s estimated average annual daily VMT contributed to the Tahoe Basin. As shown in **Table 1**, that value is 12,406 VMT.

Table 1: Project Average Annual VMT Estimate within Tahoe Basin

Month	Percent Occupancy ¹	Number of Days	Season	Monthly VMT
January	59%	31	Winter	383,358 ²
February	72%	28	Winter	422,554
March	70%	31	Winter	454,832
April	51%	30	Winter	320,688
May	37%	31	Summer	273,468 ³
June	42%	30	Summer	300,409
July	85%	31	Summer	628,237
August	68%	31	Summer	502,589
September	46%	30	Summer	329,020
October	43%	31	Summer	317,814
November	26%	30	Summer	185,968
December	63%	31	Winter	409,349

Full Year	55%	365	-	4,528,285
Average Annual Daily VMT				12,406

Notes: ¹ Source: Appendix H of DEIR.

² Calculated as follows: Average monthly occupancy of 59% x 20,960 daily VMT at 100% occupancy x 31 days = 383,358 VMT.

³ Calculated as follows: Average monthly occupancy of 37% x 23,842 daily VMT at 100% occupancy x 31 days = 273,468 VMT.

Source: Fehr & Peers, 2016.

Although the average annual VMT estimate in the Tahoe Basin of 12,406 miles is the best estimate available and used in the Draft REIR, it is worth noting that this may be an *overestimate* of the net increase in VMT that would be added to the Tahoe Basin. For example, Page 9-33 of the DEIR contains several strategies the project would implement, which would reduce its VMT. These include several policies from *The Village at Squaw Valley Specific Plan "VSVSP"* (Squaw Valley Real Estate, LLC 2015)(*original document naming with the term "Squaw" retained when these older documents are cited*):

- Policy CP-2: Enhance and supplement public transit systems and alternative means of mass transportation within the Village and Olympic Valley to reduce vehicle trips and emissions.
- Policy CP-3: Accommodate regional transit access at a Village Transit Center that encourages mass transit use by providing convenient and efficient transit routing, minimizes congestion between mass transit vehicles and other traffic, provides convenient walking access to ski portals, and enhances the environment for passengers waiting at the Transit Center.
- Policy CP-4: Encourage use of regional transit services (including services from commercial airports) and participate as appropriate in expansion of regional transit services through financial support, such as subsidies and/or funding programs.
- Policy CP-6: Extend the existing Class 1 multi-purpose biking/walking trail along Squaw Valley Road to the west (it currently terminates northeast of the Village at the Squaw Valley Meadows condos)(*original Policy language is used, including the term "Squaw"*). Construct new trails and recreational areas north and west of the Plan Area by the end of Phase I, with flexibility to augment them to accommodate Phase II development.
- Policy CP-7: Provide a robust pedestrian network that connects to multiple destinations within the Plan Area and to the regional trail network.

The efficacy of the above strategies on VMT reduction are difficult to quantify and therefore are not included in the VMT generation modelling. However, it is reasonable to expect that some reduction in VMT below the current estimate of 12,406 would occur. Also see Section 3, "Comparison of Project Attributes with TRPA Policies for Reducing VMT" provided below. For some of the project attributes identified in that section, the reductions in project vehicle trip generation are quantifiable and are included in the trip generation methodology provided in the 2016 EIR. By affecting vehicle trip generation, these project attributes also influence VMT estimates. However, like the Specific Plan Policies listed above, the influence of some of the attributes identified below in Section 3 are not readily quantifiable, but would still be expected to result in some level of reduction in project generated VMT below the current estimate.

2. Contextualizing the Project's Average Annual Daily VMT Contribution to the Tahoe Basin

The project's annual average daily VMT contribution of 12,406 VMT to the Tahoe Basin would represent a 0.8% increase over the Tahoe Basin's total 2018 (most recent published date available) average annual daily VMT of 1,483,050.¹

On an average annual daily basis, the project would generate 74,424 VMT on Placer County roadways. This value was calculated using the same methodology described above for determining average annual daily VMT in the Tahoe Basin. A peak summer day VMT of 85,398 on Placer County roadways and a peak winter day VMT of 172,168, both identified in the 2016 EIR, were used as the basis for the calculation. According to the Sacramento Area Council of Governments (SACOG) *2020 MTP/SCS DEIR*², total VMT in Placer County (excluding the Tahoe Basin) was 9,161,000 in 2016. This implies the project's contribution would also represent a 0.8% increase over the Placer County total, the same percent increase as the Tahoe Basin being a coincidence.

3. Comparison of Project Attributes with TRPA Policies for Reducing VMT

During coordination with TRPA staff as this Draft REIR was being prepared, it was suggested that, although the project is outside the Lake Tahoe Basin, it could be beneficial to document where the project may be consistent with TRPA policies for reducing VMT. This section provides that policy consistency analysis.

Policies CP-2 through CP-4 and CP-6 and CP-7 of the original *Village at Squaw Valley Specific Plan* (provided above) describe how the project would support travel by walking, biking, and transit, and would reduce reliance on the automobile for travel. Chapter 5 of the plan provides more details of project amenities and proposed activities. Those that have a relationship to reducing VMT are listed below (by travel mode):

Pedestrian/Bicycle Facilities

1. Paved multi-purpose trails – will be added beginning at the present termination of the Olympic Valley Trail at the northeastern corner of Squaw Valley Meadows condominiums adjacent to Olympic Valley Road. The trail will be a year-round facility.
2. Bike racks – will be provided at main locations throughout the Village, as well as at the Shirley Canyon and Granite Chief Trailheads, and at all major lodging properties.

¹ Source: Table 4 of <https://www.trpa.gov/wp-content/uploads/2021/04/Attachment-A-VMT-Threshold-Update-Standard-Recommendation-and-Implementation.pdf>. Accessed on: February 4, 2022.

² Source: Table 16-4 of [Transportation and Traffic \(Revised Screencheck\) \(00184201\).DOCX \(sacog.org\)](#). Accessed on: February 4, 2022.

3. Bicycle Parking Facilities – will be provided at all major lodging/resort-residential facilities, as well as at other major activity centers.

Transit Facilities and Services

1. Transit Center – will provide a convenient transit hub for both public and private transit services traveling within, to, and from the Village. It will be designed as a drop-off/pick-up facility with the capacity to accommodate two buses at a time.
2. Transit Services and Facilities within the Village – low emission vehicle shuttle service will be provided within the Village, as warranted, to provide mobility for visitors, guests, and employees.
3. Transit Services within the Olympic Valley – will provide low-emission shuttle service within the Olympic Valley with three general programs. The first program will consist of fixed-route shuttles that circulate between the Village at Palisades Tahoe and the Resort at Squaw Creek. The second program will circulate in the hillside neighborhoods north of Olympic Valley Road with fixed-route shuttles during peak-hour ski days, and the third program will consist of on-demand (dial-a-ride) shuttles that circulate in the abovementioned hillside neighborhoods during non-peak-hour ski days. Local shuttle services operated by Palisades Tahoe will coordinate with the Placer County Department of Public Works to provide timed transfers with Tahoe Truckee Area Regional Transit (TART) where feasible.
4. Transit Services Connecting the Village with the North Tahoe/Truckee Region – As demand dictates during the peak ski season, transit service will be provided (or supported) along the following routes:
 - Olympic Valley – Tahoe City – North Shore – Incline Village Route
 - Olympic Valley – Tahoe City – Sunnyside Route
 - Olympic Valley – Truckee Route

Details of these services include:

- Adequate service will be provided to serve visitor demand as needed, as well as to provide capacity to serve ridership generated by off-site employee needs.
- These routes will serve park-and-ride lots and shuttle routes and stops as warranted, focusing on parking facilities that can be shared with other uses such as schools and summer recreation sites.
- Service will be coordinated with other regional services, including the TART program to facilitate timed transfers, and to avoid duplication of services.
- Palisades Tahoe will continue to subsidize transit fares on TART services for employees not conveniently served by the shuttles.
- Palisades Tahoe will continue to provide operational funding to TART for winter service in addition to purchasing fares for employees.

Other Strategies

1. Maintain Membership in Truckee/North Tahoe Transportation Management Association (TNT/TMA) – Palisades Tahoe will continue to be an active member of this TMA, which provides a forum for solving regional transportation problems through public-private cooperation.
2. Enhanced Alternatives to the Private Automobile for Regional Access – To encourage guests to visit the region without private automobiles, Palisades Tahoe will:
 - Promote use of the North Lake Tahoe Express service to the Reno-Tahoe International Airport through its inclusion in marketing materials and websites.
 - Promote charter bus services through marketing materials. On-site charter bus parking will be provided. Other strategies will be considered, such as discounts on lodging packages for groups traveling by charter bus.
 - Partner with and promote the use of a social media-based ridesharing program for visitor access to the Truckee-Tahoe region, as well as for employee commute ridesharing.
3. Establish a Transportation Coordinator Position – A Palisades Tahoe employee will be designated as transportation coordinator, with responsibility to provide employees (in particular, newly hired employees) with information on the various commute options. The transportation coordinator will also cooperate/coordinate with TART and the Truckee/North Tahoe TMA.
4. Other Strategies to Encourage Alternative Transportation Options – Palisades Tahoe will consider and implement, where feasible, other strategies to reduce private automobile use and expand mobility options, including, but not limited to:
 - Provide Access to a Fleet of Low-Emission Car-Sharing Vehicles for Local Trips – Providing guests with access to a zero or low-emission short-term rental cars for trips within the Tahoe-Truckee region would support alternative regional transit access to the resort, as it would provide flexibility for those arriving without a private automobile to make trips not conveniently served by mass transit (such as a visit to North Lake Tahoe or Truckee).
 - Provide Access to Bicycles for Visitors and Guests – This could encourage cycling within Olympic Valley and beyond and could be operated through a local bicycle shop.

Appendix A to TRPA's 2020 RTP provides the following six goals for transportation planning in the Tahoe Basin:

- *Environment:* Goal: Protect and enhance the environment, promote energy conservation, and reduce greenhouse gas emissions.
- *Connectivity:* Goal: Enhance and sustain the connectivity and accessibility of the Tahoe transportation system, across and between modes, communities, and neighboring regions, for people and goods.

- *Safety: Goal*: Increase safety and security for all users of Tahoe’s transportation system
- *Operations and Congestion Management: Goal*: Provide an efficient transportation network through coordinated operations, system management, technology, monitoring, and targeted investments.
- *Economic Vitality and Quality of Life: Goal*: Support the economic vitality of the Tahoe Region to enable a diverse workforce, sustainable environment, and quality experience for both residents and visitors.
- *System Preservation: Goal*: Provide for the preservation of the existing transportation system through maintenance activities that support climate resiliency, water quality, and safety.

Each of these goals is supported by various policies, which are listed in Table 4 of Appendix A of the 2020 RTP. **Table 2** lists those policies that are either directly or indirectly applicable to reducing VMT generated by land use developments. **Table 2** then compares the extent to which project attributes (described above) are consistent with these VMT reducing policies.

Table 2: Comparison of Project Attributes with TRPA Policies for Reducing VMT

#	2020 RTP Policy ¹	Project Attribute Consistent? ²
1.1	Support mixed-use, transit-oriented development and community revitalization projects that encourage walking, bicycling, and easy access to existing and planned transit stops.	Yes. Consistent. See various VSVSP Open Space Network policies and above project attributes.
1.4	Develop and implement project impact analysis, mitigation strategies, and fee programs to reduce Vehicle Miles Traveled and auto trips.	Yes. Consistent. See “Other Strategies” 1- 4 above.
1.5	Prioritize projects and programs that enhance non-automobile travel modes.	Yes. Consistent. See “Other Strategies” 1- 4 above.
1.7	Collaborate with all jurisdictions and employers in the basin to develop, maintain, and implement programs to reduce employee vehicle trips.	Yes. Consistent. See “Transit Facilities and Services” 2 and 4 above, and “Other Strategies” 2 and 3 above.
2.13	Coordinate public and private transit service, where feasible, to reduce costs of service and avoid service duplication.	Yes. Consistent. See “Transit Facilities and Services” 1, 3, and 4 above.
2.14	Support, where feasible, the implementation of on-demand, dynamically routed transit shuttles.	Yes. Consistent. ³ Palisades Tahoe Resort operates and helps fund the Mountaineer, which is a free, on-demand dynamically routed transit service.
2.18	Accommodate the needs of all categories of travelers by designing and operating roads for safe, comfortable, and efficient travel for roadway users of all ages and abilities, such as pedestrians, bicyclists, transit riders, motorists, commercial vehicles, and emergency vehicles.	Yes. Consistent. See all project attributes above.
2.19	Support parking management programs that incentivize non-auto modes and discourage private automobile use at peak times in peak locations, alleviate circulating vehicle	No. Not consistent. Project does not include paid parking.

	trips associated with parking availability (<i>In this context, parking management refers to paid parking that is organized and enforced. See Page 45 of 2020 RTP.</i>)	
2.20	Coordinate and maintain parking maximums and shared parking standards that support goals and policies of the Regional Plan.	Yes. Consistent. Project’s parking supply is less than the minimum parking requirement for hotel/condo units specified in the Placer County Municipal Code (Placer County Code (Placer County, California) (qcode.us))
2.22	Coordinate and include in area plans, intermodal transportation facilities (“Mobility Hubs”) that serve major activity centers and connect transit, pedestrian, bicycle facilities, and car/ride share, and provide park-and-ride facilities, where appropriate, in and outside of the basin.	Yes. Consistent. See “Transit Facilities and Services” 1 above. See “Pedestrian/Bicycle Facilities” 1-3 above.
2.24	Encourage partners to develop and implement plans coordinating wayfinding and signage to build awareness of alternative transportation opportunities including transit, pedestrian, and bicycle facilities.	Yes. Consistent. Palisades Tahoe Resort has “Getting Around” and “Summer Biking Rentals” webpages that describe transit options and summer bike rentals for guests.
4.8	Invest resources in marketing and outreach campaigns to promote the use of non-auto travel options.	Yes. Consistent. See “Other Strategies” #2. In addition, Palisades Tahoe Resort maintains “Getting Around” and “Summer Biking Rentals” webpages on its website.
4.10	Support the use of emerging technologies, such as the development and use of mobile device applications, to navigate the active transportation network and facilitate ridesharing, efficient parking, transit use, and transportation network companies.	Yes. Consistent. Tahoe Basin Transportation Smartphone Application Pilot (operational by 2025) will develop a smartphone app to enhance traveler information dissemination (RTP Project #04.02.02.0010) Palisades Tahoe Resort has a mobile app that provides real-time mountain information including parking lot occupancy levels.
6.1	Preserve the condition of sidewalks and bicycle facilities and maintain, where feasible, for year-round use.	Yes. Consistent. See “Pedestrian/Bicycle Facilities” 1 above.
6.2	Improve winter transit access by providing shelters, cleared sidewalks and paths around stops, winter accessible bike racks, and warm shelters at mobility hubs and major transit stops.	Yes. Consistent. See “Transit Facilities and Services” 1, above. Transit center will include shelter. Also, within the Village, including near the transit center, walkways will be kept free of snow and ice in the winter.

Notes: ¹ Source: *2020 Regional Transportation Plan* (Tahoe Regional Planning Agency, 2021).
² Source: *Village at Squaw Valley Specific Plan* (Placer County, 2016).
³ In this context, dynamic routing refers to microtransit (i.e., Mountaineer), See page 50 of *2020 RTP*.
 Source: Fehr & Peers, 2022.

4. Description of Existing Transit Services and Planned Transit Improvements within the SR 89 Corridor

The 2020 RTP describes proposed transit improvements along SR 89 between Tahoe City and Truckee including funding sources and expected timelines for implementation. However, before discussing these improvements, it is instructive to document current levels of transit service in the SR 89 corridor and serving Olympic Valley.

TART is operated by Placer County. The following transit services are currently provided (based on scheduling as of January 15, 2022):

- Highway 89 AM/PM (Peak) Route ³ – This route travels along SR 89 between the Tahoe City Transit Center and Truckee Depot in Downtown Truckee. On weekdays, northbound buses stop at the project site at 6:44 AM, 7:44 AM, 8:44 AM, 11:44 AM, 1:44 PM, 2:44 PM, 4:04 PM, and 5:04 PM. On weekdays, southbound buses stop at the project site at 6:20 AM, 7:52 AM, 8:52 AM, 10:52 AM, 12:52 PM, 1:52 PM, 2:52 PM, 4:05 PM, 5:05 PM, and 6:05 PM. Buses stop at the Olympic Valley Clock Tower and along Olympic Valley Road at Far East Road. This route is free to all passengers.
- Mountaineer ⁴ – An on-demand shuttle service operated by the Mountaineer Transit Company (MTC) (formerly the Squaw Alpine Transit Company [SATCo]). For the 2022-2023 winter season, it is scheduled to operate from December 9, 2022, through April 9, 2023. It will operate daily within Olympic Valley from 7:00 AM to 10:30 PM. It also includes service via partnership with TART Connect between Olympic Valley and Tahoe City on Fridays and Saturdays from 6:00 PM to 11:00 PM. This service is free to all passengers. Ten vehicles, each with a capacity of nine riders, are planned to operate during the upcoming season. The vehicles are equipped with ski and snowboard racks.

Mountaineer is funded through the nonprofit MTC using a combination of a 1 percent assessment on Olympic Valley and Alpine Meadows lodging and short-term rental gross revenue, along with a 1 percent assessment on Palisades Tahoe on-site lift ticket gross revenue. Palisades Tahoe also provides a volunteer contribution of a 1 percent assessment on its daily lift ticket frequency product gross revenues to assist in funding Mountaineer services.

Other forms of transportation available to those desiring to travel to the project site today without relying on their own private vehicle include:

³ Accessed at: [Tahoe Truckee Area Regional Transit \(TART\) | Placer County, CA](#). Accessed on: January 27, 2022.

⁴ Accessed at: www.mountaineertransit.org. Accessed on October 24, 2022

- North Lake Tahoe Express ⁵ – The Red Route operates between Reno/Tahoe International Airport and destinations along SR 89 and Tahoe City. Six trips per day depart the airport and five trips per day return to the airport. The cost is \$100 per person in each direction, with per-person prices decreasing with greater numbers of persons in the party.
- Amtrak – Train service operates between the Bay Area and Reno with a stop at the Truckee Depot. A one-way train ride between the Sacramento Valley Station and Truckee takes three to four hours. Amtrak’s scheduled departure and arrival times change frequently. As of Fall 2022, there is one train per day travelling from Sacramento to Truckee, and one train per day travelling from Truckee to Sacramento. Cost per person depends on booking date, seat availability, and seat type. A round trip coach seat booked several weeks in advance could cost in the range of \$70 per person. From the Truckee Depot, riders could transfer to the TART Highway 89 AM/PM route to reach the project site.

In summary, the project site is currently well-served by both fixed-route and on-demand bus services, which are free and operational seven days per week during the winter season. The Highway 89 AM/PM route and TART Connect are also operational during other months of the year.

Appendix B of the 2020 RTP lists a series of financially constrained transportation projects included in the plan. Financially constrained projects are those that can be expected to be implemented within the next 25 years based on the amount of funding that is forecasted to be reasonably available. According to the 2020 RTP, the funding forecast reflects historically available funding levels, a reasonable expectation of success with discretionary grants, and a new regional revenue estimate being actively pursued as part of the Sustainable Funding Initiative. According to page 161 of the 2020 RTP, funding is expected to be available for the next 25 years for about 71 percent of the plan’s total \$3.4 billion set of transportation investments. Notably, 77 percent of funds needed for transit projects are expected to be available over the next 25 years. Additionally, TRPA staff (per email from Michelle Glickert, Principal Transportation Planner, TRPA, November 22, 2021) stated that “All transit projects in the north Tahoe area are all on the constrained list.”

According to page 52 of the 2020 RTP, transit service improvements will build off existing routes by improving service frequency, service duration of service, and geographic coverage. As projected in the 2020 RTP, use of these bus routes will continue to be free of charge through 2045. The following describes specific transit improvements along the SR 89 corridor (by year) that are on the constrained (i.e., funded) projects list (per page 164 of the 2020 RTP):

⁵ Accessed at: [Routes & Schedule – North Lake Tahoe Express](#). Accessed on January 27, 2022.

- By 2025, TART will reduce headways (i.e., the elapsed time between successive arriving buses) from 60 to 30 minutes on the Highway 89 AM/PM (Peak) route.
- By 2045, headways on the Highway 89 AM/PM (Peak) route will be further reduced to 15 minutes (per email from Michelle Glickert, Principal Transportation Planner, TRPA, November 22, 2021).

Regarding the first bullet above, the *Systems Plan Update for Tahoe Truckee Area Regional Transit in Eastern Placer County* (LSC Transportation Consultants, 2016) also identifies reducing TART bus headways from one hour to 30 minutes on the TART Highway 89 route between Tahoe City and Truckee as well as funding sources for this service improvement. See Appendix B of this document for further information on this portion of the *Systems Plan Update*.

5. Village at Palisades Tahoe Specific Plan – Transit Demand Analysis

Part A – Existing (2020) Winter Pre-COVID TART Highway 89 Ridership

Tables 3 and 4 show the Tahoe Truckee Area Regional Transit (TART) Highway 89 bus route schedule from the TART website.⁶ **Table 3** displays the timetable for northbound trips from the Tahoe City Transit Center (TCTC) into Olympic Valley during the morning peak period. **Table 4** shows the timetable for southbound trips during the afternoon peak period from the Truckee Depot, through Olympic Valley, and ending at the TCTC. As indicated in the tables, the TART Highway 89 route operates on one-hour headways (i.e., there is a one-hour period between trips departing each stop).

Table 3 TART Highway 89 Northbound Morning Commute Bus Route Timetable			
Location	Time		
Crystal Bay on State Route 28	6:00 AM ^{1,2}	7:00 AM ^{1,2}	-
Tahoe City Transit Center	6:30 AM	7:30 AM	8:30 AM
Palisades Tahoe Ski Area Clock Tower	6:44 AM	7:44 AM	8:44 AM
Villages at Palisades Tahoe - East	6:46 AM	7:46 AM	8:46 AM

Notes:
¹ During peak conditions, a second bus may operate along this route (if a driver is available) to pick-up any passengers who are denied entry to the first bus due to that bus being at-capacity. The second bus travels the same westbound SR 28 to northbound SR 89 route as the first bus.
² The bus begins at Crystal Bay for only the two earliest time slots shown.
 These routes operate with this schedule 7 days per week.
 Source: TART website for Spring 2022 Conditions.

⁶ [Route Hwy 89 – TART \(tahoetruckeetransit.com\)](https://www.tahoetruckeetransit.com) Data accessed in May 2022.

Table 4 TART Highway 89 Southbound Afternoon Commute Bus Route Timetable			
Location	Time		
Truckee Depot	3:30 PM	4:30 PM	5:30 PM
Palisades Tahoe Ski Area Clock Tower	4:05 PM	5:05 PM	6:05 PM
Villages at Palisades Tahoe - East	4:07 PM	5:07 PM	6:07 PM
Tahoe City Transit Center	4:28 PM	5:28 PM	6:28 PM

Note: These routes operate with this schedule 7 days per week.
 Source: TART website for Spring 2022 Conditions.

As noted in note 1 in **Table 3**, during extreme demand conditions, a second capacity bus (often referred to as a “tripper”) is deployed (if a driver is available) during morning peak periods to provide additional capacity for the trip that leaves Crystal Bay at 6 AM and 7 AM. There are additional stops along the Highway 89 route not shown in **Tables 3 and 4** nor mentioned elsewhere in this analysis. The ridership data presented includes activities at those stops and considers both the added riders and transit system capacity provided by the supplemental bus service noted in note 1 of **Table 3**. The data presented here focuses on information relevant to determining the effect of project-generated ridership on transit capacity.

Placer County staff provided ridership data for the TART Highway 89 route for the following time periods:

- January/February 2020
- January/February 2022

The January/February 2020 data represents conditions prior to the beginning of the COVID-19 pandemic and soon after TART established fare-free service on the Highway 89 route. The January/February 2022 data represents conditions during COVID-19. A comparison of total riders between the two periods revealed a 38% decrease in the number of riders in January/February 2022 compared to January/February 2020. Therefore, rather than using the most recent data to reflect existing ridership, a conservative approach was taken, and the January/February 2020 dataset was used in the analysis that follows to reflect a level of ridership that is not adversely affected by the response to COVID-19.

The January/February 2020 dataset covers the entire two-month period and includes the following:

- Time stamp of each person boarding the bus (collected by the bus driver)
- Bus number and bus driver number
- Direction of travel
- Day of week

While the data does not indicate the specific stop from which each rider was picked up, it is possible to determine boarding locations by comparing the time stamp with route timetable data. However, delays can

occur along Highway 89, causing late arrivals, making this process less accurate. Data regarding passenger alightings (i.e., exiting the bus) is not recorded by TART on this route. Additionally, review of the data indicated occasional incorrect entries or inconsistencies. Potentially inaccurate data was excluded from the analysis.

According to the January/February 2020 dataset, Mondays displayed the largest number of total daily riders, followed by Sunday and Tuesday. However, when considering peak ridership periods, which generally occur during morning (7- 9 AM) and afternoon (4 - 6 PM) commute periods, the trend is different. During peak ridership periods, Sundays are busiest followed by Saturdays and Tuesdays. Based on this analysis, ridership data focuses on Saturday and Sunday peak ridership period conditions as that also overlaps with peak travel demand for the Village at Palisades Tahoe Specific Plan.

Placer County staff (Garner Pers. Comm., 2022) indicated that current TART buses serving the Highway 89 route have the following “planning” capacities:

- Seated Bus Capacity = 33 persons
- Seated Plus Standing Capacity = 45 persons

The seated bus capacity value above is generally consistent with Table 4.1 of the *Tahoe Transportation District Short Range Transit Plan (2017)*⁷, which indicates that the heavy-duty large buses utilized by TART have capacities of 27 or 38 seats plus two wheelchair stations. The seated plus standing capacity is best described as an upper limit planning value, and not an absolute maximum capacity of persons that can fit on a bus (as will be evidenced in the data that follows).⁸ Although system operations are planned to maintain a maximum of 45 riders on each bus, more than 45 people can, and often do ride on a single bus during peak periods.

Table 5 shows the number of passengers boardings on the northbound Highway 89 route between TCTC and Olympic Valley/Palisades Tahoe for trips that depart at 6:30 AM, 7:30 AM, and 8:30 AM on select Saturdays and Sundays in January and February 2020. This table indicates the following:

- Ridership levels are generally greater on Sundays than Saturdays.
- Due to high ridership demands, the 6:30 AM and 7:30 AM trips operated with two buses on each route (on all days sampled).
- The number of passengers boardings for the 7:30 AM trip from TCTC averaged 49 persons per bus on Saturdays and 60 persons per bus on Sundays. This exceeds the planning value seated plus standing capacity of 45 persons.

⁷ [SRTP-Final-Board-adopted-10-2017-amended12-2017_w_append.pdf](#) (tahoetransportation.org). Accessed August 2022.

⁸ For this analysis, the seated plus standing capacity reflects a 36% increase over seated capacity. Agencies typically select a standing capacity that ranges from 25% to 100% of the seated capacity, with the type of transit vehicle, frequency, route length, location of the service, and other factors dictating the chosen value.

- The number of passengers boardings for the Sunday 6:30 AM trip from TCTC averaged 47 persons per bus, which is also a slight exceedance of the seated plus standing capacity of 45 persons.

Table 5 TART Highway 89 Route Passenger Boardings – Northbound Trips from TCTC to Olympic Valley – Weekend Mornings in January/February 2020			
Dates	Scheduled Trip Departure Time from TCTC	Passenger Boardings for Trips from TCTC to Olympic Valley ^{1,2}	
		Saturday	Sunday
1/4/2020 & 1/5/2020	8:30 AM	17	22
1/11/2020 & 1/12/2020	8:30 AM	43	Data Not Available
1/18/2020 & 1/19/2020	7:30 AM ³	101	Data Not Available
	8:30 AM	20	29
1/25/2020 & 1/26/2020	6:30 AM	Data Not Available	82
	7:30 AM ³	97	118
	8:30 AM	25	31
2/1/2020 & 2/2/2020	7:30 AM ³	102	108
	8:30 AM	17	38
2/8/2020 & 2/9/2020	6:30 AM ³	68	Data Not Available
	7:30 AM ³	90	Data Not Available
	8:30 AM	Data Not Available	17
2/15/2020 & 2/16/2020	6:30 AM ³	Data Not Available	106
	8:30 AM	20	Data Not Available
2/22/2020 & 2/23/2020	6:30 AM ³	68	Data Not Available
	7:30 AM ³	Data Not Available	131
	8:30 AM	23	25
2/29/2020	6:30 AM ³	62	Data Not Available
	7:30 AM ³	101	Data Not Available
Average	6:30 AM	66 (two buses)	94 (two buses)
	7:30 AM	98 (two buses)	119 (two buses)
	8:30 AM	24 (one bus)	27 (one bus)

Notes:

¹Based on observed passenger boardings recorded by driver of the bus.

²In some instances, data was not available or flagged as having potential inaccuracies. Such data was excluded from the analysis.

³ Included a second bus (see discussion on previous page).

TCTC = Tahoe City Transit Center.

Source: Placer County, 2022 and Fehr & Peers, 2022.

Table 6 shows the total number of passengers boardings along the southbound TART Highway 89 route between the Truckee Depot and the TCTC for trips that depart Truckee Depot on Saturday and Sundays at 3:30 PM, 4:30 PM, and 5:30 PM. Because the dataset did not include both boardings and alightings, passenger loads (i.e., the number of passengers on a bus at a given point in time) at specific points along the route cannot be directly calculated. This is demonstrated by the fact that some total passenger boarding values in Table 6 far exceed the seated plus standing capacity of 45 persons. The use of the Table 6 data and other data sources to estimate passenger loads, accounting for both passenger boardings and alightings, is discussed later in this section.

Table 6 TART Highway 89 Route Passenger Boardings – Southbound Trips from Truckee Depot to TCTC – Weekend Afternoons in January/February 2020			
Dates	Scheduled Trip Departure Time from Truckee Depot	Passenger Boardings for Trips from Truckee Depot to TCTC ^{1,2}	
		Saturday	Sunday
1/4/2020 & 1/5/2020	3:30 PM	34	22
	4:30 PM	34	70
1/11/2020 & 1/12/2020	3:30 PM	40	38
1/18/2020 & 1/19/2020	3:30 PM	35	Data Not Available
	4:30 PM	Data Not Available	41
	5:30 PM	27	Data Not Available
1/25/2020 & 1/26/2020	3:30 PM	32	42
	4:30 PM	42	58
2/1/2020 & 2/2/2020	3:30 PM	16	47
2/8/2020 & 2/9/2020	3:30 PM	20	69
	4:30 PM	Data Not Available	42
	5:30 PM	Data Not Available	11
2/15/2020 & 2/16/2020	3:30 PM	32	21
	4:30 PM	63	Data Not Available
	5:30 PM	14	Data Not Available
2/22/2020 & 2/23/2020	3:30 PM	25	56
	4:30 PM	70	Data Not Available
	5:30 PM	25	17
2/29/2020	3:30 PM	41	N / A
	4:30 PM	61	N / A
	5:30 PM	18	N / A
Average	3:30 PM	31	42
	4:30 PM	54	53

Table 6 TART Highway 89 Route Passenger Boardings – Southbound Trips from Truckee Depot to TCTC – Weekend Afternoons in January/February 2020			
Dates	Scheduled Trip Departure Time from Truckee Depot	Passenger Boardings for Trips from Truckee Depot to TCTC ^{1,2}	
		Saturday	Sunday
	5:30 PM	21	14

Notes:
¹Based on observed passenger boardings recorded by driver of the bus.
²In some instances, data was not available or flagged as having potential inaccuracies. Such data was excluded from the analysis. No routes operated with a second supplemental bus (see discussion on previous page).
 TCTC = Tahoe City Transit Center.
 Source: Placer County, 2022 and Fehr & Peers, 2022.

Key findings from this table are:

- Although Sunday ridership is generally greater, there are specific bus trips in which Saturday ridership is greater than the following Sunday’s ridership.
- On average, the 4:30 PM trip departing Truckee Depot has the greatest ridership, followed by the 3:30 PM trip.

In contrast to the northbound morning Highway 89 trips, none of the southbound afternoon trips have ridership levels that warrant use of a second tripper bus. This is primarily the result of more dispersed afternoon commute times versus more peaked morning commute arrival patterns.

Detailed analysis of the passenger boarding time stamp data was performed to determine the relative boarding locations of passengers on the three southbound trips that departed Truckee Depot at 3:30 PM, 4:30 PM, and 5:30 PM. About 75% of all passengers boarded from a bus stop within Olympic Valley with another 21% boarding prior to Olympic Valley (i.e., upstream, closer to or within Truckee) and 4% boarded after the bus left Olympic Valley.

Table 7 shows the estimated passenger loads on the three southbound trips that departed Truckee Depot at 3:30 PM, 4:30 PM, and 5:30 PM for the segment of the route between Olympic Valley and the TCTC. This analysis reasonably estimates that half of the passengers that boarded the bus before reaching Olympic Valley exited the bus at a stop within Olympic Valley. This is reasonable given the variety of recreational, social, and other amenities present as well as homes that may have residents working in Truckee and commuting home via bus.

Table 7 TART Highway 89 Route Passenger Loads – Southbound Trips from Truckee Depot to TCTC – Weekend Afternoons in January/February 2020			
Dates	Scheduled Trip Departure Time from Truckee Depot	Passenger Loads Between Olympic Valley and TCTC ^{1,2}	
		Saturday	Sunday
Average	3:30 PM	28	38
	4:30 PM	48	48
	5:30 PM	19	13

Notes:
¹Based on observed passenger boardings recorded by driver of the bus.
²Refer to above discussion for methodology used to estimate ridership on this segment of the route.
 TCTC = Tahoe City Transit Center.
 Source: Placer County, 2022 and Fehr & Peers, 2022.

Table 7 shows that on Saturdays and Sundays, the passenger load for the trip that departs the Truckee Depot at 4:30 PM slightly exceeds its seated plus standing capacity of 45 persons when it leaves the Olympic Valley.

Part B – Characterizing Expected Village at Palisades Tahoe Specific Plan Project Ridership on TART Highway 89 Bus Route

This section relies directly on the following information contained on page 9-65 of the 2016 DEIR:

- Up to 550 project-related employees⁹ may be expected to work in the Village Area and reside outside of Olympic Valley.
- About two-thirds of these employees are expected to work the day shift (i.e., 8 AM to 5 PM).
- 8% of employees would use TART to travel to and from work.

By multiplying the number of employees that would reside outside Olympic Valley (550) who work the day shift (66.67%) and take TART (8%), 29.3 riders, or a rounded-up value of 30 project-generated riders would be expected. This is precisely how the value of “30 inbound riders on the morning TART service” cited on page 9-65 of the 2016 EIR was derived.

The *Squaw Valley Winter Employee Commute Survey Technical Memorandum*, prepared by LSC Transportation Consultants (April 21, 2011) presented the results of a 2011 survey of Squaw Valley Ski Resort winter employees (note that the title “Squaw Valley” was used at the time rather than the current “Palisades Tahoe”). Among employees living outside Olympic Valley, approximately 64% reported living to the south (i.e., within the Lake

⁹ 200 of 751 total employees would reside in the East Parcel employee housing. The remainder are assumed to reside outside of Olympic Valley.

Tahoe North and West Shore areas).¹⁰ This implies 64% of project-generated TART riders (or about 20 persons) would travel northbound on the TART Highway 89 route from TCTC to the project site for the morning commute and ride southbound on the TART route in the afternoon. Therefore, although the 30 project-generated transit riders could be split between northbound and southbound buses as they travel to and from the project site; to ensure that project effects on transit ridership are not underestimated, the analysis below assumes all 30 riders travel in the same direction and commute between the project site and locations to the south.

Many of the project's employees would be associated with hospitality, food & beverage, management, and related services. Exact start/end times for these types of positions are not known, though it is expected that most would work an 8 AM to 5 PM shift. However, it is reasonable to assume that at least some of the 30 project-generated employees using transit would be provided or choose shift start and end times that would enable them to use buses with different departure times. For example, in the mornings, some project employees would board the trip that leaves the TCTC at 6:30 AM, some would use the 7:30 AM trip, and some would use the 8:30 AM trip. However, to ensure that project effects on transit ridership are not underestimated, the analysis below assumes that all 30 riders use the bus with the greatest number of existing riders. Based on these assumptions, the Village at Palisades Tahoe Specific Plan would add 30 passenger boardings in the morning to the northbound trip leaving the TCTC at 7:30 AM and 30 passenger boardings in the afternoon to the southbound trip that leaves the Truckee Depot at 4:30 PM.

Part C – Existing Plus Village at Palisades Tahoe Specific Plan Project Ridership on TART Highway 89 Bus Route

Table 8 indicates that the Village at Palisades Tahoe Specific Plan would cause the busiest Sunday morning northbound TART Highway 89 route trip to have a passenger load that further exceeds its seated plus standing capacity. The 30 project-generated passenger boardings, added to the existing average passenger load of 98 passengers across two buses, would result in a passenger load of 128 passengers across the two buses, which have a combined seated plus standing capacity of 90 persons.

¹⁰ Calculated based on employee residence destinations as: (56% live in Tahoe North/South/West Shore) / [Tahoe N-S-W (56%) + Northstar/Truckee/Reno/West of Donner Summit (32%)] = 63.6%

Table 8 TART Highway 89 Route Northbound Sunday Morning Ridership – Existing Plus Project Conditions						
Segment	Departure from TCTC	Existing Conditions ¹		Project-Generated	Existing Plus Project Conditions	
		Passenger Load	% of Seated Plus Standing Capacity ²	Passenger Boardings	Passenger Load	% of Seated Plus Standing Capacity ²
TCTC to Project Site	7:30 AM	98 passengers across two buses	109%	30	128 passengers across two buses	142%

Note:
¹ Conditions reported for worst-case Sunday scenario.
² Seated plus standing capacity is 45 passengers per bus.
 TCTC = Tahoe City Transit Center.
 Source: Fehr & Peers, 2022.

Table 9 indicates that the Village at Palisades Tahoe Specific Plan would exacerbate passenger loads that already exceed the seated plus standing capacity on the busiest Sunday afternoon southbound TART Highway 89 route trip. The 30 project-generated passenger boardings, added to the existing average passenger load of 48 passengers, would result in a passenger load of 78 passengers on a bus with a seated plus standing capacity of 45 passengers.

Table 9 TART Highway 89 Route Southbound Sunday Afternoon Ridership – Existing Plus Project Conditions							
Segment	Departure from Truckee Depot	Departure from Project Site	Existing Conditions ¹		Project-Generated	Existing Plus Project Conditions	
			Passenger Load	% of Seated Plus Standing Capacity ²	Passenger Boardings	Passenger Load	% of Seated Plus Standing Capacity ²
Project Site to TCTC	4:30 PM	5:05 PM	48	107%	30	78	173%

Note:
¹ Conditions reported for worst-case Sunday scenario.
² Seated plus standing capacity is 45 passengers.
 TCTC = Tahoe City Transit Center.
 Source: Fehr & Peers, 2022.

This analysis reaffirms the finding on page 9-65 of the DEIR that the project “could cause a demand for public transit that exceeds what is currently provided unless expanded service is implemented, resulting in a significant impact.”

Part D – Existing Plus Village at Palisades Tahoe Specific Plan Project Ridership with Expanded TART Service

As identified in Section 4, above, the 2020 RTP identifies that by 2025, TART Highway 89 route service will be expanded to operate on 30-minute headways (i.e., the route would operate with two trips per hour in each direction). **Tables 10 and 11** show how expanded bus service capacity is estimated to distribute existing and project-generated passengers over more buses, thereby resulting in substantially fewer passengers on a given bus.

Redistribution of Existing Morning Bus Passengers

For existing morning northbound passengers (**Table 10**), the shifting of passengers to the “new” or added trips reflects that most work shifts start between 7:00 AM and 8:00 AM, as evidenced by the existing 6:30 AM and 7:30 AM trips having the highest ridership. Of the average of 94 passengers on the current pair of buses that depart the TCTC at the 6:30 AM trip, 15% (14 passengers) were shifted to the new 6:00 AM trip, with the remaining passengers equally split between the existing 6:30 AM trip and the new 7:00 AM trip. For the 7:30 AM pair of buses that averages 119 passengers, 50% (60 passengers) were assumed to remain on that trip while 35% would shift to the new earlier 7:00 AM trip and 15% would take the new later 8:00 AM trip. For the 8:30 AM trip that averages 27 passengers, 10% were assumed to shift to the new later 9:00 AM trip, with the remainder of passengers equally split between the same 8:30 AM trip and earlier 8:00 AM trip.

Redistribution of Project Generated Morning Bus Passengers

As stated previously, all 30 project-generated passenger boardings were initially attributed to the busiest existing trip, the trip that leaves the TCTC at 7:30 AM. With the expanded TART service, 50% of the 30 project-generated passenger boardings (15 passengers) were assumed to stay on the 7:30 AM trip while 25% would take the new earlier 7:00 AM trip, and 25% would take the new later 8:00 AM trip.

Table 10 indicates that a second tripper bus would trail the primary bus (to pick-up any passengers turned away from the primary bus) on the 7:00 AM and 7:30 AM trips. Since the tripper bus is an existing condition provided today to serve peak surges in ridership, it is reasonable to assume it would also be operational when TART headways are reduced. As shown in **Table 10**, with the expanded TART service and the addition of project-generated passengers, no Sunday morning trip departing the TCTC would have ridership that exceeds the seated plus standing capacity of 45 passengers per bus.

Table 10 TART Highway 89 Route Northbound Sunday Morning Ridership – Existing Plus Project Conditions with Expanded TART Service

Segment	Departure Time from Project Site	Existing Plus Project Conditions with Current TART Service			Existing Plus Project Conditions with Expanded TART Service				
		Existing Conditions Passenger Loads ¹	Project-Generated Passenger Boardings	Total Passenger Loads	Existing Passenger Loads ²	Project-Generated Passenger Boardings ³	Existing Plus Project Passenger Loads	Number of Buses per Trip	% of Seated Plus Standing Capacity ⁴
TCTC to Project Site	6:00 AM	-	-	-	14	0	14	1	31%
	6:30 AM	94 (two buses)	-	94	40	0	40	1	89%
	7:00 AM	-	-	-	82	7	89	2	99%
	7:30 AM	119 (two buses)	30	149	60	15	75	2	83%
	8:00 AM	-	-	-	29	8	37	1	82%
	8:30 AM	27 (one bus)	-	27	12	0	12	1	27%
	9:00 AM	-	-	-	3	0	3	1	7%
	Total	240	30	270	240	30	270		-

Note:
¹ Conditions reported for worst-case Sunday scenario.
² Assumes existing passengers on the 6:30 AM trip shift 15% to the earlier trip, with the remainder of passengers equally split between the same trip and later trip. For the 7:30 AM trip, assumes 50% remain on trip, 35% take earlier trip, and 15% take later trip. For the 8:30 AM trip, assumes 10% shift to the later trip, with the remainder of passengers equally split between the same trip and earlier trip.
³ For the 30 project-generated passengers attributed to the 7:30 AM trip, assumes 50% remain on that trip, 25% take earlier trip, and 25% take later trip.
⁴ Seated plus standing capacity is 45 passengers per bus.
 TCTC = Tahoe City Transit Center.
 Source: Fehr & Peers, 2022.

Redistribution of Existing Afternoon Bus Passengers

For existing evening southbound passengers (**Table 11**), of the average passenger load of 42 passengers on the current trip that departs the project site at 4:05 PM, one-third (14 passengers) would shift to the new 3:35 PM trip, one-third would remain on the 4:05 PM trip, and one-third would shift to the new 4:35 PM trip. This same one-third split is also applied to existing passengers on the 6:05 PM trip. For the 5:05 PM trip that averages a passenger load of 53 passengers, 50% (27 passengers) were assumed to remain on that trip while 25% would shift to the new earlier 4:35 PM trip and 25% would take the new later 5:35 PM trip.

Redistribution of Project-Generated Afternoon Bus Passengers

All 30 project-generated passengers were initially attributed to the busiest existing afternoon trip, the trip that leaves the project site at 5:05 PM. With the expanded TART service, 50% of the 30 project-generated passengers (15 passengers) were assumed to stay on the 5:05 PM trip while 25% would take the new earlier 4:35 PM trip, and 25% would take the later 5:35 PM trip. As shown in **Table 11**, with the expanded TART service and the addition of project-generated passengers, no Sunday evening trip departing Olympic Valley for the TCTC would have a passenger load that exceeds the seated plus standing capacity of 45 passengers per bus.

Table 11 TART Highway 89 Route Southbound Sunday Afternoon Ridership – Existing Plus Project Conditions with Expanded TART Service								
Segment	Departure Time from Project Site	Existing Plus Project Conditions with Current TART Service			Existing Plus Project Conditions with Expanded TART Service			
		Existing Conditions Passenger Loads ¹	Project-Generated Passenger Boardings	Total Passenger Loads	Existing Passenger Loads ²	Project-Generated Passenger Boardings ³	Existing Plus Project Passenger Loads	Number of Buses per Trip
Project Site to TCTC	3:35 PM	-	-	-	14	0	14	31%
	4:05 PM	42	-	42	14	0	14	31%
	4:35 PM	-	-	-	27	8	35	78%
	5:05 PM	53	30	83	27	15	43	96%
	5:35 PM	-	-	-	18	7	25	56%
	6:05 PM	14	-	14	5	0	5	11%
	6:35 PM	-	-	-	4	0	4	9%

Note:
¹ Conditions reported for worst-case Sunday scenario.
² Assumes existing riders on the 4:05 PM and 6:05 PM trips shift one-third to the earlier trip, one-third to the later trip, and one-third remain on same trip. For the 5:05 PM trip, assumes 50% remain on trip, 25% take earlier trip, and 25% take later trip.
³ For the 30 project-generated passengers attributed to the 5:05 PM trip, assumes 50% remain on that trip, 25% take earlier trip, and 25% take later trip.
⁴ Seated plus standing capacity is 45 passengers.
 TCTC = Tahoe City Transit Center.
 Source: Fehr & Peers, 2022.

Tables 10 and 11 indicate that two specific trips (northbound 7:00 AM departure from TCTC and southbound 5:05 PM departure from the project site) would have passenger loads very close to (but not above) the buses’ seated plus standing capacity. This is based on very conservative assumptions that increase the number of

project-generated passengers attributed to the busiest existing trips. As stated in Part B of this document, all 30 project-generated passengers were assumed to commute towards the south of the project site between the TCTC and the project site. In reality, some proportion of these passengers would commute to the north of the project site, between the Truckee Depot and the project site. Therefore, the 30 total passengers would be split between these two routes. As also stated in Part B, all 30 project-generated passengers were initially attributed to the busiest existing morning and evening trip. In reality, employees would have different shift start and end times and some proportion of the 30 project-generated passengers would use different available trips during the morning and afternoon timeframes. Therefore, the actual project-generated employee ridership would be more evenly distributed across available trips than is shown in Tables 10 and 11.

Part E – Conclusion

Part D concluded that with implementation of the Village at Palisades Tahoe Specific Plan and planned TART Highway 89 bus service expansion, all northbound morning peak period bus trips from the TCTC to the project site and all southbound afternoon peak period bus trips from the project site to the TCTC would have passenger loads below seated plus standing capacity. However, there is considerable academic research demonstrating that increasing bus service frequency attracts more riders.

A summary of some of those studies is provided in a *Policy Brief on Impacts of Transit Service Strategies on Passenger Vehicle Use and Greenhouse Gas Emissions* (Handy and Lovejoy, UC Davis, Boarnet, USC, and Spears, UC Irvine, 2013)¹¹. The research findings indicate that a 1% increase in transit service frequency could result in a 0.5% increase in riders. However, the policy brief cautions uniform application of this elasticity, noting “no single transit elasticity value applies in all situations”. The brief describes how ridership increases are more likely in situations where service is currently infrequent, riders are not transit dependent, and/or trips are discretionary. Operating levels and rider characteristics along the Highway 89 TART route satisfy some of these conditions, but not others.

Application of a 0.5 elasticity to estimate increased ridership associated with more frequent TART Highway 89 service would likely result in an overestimate of new riders given the above. A more reasonable elasticity would be in the range of 0.25 to 0.40. Even with a lower elasticity, there would still be a sizeable number of new

¹¹ https://ww2.arb.ca.gov/sites/default/files/2020-06/Impacts_of_Transit_Service_Strategies_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Policy_Brief.pdf. Accessed in August 2022.

background riders expected with more frequent service. Given that the busiest northbound morning and southbound afternoon buses are at 99% and 96%, respectively, of their seated plus standing capacity, there is very limited reserve capacity to accommodate induced riders associated with increased bus frequency.

Therefore, it is concluded that with implementation of the Village at Palisades Tahoe Specific Plan and consideration of the induced ridership effects of increased TART Highway 89 bus service frequency, ridership levels would exceed the seated plus standing capacity on multiple buses during a peak winter Sunday condition. Accordingly, Impact 9-7, which was identified as significant in the 2016 EIR, because the project “could cause a demand for public transit that exceeds what is currently provided” remains significant based on this new information. Mitigation Measure 9-7 remains appropriate.

Appendix A

Single Day Estimates of Project VMT in the Tahoe Basin

Summer Friday VMT Estimate

Page 3-25 of the 2016 Final EIR Master Responses stated that the project would generate 23,842 VMT within the Tahoe Basin on a summer Friday. That estimate assumed 100 percent occupancy of the project’s hotel/condo units and fractional cabins. **Table A1** shows the specific calculations that led to this result.

This calculation was originally prepared to compare the project’s VMT contribution to the Tahoe Basin against the basin-wide total of 1,984,600 VMT on a summer Friday (as of 2010). It was also used to determine that the addition of project trips would result in the Tahoe Basin remaining below its VMT carrying capacity threshold that was in effect at that time, of 2,067,600 miles on a summer Friday.

Table A1: Project Summer Friday VMT Estimate within Tahoe Basin

User Group	Total Daily Project Trips ¹	Percent Travel To/From the Tahoe Basin ¹	Average Trip Length ¹	VMT Within Tahoe Basin ²
Guest/Visitor Travel	2,739 trips	41 percent	19.9 miles	22,364
Employee Travel	561 trips	35 percent	7.5 miles	1,478
Total	3,300 trips	-	-	23,842

Notes:

¹ Source: Supplemental data collection and analysis performed for the 2016 Final EIR and documented in Appendix C to the 2016 Final EIR and response to comment O8d-2.

² Values correspond to Appendix C of the 2016 Final EIR. These results vary slightly from calculations using the values in this table (e.g., 561 trips X 0.35 X 7.5 miles = 1,473 VMT) because this table does not show the full range of decimal spaces used in the calculations for Appendix C.

Winter Saturday VMT Estimate

A peak winter Saturday VMT estimate calculated as part of the 2016 Final EIR was considerably more complex than the summer estimate shown in **Table A1**. This is because separate daily trip generation estimates were developed for the hotel/condo/fractional cabins, restaurant/retail, Mountain Adventure Center, and miscellaneous trips categories. Additionally, trips were classified as being either employee trips or guest trips (which were further classified as either primary or non-primary, with primary defined as the main trip into Olympic Valley for the guest’s overnight stay). However, beyond these additional variables, the overall methodology to estimate VMT was similar to summer conditions, relying on the winter Saturday daily trip

generation estimate from 2016 Draft EIR Table 9-18; trip distribution percentages for winter guest and employees from 2016 Draft EIR exhibits 9-5, 9-6, and 9-7; and trip origin/destination information for winter Village at Palisades Tahoe visitors and employees (per Table 9-13 of the 2016 Draft EIR). During a winter Saturday, the project would generate 20,960 VMT in the Tahoe Basin, of which 12 percent is associated with employee travel.

Appendix B

Highway 89 Route Service Improvements Contained in the *Systems Plan Update for Tahoe Truckee Area Regional Transit in Eastern Placer County*

Technical Memorandum

Date: July 25, 2022
To: Sean Bechta & Sarah Henningsen, Ascent Environmental
From: John Gard, Fehr & Peers
Subject: *Systems Plan Update for TART in Eastern Placer County*

RS21-4105

The *Systems Plan Update for Tahoe Truckee Area Regional Transit in Eastern Placer County* (LSC Transportation Consultants, 2016) described existing transit service provided by TART (as of 2016), analyzed the ridership and financial aspects of three system upgrade scenarios, and presented a financially constrained (i.e., funded) service plan. Pages 49-51 of the report described the following specific transit service upgrade, which is part of the constrained plan:

- Reduce TART bus headways (i.e., time between successive arriving buses) from one hour to 30 minutes on the TART Highway 89 route that operates between Tahoe City and Truckee.

Table 26 of the report showed the short-range transit improvement capital costs and revenues associated with the financially constrained plan. Costs included those for bus stop improvements and new/replaced buses. Revenues identified to cover those costs included several programs administered through the Federal Transit Administration (FTA), Placer County traffic fee program, transient occupancy tax, the Public Transportation Modernization, Improvement, and Service Enhancement Account Program (PTMISEA) component of California Proposition 1B, and other sources. A funding shortfall was not identified for capital costs.

Table 28 of the report showed the short-range transit improvement operating/administrative costs and revenues associated with the financially constrained plan. These costs were associated with the need for additional resources related to system management and operation, dispatch, maintenance, and marketing. This table showed that a variety of revenues would cover the expanded operating/administrative costs including bus fare revenue, transportation funds from various local agencies (including cities, counties, air pollution districts),

FTA funding sources, transient occupancy taxes, development agreements, Placer County Service Area (CSA) funding, and other sources. A funding shortfall was not identified for operating/administrative costs.

Pages 58 through 60 of the report described operating/administrative revenues to be provided by the expanded Placer County Service Area funding. CSA funding is collected through zones of benefit assessed (through annual property tax bills) on new development to help fund expansion of transit. Table 28 showed that CSA revenues were expected to increase from \$51,000 per year in fiscal year (FY) 2015/2016 to \$91,000 per year in FY 2020/2021.

Page 60 described how revenues would also come from direct "up front" contributions from developers (through development agreements with Placer County) on major projects. Starting in FY 2018/2019, this revenue source was expected to collect \$120,000 annually.

Thus, it is apparent from the *2016 TART Systems Plan Update* that increased bus service was planned on the Highway 89 TART route and that full funding for this service would be available through specific identified funding sources. This report also noted that County Service Areas (CSAs) and direct contributions from developers on major projects would help provide the additional needed funding.

Appendix D

Criteria Pollutant Emissions Calculations

Palisades VMT to Criteria Pollutant Emissions Calculations

All in pounds per day

Condition	Total VMT	ROG emissions	NOx emissions	PM10 emissions	PM2.5 emissions	Emission Factor
Average Annual Daily in Tahoe Basin	12,406	7.42	11.60	0.87	0.37	Annual Tahoe
Average Annual Daily in Placer County	74,408	27.70	52.22	4.97	2.03	Annual Placer

Some notes:

Emissions include exhaust and brake and tire wear (from EMFAC). Does not include re-entrained road dust (calculated outside of EMFAC)

Math is: tpd from EMFAC for all vehicles (total ROG, total Nox, total PM) divided by total VMT from EMFAC to create an emission rate that accounts for

Based on EMFAC2021 v1.0.2, run in June 2022

Total per day from EMFAC, to calculate seasonal emission rates on a per mile basis.
 Summarized for calc simplicity.

	Total from EMFAC (VMT/day and tons/day)					EF (lbs per VMT calc)			
	VMT	ROG	NOX	PM10	PM2.5	ROG	NOX	PM10	PM2.5
Annual Tahoe	1,038,450	0.310430	0.485635	0.036586	0.015278	0.00060	0.00094	0.000070	0.000029
Annual Placer	10,690,470	1.990026	3.750987	0.357276	0.146120	0.00037	0.00070	0.000067	0.000027

lb per ton 2000

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Air Basin

Region: Lake Tahoe

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	NOx_TOTEX	PM2.5_TOTAL	PM10_TOTAL	ROG_TOTAL
Lake Tahoe	2024	All Other B	Aggregate	Aggregate	Diesel	26.58512642	1353.545949	0.004270477	0.000137109	0.00020019	0.0003034
Lake Tahoe	2024	All Other B	Aggregate	Aggregate	Natural Ga	0.301028868	12.71654745	2.36894E-06	2.88755E-07	8.37072E-07	1.82587E-07
Lake Tahoe	2024	LDA	Aggregate	Aggregate	Gasoline	7873.195702	303624.9821	0.042277969	0.002337323	0.006542551	0.062628988
Lake Tahoe	2024	LDA	Aggregate	Aggregate	Diesel	35.53477179	1090.908326	0.000508354	4.01972E-05	5.68718E-05	5.17592E-05
Lake Tahoe	2024	LDA	Aggregate	Aggregate	Electricity	423.4421443	21346.28548	0	8.30259E-05	0.000291	0
Lake Tahoe	2024	LDA	Aggregate	Aggregate	Plug-in Hyt	204.4601644	9869.959722	0.000161959	4.55497E-05	0.000142345	0.000362432
Lake Tahoe	2024	LDT1	Aggregate	Aggregate	Gasoline	2080.597242	63514.45471	0.021411415	0.000608903	0.001584163	0.0329808
Lake Tahoe	2024	LDT1	Aggregate	Aggregate	Diesel	0.081140165	1.256580539	2.00817E-06	2.85005E-07	3.17469E-07	3.53885E-07
Lake Tahoe	2024	LDT1	Aggregate	Aggregate	Electricity	1.121169859	57.1746179	0	2.22297E-07	7.79189E-07	0
Lake Tahoe	2024	LDT1	Aggregate	Aggregate	Plug-in Hyt	1.096888389	56.71237758	8.66958E-07	2.49608E-07	8.04391E-07	1.72305E-06
Lake Tahoe	2024	LDT2	Aggregate	Aggregate	Gasoline	8762.853866	330747.8311	0.067076442	0.002726303	0.007670873	0.074302319
Lake Tahoe	2024	LDT2	Aggregate	Aggregate	Diesel	43.56941995	1789.293613	9.67313E-05	2.20929E-05	4.90307E-05	2.63479E-05
Lake Tahoe	2024	LDT2	Aggregate	Aggregate	Electricity	27.85850419	1055.364366	0	4.10224E-06	1.43798E-05	0
Lake Tahoe	2024	LDT2	Aggregate	Aggregate	Plug-in Hyt	39.19544669	1949.776979	3.11294E-05	8.93111E-06	2.80432E-05	6.36131E-05
Lake Tahoe	2024	LHD1	Aggregate	Aggregate	Gasoline	957.9223419	30977.51805	0.027142822	0.001099684	0.003044499	0.022405036
Lake Tahoe	2024	LHD1	Aggregate	Aggregate	Diesel	830.6361113	28728.66856	0.095284937	0.002821833	0.004796613	0.008484057
Lake Tahoe	2024	LHD1	Aggregate	Aggregate	Electricity	1.064679417	84.236098	0	1.45317E-06	4.36416E-06	0
Lake Tahoe	2024	LHD2	Aggregate	Aggregate	Gasoline	91.6906451	3124.756787	0.002013973	0.00012447	0.000349566	0.001698343
Lake Tahoe	2024	LHD2	Aggregate	Aggregate	Diesel	308.5449427	11722.88761	0.022336697	0.000991485	0.001896606	0.002500736
Lake Tahoe	2024	LHD2	Aggregate	Aggregate	Electricity	0.275572327	20.65767157	0	4.08173E-07	1.21826E-06	0
Lake Tahoe	2024	MCY	Aggregate	Aggregate	Gasoline	1037.640329	5199.912565	0.004975388	4.84924E-05	0.000111532	0.035628177
Lake Tahoe	2024	MDV	Aggregate	Aggregate	Gasoline	5166.35343	174135.5945	0.056057444	0.001479127	0.004114387	0.062640524
Lake Tahoe	2024	MDV	Aggregate	Aggregate	Diesel	151.8109812	6028.727532	0.000354237	8.07144E-05	0.000172177	8.61558E-05
Lake Tahoe	2024	MDV	Aggregate	Aggregate	Electricity	27.66730812	1059.262201	0	4.11625E-06	1.44296E-05	0
Lake Tahoe	2024	MDV	Aggregate	Aggregate	Plug-in Hyt	23.68689607	1227.267515	1.91042E-05	5.75779E-06	1.78041E-05	4.0052E-05
Lake Tahoe	2024	MH	Aggregate	Aggregate	Gasoline	146.0212602	1209.00419	0.000987236	2.78966E-05	7.91663E-05	0.001281811
Lake Tahoe	2024	MH	Aggregate	Aggregate	Diesel	80.95329782	754.5279125	0.003986588	0.00012419	0.000163287	0.00011679
Lake Tahoe	2024	Motor Coa	Aggregate	Aggregate	Diesel	7.943826896	1108.425956	0.002971175	7.09178E-05	0.00014237	5.30905E-05
Lake Tahoe	2024	OBUS	Aggregate	Aggregate	Gasoline	18.33733083	861.6230378	0.000900958	1.87855E-05	5.51334E-05	0.000400548
Lake Tahoe	2024	OBUS	Aggregate	Aggregate	Electricity	0.016346829	1.618223272	0	1.93633E-08	6.14395E-08	0
Lake Tahoe	2024	PTO	Aggregate	Aggregate	Diesel	0	65.73182677	0.000309835	4.44043E-07	4.6412E-07	3.05849E-06
Lake Tahoe	2024	SBUS	Aggregate	Aggregate	Gasoline	1.159226397	62.21430425	3.86719E-05	1.2878E-06	3.70788E-06	2.32516E-05
Lake Tahoe	2024	SBUS	Aggregate	Aggregate	Diesel	31.27883317	661.9248407	0.005942944	3.54601E-05	6.43155E-05	6.26354E-05
Lake Tahoe	2024	SBUS	Aggregate	Aggregate	Electricity	0.100137709	2.917601263	0	3.44323E-08	1.08838E-07	0
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Diesel	4.293491633	140.2887059	0.000330466	3.48758E-06	9.68056E-06	2.03351E-06
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.009926373	0.37093038	0	4.62997E-09	1.46304E-08	0
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Diesel	2.152037997	71.10476142	0.000145963	1.73744E-06	4.87496E-06	9.57628E-07
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.010074888	0.360299112	0	4.49727E-09	1.4211E-08	0
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Diesel	5.349542029	176.8898901	0.000669028	2.02014E-05	2.87247E-05	3.65235E-05
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.021891981	0.803481909	0	1.00291E-08	3.16912E-08	0
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Diesel	2.716486772	150.2262615	0.000167646	3.5863E-06	1.02113E-05	1.54558E-06
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.004343348	0.191100548	0	2.38532E-09	7.53745E-09	0
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Diesel	31.41944541	1263.29087	0.003570986	7.52388E-05	0.000130605	0.000118087
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Diesel	35.34495989	1514.54135	0.002414772	4.20541E-05	0.000106254	2.82076E-05
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.011412387	0.486870344	0	5.82363E-09	1.8479E-08	0
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Diesel	18.76969546	733.8386553	0.002561854	6.89505E-05	0.000102254	0.000111296
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.073306541	3.10106419	0	3.70929E-08	1.177E-07	0
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Diesel	10.29310784	455.6918267	0.000892726	1.30496E-05	3.23839E-05	9.65433E-06
Lake Tahoe	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.033389139	2.404038614	0	2.87555E-08	9.12444E-08	0
Lake Tahoe	2024	T6 Public C	Aggregate	Aggregate	Diesel	10.81598926	374.2495835	0.002080713	1.58536E-05	3.23063E-05	3.48725E-05
Lake Tahoe	2024	T6 Public C	Aggregate	Aggregate	Electricity	0.052026985	2.24164975	0	2.73777E-08	8.66941E-08	0
Lake Tahoe	2024	T6 Public C	Aggregate	Aggregate	Diesel	17.1280002	626.6610507	0.002735922	2.30358E-05	5.04262E-05	3.47897E-05
Lake Tahoe	2024	T6 Public C	Aggregate	Aggregate	Electricity	0.069539021	2.972070343	0	3.62985E-08	1.14943E-07	0
Lake Tahoe	2024	T6 Public C	Aggregate	Aggregate	Diesel	4.824962185	167.6304777	0.001165011	9.56524E-06	1.7046E-05	2.08806E-05
Lake Tahoe	2024	T6 Public C	Aggregate	Aggregate	Electricity	0.028670247	1.148407638	0	1.40257E-08	4.44138E-08	0
Lake Tahoe	2024	T6 Public C	Aggregate	Aggregate	Diesel	47.88211559	2162.03771	0.011654923	0.000103947	0.000199552	0.000174112
Lake Tahoe	2024	T6 Public C	Aggregate	Aggregate	Electricity	0.209695254	13.99006818	0	1.70864E-07	5.41055E-07	0
Lake Tahoe	2024	T6 Utility C	Aggregate	Aggregate	Diesel	3.172517137	129.0236707	0.000163429	3.1221E-06	8.62757E-06	1.57133E-06
Lake Tahoe	2024	T6 Utility C	Aggregate	Aggregate	Electricity	0.024381029	1.060700961	0	1.28169E-08	4.06286E-08	0
Lake Tahoe	2024	T6 Utility C	Aggregate	Aggregate	Diesel	0.601560271	24.35014671	3.11545E-05	5.86094E-07	1.62498E-06	2.75196E-07
Lake Tahoe	2024	T6 Utility C	Aggregate	Aggregate	Electricity	0.00454433	0.197701867	0	2.38892E-09	7.57267E-09	0
Lake Tahoe	2024	T6 Utility C	Aggregate	Aggregate	Diesel	0.683428117	33.87711441	3.53215E-05	8.04446E-07	2.2493E-06	3.1625E-07

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Air Basin

Region: Lake Tahoe

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Nox_TOTEX	PM2.5_TOTAL	PM10_TOTAL	ROG_TOTAL
Lake Tahoe	2024	T6 Utility C	Aggregate	Aggregate	Electricity	0.005409419	0.326440016	0	3.94452E-09	1.25038E-08	0
Lake Tahoe	2024	T6TS	Aggregate	Aggregate	Gasoline	53.13636875	2409.140031	0.003450081	5.49748E-05	0.000157084	0.00174474
Lake Tahoe	2024	T6TS	Aggregate	Aggregate	Electricity	0.088198191	8.876458112	0	1.06489E-07	3.37802E-07	0
Lake Tahoe	2024	T7 CAIRP C	Aggregate	Aggregate	Diesel	36.59577652	7486.069551	0.019833797	0.000547495	0.001179467	0.000527833
Lake Tahoe	2024	T7 CAIRP C	Aggregate	Aggregate	Electricity	0.229135217	41.30105762	0	1.00009E-06	3.32568E-06	0
Lake Tahoe	2024	T7 NNOOS	Aggregate	Aggregate	Diesel	32.74673185	8899.672739	0.022190496	0.000634474	0.001385039	0.000589174
Lake Tahoe	2024	T7 NOOS C	Aggregate	Aggregate	Diesel	13.79357725	3233.093022	0.00881663	0.00023899	0.000512042	0.000244058
Lake Tahoe	2024	T7 Public C	Aggregate	Aggregate	Diesel	84.44752949	3727.642626	0.037280266	0.00038629	0.000803552	0.000542023
Lake Tahoe	2024	T7 Public C	Aggregate	Aggregate	Electricity	0.304180964	19.08999968	0	5.51811E-07	1.79305E-06	0
Lake Tahoe	2024	T7 Public C	Aggregate	Aggregate	Natural Ga	0.154073977	8.513510155	3.23534E-06	4.41676E-07	1.29837E-06	2.67848E-07
Lake Tahoe	2024	T7 Single D	Aggregate	Aggregate	Diesel	0.504483941	33.60952844	6.49428E-05	1.82495E-06	4.78062E-06	1.33809E-06
Lake Tahoe	2024	T7 Single D	Aggregate	Aggregate	Natural Ga	0.009412014	0.627043441	2.3173E-07	2.75392E-08	8.24677E-08	1.4402E-08
Lake Tahoe	2024	T7 Single O	Aggregate	Aggregate	Diesel	5.184574268	282.6768531	0.001026571	1.81188E-05	4.31117E-05	1.92219E-05
Lake Tahoe	2024	T7 Single O	Aggregate	Aggregate	Natural Ga	0.243271677	14.12519338	1.31826E-05	6.01092E-07	1.83676E-06	3.76189E-07
Lake Tahoe	2024	T7 SWCV C	Aggregate	Aggregate	Diesel	3.131783718	202.6762317	0.003522252	2.41761E-05	6.09638E-05	6.39158E-06
Lake Tahoe	2024	T7 SWCV C	Aggregate	Aggregate	Electricity	0.008106982	0.440363418	0	2.22079E-08	6.84439E-08	0
Lake Tahoe	2024	T7 Tractor	Aggregate	Aggregate	Diesel	5.359776554	415.01713	0.001313686	2.69077E-05	6.30292E-05	2.71314E-05
Lake Tahoe	2024	T7 Tractor	Aggregate	Aggregate	Electricity	0.013324891	1.028207975	0	2.5746E-08	8.52178E-08	0
Lake Tahoe	2024	T7 Tractor	Aggregate	Aggregate	Natural Ga	0.006715441	0.485067856	4.17124E-07	2.05607E-08	6.23315E-08	1.44154E-08
Lake Tahoe	2024	T7 Utility C	Aggregate	Aggregate	Diesel	2.253892447	102.369585	0.000324239	5.51363E-06	1.54983E-05	3.01916E-06
Lake Tahoe	2024	T7 Utility C	Aggregate	Aggregate	Electricity	0.004958536	0.314087894	0	8.81785E-09	2.8755E-08	0
Lake Tahoe	2024	T7IS	Aggregate	Aggregate	Gasoline	0.021855559	2.355095108	1.30222E-05	1.03449E-07	3.00401E-07	2.80128E-06
Lake Tahoe	2024	T7IS	Aggregate	Aggregate	Electricity	8.28426E-05	0.02707096	0	6.075E-10	1.90623E-09	0
							1038450.247	0.485634695	0.015278415	0.036585752	0.310429712
							VMT	Nox	PM2.5	PM10	ROG

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: County

Region: Placer

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Yr	Vehicle Cat	Model Yea	Speed	Fuel	Population	Total VMT	NOx_TOTEX	PM2.5_TOTAL	PM10_TOTAL	ROG_TOTAL
Placer	2024	All Other B	Aggregate	Aggregate	Diesel	75.9719	4247.218051	0.009317319	0.000270558	0.000461276	0.000555528
Placer	2024	LDA	Aggregate	Aggregate	Gasoline	105776.4	4003178.868	0.338528641	0.027716871	0.077659006	0.580180946
Placer	2024	LDA	Aggregate	Aggregate	Diesel	444.6622	12918.62024	0.003986783	0.000352513	0.000526368	0.000487296
Placer	2024	LDA	Aggregate	Aggregate	Electricity	5771.748	270385.0033	0	0.00105195	0.003686824	0
Placer	2024	LDA	Aggregate	Aggregate	Plug-in Hyt	2926.069	133308.7329	0.002077429	0.000618542	0.001894093	0.005171497
Placer	2024	LDT1	Aggregate	Aggregate	Gasoline	13795.62	470256.1151	0.09549101	0.003947648	0.010454115	0.159886256
Placer	2024	LDT1	Aggregate	Aggregate	Diesel	7.093507	57.4621971	0.000102565	1.58411E-05	1.73793E-05	1.93629E-05
Placer	2024	LDT1	Aggregate	Aggregate	Electricity	25.02557	1048.689484	0	4.08486E-06	1.43133E-05	0
Placer	2024	LDT1	Aggregate	Aggregate	Plug-in Hyt	14.4655	818.428658	1.0576E-05	3.52686E-06	1.13459E-05	2.06973E-05
Placer	2024	LDT2	Aggregate	Aggregate	Gasoline	66806.32	2765186.398	0.296623066	0.020757131	0.058089686	0.375699171
Placer	2024	LDT2	Aggregate	Aggregate	Diesel	277.9131	11840.39526	0.000745512	0.000135402	0.000297707	0.0002026
Placer	2024	LDT2	Aggregate	Aggregate	Electricity	334.6612	12099.70462	0	4.70222E-05	0.000164835	0
Placer	2024	LDT2	Aggregate	Aggregate	Plug-in Hyt	472.8153	25418.51915	0.000345201	0.000113387	0.000356376	0.000704827
Placer	2024	LHD1	Aggregate	Aggregate	Gasoline	6059.684	222257.8246	0.117332188	0.007606921	0.021535801	0.085856341
Placer	2024	LHD1	Aggregate	Aggregate	Diesel	6364.389	220431.3864	0.623085517	0.019798794	0.034867258	0.057622893
Placer	2024	LHD1	Aggregate	Aggregate	Electricity	14.32279	1070.825739	0	1.8473E-05	5.5478E-05	0
Placer	2024	LHD2	Aggregate	Aggregate	Gasoline	744.9914	27522.94738	0.012452693	0.001069013	0.003049272	0.008129214
Placer	2024	LHD2	Aggregate	Aggregate	Diesel	2340.223	87402.50691	0.150442154	0.007033724	0.013765838	0.017359596
Placer	2024	LHD2	Aggregate	Aggregate	Electricity	3.707185	262.6043579	0	5.18878E-06	1.54867E-05	0
Placer	2024	MCY	Aggregate	Aggregate	Gasoline	8595.88	46448.90281	0.037661232	0.000422044	0.000985121	0.290561565
Placer	2024	MDV	Aggregate	Aggregate	Gasoline	45843.33	1640764.649	0.291001566	0.012670892	0.035182223	0.348680042
Placer	2024	MDV	Aggregate	Aggregate	Diesel	991.4934	37115.05439	0.002741771	0.000479164	0.000997478	0.000609157
Placer	2024	MDV	Aggregate	Aggregate	Electricity	364.0919	13151.52813	0	5.11065E-05	0.000179155	0
Placer	2024	MDV	Aggregate	Aggregate	Plug-in Hyt	313.1194	14431.58417	0.000221419	6.75196E-05	0.000205721	0.000496726
Placer	2024	MH	Aggregate	Aggregate	Gasoline	1152.873	10104.86758	0.004147724	0.000225018	0.000652818	0.007806833
Placer	2024	MH	Aggregate	Aggregate	Diesel	621.6374	5680.729245	0.02873056	0.000832267	0.001121983	0.000828352
Placer	2024	Motor Coa	Aggregate	Aggregate	Diesel	13.85455	1933.096387	0.00517538	0.000123683	0.000248297	9.25931E-05
Placer	2024	OBUS	Aggregate	Aggregate	Gasoline	123.4957	5652.949432	0.004158492	0.000123108	0.000361568	0.001885243
Placer	2024	OBUS	Aggregate	Aggregate	Electricity	0.219909	18.10487243	0	2.16638E-07	6.87392E-07	0
Placer	2024	PTO	Aggregate	Aggregate	Diesel	0	5733.80664	0.018979693	3.01345E-05	3.14971E-05	0.000136499
Placer	2024	PTO	Aggregate	Aggregate	Electricity	0	16.78683507	0	0	0	0
Placer	2024	SBUS	Aggregate	Aggregate	Gasoline	30.02809	1449.360031	0.001431329	3.02379E-05	8.66376E-05	0.000779119
Placer	2024	SBUS	Aggregate	Aggregate	Diesel	247.4522	5457.039049	0.040685966	0.000297213	0.000535323	0.00054442
Placer	2024	SBUS	Aggregate	Aggregate	Electricity	0.759538	22.07164386	0	2.57914E-07	8.13089E-07	0
Placer	2024	T6 CAIRP C	Aggregate	Aggregate	Diesel	1.920838	130.8450453	9.7019E-05	3.75725E-06	9.07603E-06	1.57447E-06
Placer	2024	T6 CAIRP C	Aggregate	Aggregate	Electricity	0.010553	0.819502203	0	9.39925E-09	2.99522E-08	0
Placer	2024	T6 CAIRP C	Aggregate	Aggregate	Diesel	2.560466	179.6365269	0.000125265	4.85049E-06	1.21387E-05	1.53824E-06
Placer	2024	T6 CAIRP C	Aggregate	Aggregate	Electricity	0.012092	0.983555722	0	1.12809E-08	3.59482E-08	0
Placer	2024	T6 CAIRP C	Aggregate	Aggregate	Diesel	8.409848	467.8525811	0.000339091	1.28425E-05	3.18337E-05	4.70517E-06
Placer	2024	T6 CAIRP C	Aggregate	Aggregate	Electricity	0.071242	4.112862013	0	4.71723E-08	1.50322E-07	0
Placer	2024	T6 CAIRP C	Aggregate	Aggregate	Diesel	14.16617	2948.829321	0.00159661	7.95217E-05	0.000199157	2.14575E-05
Placer	2024	T6 CAIRP C	Aggregate	Aggregate	Electricity	0.057902	11.57649412	0	1.32776E-07	4.23112E-07	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	141.6162	4861.440762	0.01182389	0.000218375	0.000437391	0.000308479
Placer	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.512813	19.49044488	0	2.4328E-07	7.68748E-07	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	32.89079	1138.396207	0.002275947	3.35594E-05	8.40512E-05	3.13949E-05
Placer	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.104551	3.98513133	0	4.97425E-08	1.57183E-07	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	176.4176	6078.150327	0.012705351	0.000201739	0.000472346	0.00022711
Placer	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.565729	20.9435456	0	2.61418E-07	8.26062E-07	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	29.23962	1571.839055	0.003880337	4.28718E-05	0.000112432	4.21221E-05
Placer	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.029608	1.168605048	0	1.45866E-08	4.60925E-08	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	390.0058	16645.25185	0.033314749	0.000671072	0.001386095	0.000788159
Placer	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.808778	35.46571707	0	4.24218E-07	1.34609E-06	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	745.4067	33092.88249	0.047105189	0.000875405	0.002276217	0.000511008
Placer	2024	T6 Instate I	Aggregate	Aggregate	Electricity	2.114127	95.57256252	0	1.14318E-06	3.62742E-06	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	390.1251	16972.53221	0.029432082	0.000616019	0.001342014	0.000619532
Placer	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.971168	42.93080983	0	5.1351E-07	1.62942E-06	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	218.1303	10110.83098	0.01856759	0.000281623	0.000710251	0.000189002
Placer	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.423616	27.90772902	0	3.33814E-07	1.05923E-06	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	8.306933	453.6412755	0.000526616	1.11623E-05	3.0327E-05	4.65538E-06
Placer	2024	T6 Instate I	Aggregate	Aggregate	Electricity	0.046174	2.948569637	0	3.52689E-08	1.11912E-07	0
Placer	2024	T6 Instate I	Aggregate	Aggregate	Diesel	24.98915	1484.660516	0.002187135	3.90809E-05	0.000101917	2.10594E-05
Placer	2024	T6 OOS Cla	Aggregate	Aggregate	Diesel	1.025889	69.30334562	5.69011E-05	2.11684E-06	4.93971E-06	1.08034E-06
Placer	2024	T6 OOS Cla	Aggregate	Aggregate	Diesel	1.361146	95.07172781	6.8204E-05	2.59915E-06	6.45785E-06	8.85046E-07

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: County

Region: Placer

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Yr	Vehicle Cat	Model Yea	Speed	Fuel	Population	Total VMT	NOx_TOTEX	PM2.5_TOTAL	PM10_TOTAL	ROG_TOTAL
Placer	2024	T6 OOS Cla	Aggregate	Aggregate	Diesel	4.492696	248.4251448	0.000194686	7.13194E-06	1.72302E-05	3.09536E-06
Placer	2024	T6 OOS Cla	Aggregate	Aggregate	Diesel	7.035965	1806.359717	0.000972297	4.8813E-05	0.000122102	1.30299E-05
Placer	2024	T6 Public C	Aggregate	Aggregate	Diesel	41.25676	1468.154013	0.008877246	7.02814E-05	0.00013519	0.000112828
Placer	2024	T6 Public C	Aggregate	Aggregate	Electricity	0.183507	7.927347051	0	9.68184E-08	3.06584E-07	0
Placer	2024	T6 Public C	Aggregate	Aggregate	Diesel	111.5154	4149.771445	0.014634012	0.000140566	0.000321404	0.000237601
Placer	2024	T6 Public C	Aggregate	Aggregate	Electricity	0.459883	19.78616276	0	2.41653E-07	7.65215E-07	0
Placer	2024	T6 Public C	Aggregate	Aggregate	Diesel	27.22535	950.2722219	0.006480401	5.30727E-05	9.54279E-05	0.000104977
Placer	2024	T6 Public C	Aggregate	Aggregate	Electricity	0.143369	5.796384031	0	7.07925E-08	2.24171E-07	0
Placer	2024	T6 Public C	Aggregate	Aggregate	Diesel	163.8761	7543.065233	0.043360422	0.000428649	0.000765189	0.000665967
Placer	2024	T6 Public C	Aggregate	Aggregate	Electricity	0.80903	53.26348173	0	6.50518E-07	2.05993E-06	0
Placer	2024	T6 Utility C	Aggregate	Aggregate	Diesel	23.89717	972.9346	0.001223918	2.35254E-05	6.50399E-05	1.17821E-05
Placer	2024	T6 Utility C	Aggregate	Aggregate	Electricity	0.189647	8.250619278	0	9.96959E-08	3.16028E-07	0
Placer	2024	T6 Utility C	Aggregate	Aggregate	Diesel	4.537167	183.8736669	0.000233594	4.42277E-06	1.22675E-05	2.06811E-06
Placer	2024	T6 Utility C	Aggregate	Aggregate	Electricity	0.035423	1.54106857	0	1.86214E-08	5.90283E-08	0
Placer	2024	T6 Utility C	Aggregate	Aggregate	Diesel	5.135691	255.4555435	0.000264262	6.06342E-06	1.69584E-05	2.37582E-06
Placer	2024	T6 Utility C	Aggregate	Aggregate	Electricity	0.041862	2.531035303	0	3.05836E-08	9.69475E-08	0
Placer	2024	T6T5	Aggregate	Aggregate	Gasoline	355.1083	17772.21069	0.013349528	0.000397865	0.001150454	0.007373651
Placer	2024	T6T5	Aggregate	Aggregate	Electricity	1.186502	100.0620228	0	1.20042E-06	3.80795E-06	0
Placer	2024	T7 CAIRP C	Aggregate	Aggregate	Diesel	713.0493	147727.813	0.388503769	0.010781034	0.023251127	0.010303634
Placer	2024	T7 CAIRP C	Aggregate	Aggregate	Electricity	4.575545	834.4757168	0	2.02066E-05	6.71944E-05	0
Placer	2024	T7 NNOOS	Aggregate	Aggregate	Diesel	639.8797	175891.7537	0.435706184	0.012515039	0.027347993	0.011531438
Placer	2024	T7 NOOS C	Aggregate	Aggregate	Diesel	269.3751	63915.99209	0.173006085	0.004713361	0.010110886	0.004773586
Placer	2024	T7 Other P	Aggregate	Aggregate	Diesel	2.670221	491.4517465	0.001141521	3.15907E-05	7.67095E-05	1.64916E-05
Placer	2024	T7 Other P	Aggregate	Aggregate	Electricity	0.004641	0.98716801	0	2.60254E-08	8.5551E-08	0
Placer	2024	T7 POAK CI	Aggregate	Aggregate	Diesel	57.57453	5711.276454	0.016128323	0.000367036	0.000891368	0.00029444
Placer	2024	T7 POAK CI	Aggregate	Aggregate	Electricity	0.133599	10.5577434	0	2.78342E-07	9.14966E-07	0
Placer	2024	T7 Public C	Aggregate	Aggregate	Diesel	330.3394	14462.09202	0.143880357	0.001495668	0.003121807	0.002117045
Placer	2024	T7 Public C	Aggregate	Aggregate	Electricity	1.278725	82.45106072	0	2.38331E-06	7.74429E-06	0
Placer	2024	T7 Public C	Aggregate	Aggregate	Natural Ga	1.7235	94.48374467	3.59657E-05	4.90218E-06	1.44099E-05	2.97621E-06
Placer	2024	T7 Single C	Aggregate	Aggregate	Diesel	19.70123	1445.721139	0.00283478	8.05965E-05	0.000207831	5.43286E-05
Placer	2024	T7 Single C	Aggregate	Aggregate	Electricity	0.050059	3.46623417	0	8.8117E-08	2.91063E-07	0
Placer	2024	T7 Single C	Aggregate	Aggregate	Natural Ga	0.019371	1.218901733	7.45895E-07	5.27898E-08	1.59499E-07	3.00153E-08
Placer	2024	T7 Single D	Aggregate	Aggregate	Diesel	174.8785	10683.31306	0.027176492	0.000648967	0.00159172	0.000536442
Placer	2024	T7 Single D	Aggregate	Aggregate	Natural Ga	1.358734	73.14210835	6.85546E-05	3.11716E-06	9.51635E-06	2.00256E-06
Placer	2024	T7 Single O	Aggregate	Aggregate	Diesel	291.1575	16469.08301	0.040175405	0.000970265	0.002422231	0.00082892
Placer	2024	T7 Single O	Aggregate	Aggregate	Electricity	1.277317	81.07562265	0	2.06107E-06	6.808E-06	0
Placer	2024	T7 Single O	Aggregate	Aggregate	Natural Ga	3.617648	204.1181131	0.000135636	8.83633E-06	2.67068E-05	5.25664E-06
Placer	2024	T7 SWCV C	Aggregate	Aggregate	Diesel	126.6855	8211.26541	0.04460785	0.000898062	0.002384803	0.000506149
Placer	2024	T7 SWCV C	Aggregate	Aggregate	Electricity	0.393898	25.1389724	0	1.26778E-06	3.90725E-06	0
Placer	2024	T7 SWCV C	Aggregate	Aggregate	Natural Ga	12.9934	842.2159046	0.001432073	7.72735E-05	0.000229124	5.53809E-05
Placer	2024	T7 Tractor	Aggregate	Aggregate	Diesel	530.0214	41644.81793	0.130571161	0.002697087	0.006321552	0.002690053
Placer	2024	T7 Tractor	Aggregate	Aggregate	Electricity	1.367538	105.4461504	0	2.64033E-06	8.73937E-06	0
Placer	2024	T7 Tractor	Aggregate	Aggregate	Natural Ga	2.167437	156.523237	0.000134575	6.63455E-06	2.01133E-05	4.65206E-06
Placer	2024	T7 Utility C	Aggregate	Aggregate	Diesel	16.9225	772.1807194	0.002432491	4.15705E-05	0.000116885	2.26664E-05
Placer	2024	T7 Utility C	Aggregate	Aggregate	Electricity	0.040668	2.575264387	0	7.22992E-08	2.35768E-07	0
Placer	2024	T7IS	Aggregate	Aggregate	Gasoline	1.024839	39.5199569	0.000483525	1.9613E-06	5.4545E-06	0.000129667
Placer	2024	T7IS	Aggregate	Aggregate	Electricity	0.001114	0.305172041	0	6.84837E-09	2.1489E-08	0
Placer	2024	UBUS	Aggregate	Aggregate	Gasoline	31.78124	2187.791446	0.000604795	9.73049E-05	0.000280915	0.000149921
Placer	2024	UBUS	Aggregate	Aggregate	Diesel	43.34952	4825.695312	0.00151609	0.000266232	0.000749577	0.000293143
Placer	2024	UBUS	Aggregate	Aggregate	Electricity	0.06267	6.027186453	0	1.47825E-07	4.45137E-07	0
Placer	2024	UBUS	Aggregate	Aggregate	Natural Ga	24.08923	3654.460327	0.001242443	0.000182428	0.000550717	9.02994E-05

10690469.97 VMT 3.750986954 Nox 0.146120267 PM2.5 0.357275526 PM10 1.990026434 ROG

Appendix E

Noise Calculations

Construction Noise Contour Distance Calculations

Placer County Sound limits for sensitive receptors (section 9.36.060)

9.36.060 Sound limits for sensitive receptors.

- A. It is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied or otherwise controlled by such person that:
- Causes the exterior sound level when measured at the property line of any affected sensitive receptor to exceed the ambient sound level by five dBA; or
 - Exceeds the sound level standards as set forth in Table 1, whichever is the greater.

Table 1
SOUND LEVEL STANDARDS (On-site)

Sound Level Descriptor	Daytime (7 am to 10 pm)	Nighttime (10 pm to 7 am)
Hourly Leq, dB	55	45
Maximum level, (L _{max}) dB	70	65

B. Each of the sound level standards specified in Table 1 shall be reduced by five dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus five dB.

C. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table 1. (Ord. 5280-B, 2004)

Day and Night Construction Contour Distance Calculation

	dBA	Distance to Contour (ft)
Starting Noise Level	94	50
	88	100
	82	200
	76	400
	70	800
	64	1600
	58	3200
Threshold Level	55	4800
	52	6400

	dBA	Distance to Contour (ft)
Starting Noise Level	79	50
	73	100
	67	200
	61	400
	55	800
	49	1600
Threshold Level	47	1867
	43	3200

Notes

Starting noise levels obtained from construction noise modeling conducted in the 2016 EIR

Attenuation based on standard rate of 6 dB reduction for each doubling of the distance from the source (FTA 2018)

Threshold Determination Calculation

To determine the applicable threshold for day time and night time, the lowest ambient hourly noise level, based on 24-hour measurements conducted for the project (Appendix I of the 2016 DEIR), was first determined. Then 5 dB was added to that level and compared to the limits in Table 1 of Placer Code Section 9.36.060. The highest value is the thresholds. Calculations are provided below

Daytime Hours (per County Code)
Nighttime Hours (per County Code)

24-Hour Measurement Summary*	Time Period	Min Leq	+5 dB	Threshold
6am	Day	49	54	55
7am		55	60	
8am	Night	58	63	47
9am		59.8	64.8	
10am		61.8	66.8	
11am		65	70	
12pm		57.5	62.5	
1pm		53	58	
2pm		63.4	68.4	
3pm		57	62	
4pm		55.5	60.5	
5pm		52.9	57.9	
6pm		52.5	57.5	
7pm	51.4	56.4		
8pm	47.8	52.8		
9pm	53.2	58.2		
10pm	46.4	51.4		
11pm	45.3	50.3		
12am	48.4	53.4		
1am	43.9	48.9		
2am	44.3	49.3		
3am	42.3	47.3		
4am	46.6	51.6		
5am	47.6	52.6		

*See Appendix I of the 2016 EIR: <https://www.placer.ca.gov/2747/Village-at-Squaw-Valley-Specific-Plan>

Attenuation Calculations for Stationary Noise Sources

KEY: Orange cells are for input.
 Grey cells are intermediate calculations performed by the model.
 Green cells are data to present in a written analysis (output).

STEP 1: Identify the noise source and enter the reference noise level (dBA and distance).

STEP 2: Select the ground type (hard or soft), and enter the source and receiver heights.

STEP 3: Select the distance to the receiver.

Noise Source/ID	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor		
	noise level (dBA)	@	distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	noise level (dBA)	@	distance (ft)
Funitel at Squaw Valley	69.2	@	54	hard	5	5	0.00	69.9	@	50

Notes:

Estimates of attenuated noise levels do not account for reductions from intervening barriers, including walls, trees, vegetation, or structures of any type.

Computation of the attenuated noise level is based on the equation presented on pg. 176 and 177 of FTA 2018.

Computation of the ground factor is based on the equation presented in Table 4-26 on pg. 86 of FTA 2018, where the distance of the reference noise level can be adjusted and the usage factor is not applied (i.e., the usage factor is equal to 1).

Sources:

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available:

<<http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no->

Appendix F

Updated Cumulative Projects List

CUMULATIVE IMPACT APPROACH

The following summarizes a discussion from the 2016 EIR.

CEQA Guidelines Section 15130 identifies two basic methods for establishing the cumulative environment in which a project is considered: the use of a list of past, present, and probable future projects or the use of adopted projections from a general plan, other regional planning document, or a certified EIR for such a planning document. This cumulative analysis uses a combination of the “list” approach and the “projections” approach to identify the cumulative setting.

A list of probable future projects is provided below. Probable future projects are those in the project vicinity that have the possibility of interacting with the proposed project to generate a cumulative impact and either:

1. Are partially occupied or under construction;
2. Have received final discretionary approvals;
3. Have applications accepted as complete by local agencies and are currently undergoing environmental review; or
4. Are otherwise considered likely to be developed, based on historic development patterns, including the rate of development, in the Olympic Valley.

The other criterion used is timing. The cumulative list considers related projects likely to be constructed over the 25-year buildout of the proposed project. This time period was selected because it coincides with the timing of the introduction of project impacts (project impacts will be introduced by construction and operational activities); it is consistent with the timing requirements for water supply assessments (WSA, see CCR Section 15155), although it considers development occurring past the 20-year WSA planning horizon requirements; and it would be speculative to forecast development beyond this 25-year timeframe.

Project List

Table 18-2 provides the list of probable future projects that meet the requirements stated above. Projects are listed that are in the project vicinity and that have the possibility of interacting with the proposed project to generate related impacts (see Exhibit 18-1; the map numbering corresponds to the numbers in Table 18-2). This list of projects was utilized in the development and analysis of the cumulative settings and impacts.

Since the 2016 EIR was prepared, anticipated cumulative development in the Olympic Valley and in the larger Tahoe-Truckee region has changed somewhat. Table 18-2 provides the cumulative projects table from the 2016 EIR with updates shown in underline and ~~striketrough~~. Inclusion of the updated information results in 352 more residential units and 238 more hotel units compared to the cumulative development scenario in the 2016 EIR. All of these units are outside Olympic Valley. When considering the total effect of withdrawn projects, new projects, and the absorption of anticipated future development potential by new projects, there is no net increase in Olympic Valley cumulative development projections for residential and resort/hotel/condo units compared to the cumulative development scenario in the 2016 EIR.

Table 18-2 Cumulative Project List						
Map Number	Project Name	Location	Description	Residential Units and/or Non-Residential Area	Project Status	Changes Since 2016
1	Truckee Railyard Master Plan	The eastern end of historic downtown Truckee	Mixed commercial and residential development. Includes Trout Creek District (6 acres of primarily mixed housing), Industrial Heritage District (8.5 acres of office, residential, and mixed use buildings), and Downtown Extension District (12 acres of commercial development).	570 residential units, 70,000 square feet of retail; 15,000 square feet of office space, 60-room hotel, movie theater, 20,000-square-foot grocery store, and 25,000-square-foot civic building	Adopted in 2009. Construction has begun, but is not complete.	Plan implementation continues
2	Coldstream Specific Plan	Coldstream Road south of Interstate 80, Truckee	Planned Community.	345 residential units, including affordable housing units; 30,000 square feet of commercial	Project approved and EIR certified on September 23, 2014.	No change
3	Pollard Station – A Senior Neighborhood	10335 Old Brockway Road, Truckee (West of Pine Cone Road terminus, at Hilltop)	Age-restricted senior neighborhood: lodge and condominiums (8-acres in the Hilltop Master Plan area).	86 unit senior lodge and 40 two bedroom condominium units	Revised application submitted January 2013. MND released October 2014.	No change
4	Joerger Ranch Specific Plan	Intersection of SR 267, Brockway Road, and Soaring Way, Truckee	70-acre mixed use planned community including industrial, office space, public facility, transportation, and apartment uses.	318 dwelling units	Final EIR released <u>and project approved in January 2015. Town Council hearing date to be determined, but would not be before February 24, 2015.</u>	Plan implementation underway.
5	Northstar Mountain Master Plan	5001 Northstar Drive, Truckee	Mountain Master Plan for the existing ski resort area. Various additions and changes to ski lifts, snowmaking, trails, bridges, access, ropes course, bike trails, and campsites.	–	Final EIR released in June 2014. <u>Project put on hold by applicant. Final EIR has not yet been certified and project entitlement requests have not yet been approved. Project buildout dates unknown. Project approved in January 2017 and in a valid vesting period.</u>	Plan implementation underway.

Table 18-2 Cumulative Project List						
6	Northstar Highlands Phase II	Northstar Drive, Truckee	Modifications to the original subdivision approval, reducing the development area and number of housing units (from 576 units to 446 units).	50 townhomes, 10 single family lots, and 386 condominiums for a total of 446 units; up to 147 non-residential and commercial condominiums and 4,000 square feet of commercial space	Initial study checklist has been prepared. <u>Project approved and vested. Map/subdivision improvements constructed and an estimated 50% of units have been constructed.</u>	Project implementation continues.
7	Cabin Creek Biomass Facility Project	900 Cabin Creek Road, Truckee	Develop a two megawatt wood-to-energy facility that would utilize a gasification technology. Would support fuels reduction and thinning activities within and outside of the Lake Tahoe Basin. Fueled by forest-sourced material only.	-	Final EIR certified and project approved by Board of Supervisors on May 7, 2013. Construction projected to begin in 2015. <u>Project has expired.</u>	No formal plans for project implementation.
8	Truckee River Corridor Access Plan	Truckee River Watershed, Placer and Nevada counties	Continuous and coordinated system of preserved lands and habitat, with a connecting corridor of walking, in-line skating, equestrian, bicycle trails, and angling and boating access from Lake Tahoe to the Martis Valley, the Squaw-Olympic Valley Road / Highway 89 intersection to the Placer County/Town of Truckee boundary.	-	Application submitted; design and environmental review underway.	Planning and environmental review continues.
9a	Squaw Valley Palisades Tahoe Red Dog Lift Replacement	Terminus of Squaw Olympic Valley Road , west of State Route 89, Squaw Olympic Valley	Replace the existing triple chairlift with a high-speed, detachable, 6-person chairlift.	-	Mitigated Negative Declaration and project approved on March 28, 2013 <u>2012</u> by Planning Commission, but had not been constructed as of this writing. <u>In 2019, a modification to the previously approved Conditional Use Permit was approved for the relocation of the lower</u>	Minor location change. Under construction.

Table 18-2 Cumulative Project List

					terminal 600 feet to the east of the approved location. In February of 2021, the Planning Commission approved an extension of time extending the Conditional Use Permit approval to April 8, 2023.	
9b	Siberia Lift Replacement	Terminus of Squaw Olympic Valley Road, west of State Route 89, Squaw Olympic Valley	Replace the existing 4-person chairlift with a high-speed, detachable, 6-person chairlift. Total lift capacity would not increase.	-	Mitigated Negative Declaration and project approved in March 2015 by Planning Commission. Construction planned for summer 2015. Project construction complete.	Project complete.
10	Alpine Sierra Subdivision	Terminus of Alpine Meadows Road near Alpine Meadows Ski Resort	45.547.3-acre planned development to include single-family lots and commonly held parcels.	3347 single-family residential units and 5 secondary dwelling units 14 residential halfplex units	NOP circulated in spring 2014. Draft EIR expected to be circulated 2017 summer 2014. Project and Final EIR approved 2019.	Addition of 5 secondary dwelling units.
11	Alpine Meadows Hot Wheels Lift Replacement	Alpine Meadows Ski Resort, Alpine Meadows	Replace the existing triple chairlift with a detachable quad chairlift	-	Environmental review complete; project approved in December 2012. Implementation could begin Project is fully constructed and in the summer 2015 operation.	Project complete.
12	Homewood Mountain Resort Master Plan	5145 Westlake Boulevard, Homewood	Redevelop mixed-uses at the North Base area, residential uses at the South Base area, a lodge at the Mid-Mountain Base area, and ski area.	-	EIR/EIS certified and project approved in December 2011. Separate federal and state lawsuits were	No change.

Table 18-2 Cumulative Project List

						filed challenging the certification of the EIR/EIS and the project approval. The federal lawsuit was settled in 2014. The state lawsuit is on appeal and pending before the 3 rd District Court of Appeal. <u>Construction timeframe is unknown. Project proponent is working with county staff to carry out a phase 1 project.</u>	
13	SR 89/Fanny Bridge Improvement Project	State routes 89 and 28 at the Truckee River Crossing, Tahoe City	Construction of a new bridge over the Truckee River, repair or replacement of Fanny Bridge, and various other improvements.	-		EIR/EIS/EA released in December 2014. Construction target is 2016. <u>Phase 1 Project construction completed.</u>	Phase 1 project complete. Phase 2 construction anticipated in 2023.
14	Tahoe City Vision Plan	Tahoe City (contiguous with Tahoe City Community Plan boundaries)	Visioning effort to guide Area Plan development.	-		Planning effort. Vision planning <u>underway completed.</u>	Planning process complete.
15	Martis Camp	1200 Lodgetrail Drive, Truckee, CA	A private golf and ski club community of upscale second homes.	663 lots (between 2.5 and 0.5 acres) on over 2,000 acres		Opened in 2006. Partially built-out. Many homes and community facilities are in place, but there are also lots available.	Project status remains the same.
16	Martis Valley West Parcel	Northstar	Mixed residential uses (including single family, town homes, cabins, condos) and commercial development (including resort services, fitness center, family entertainment, and community center).	760 residential units; homeowner amenities, and approximately 34,500 square feet <u>6.6 acres</u> of commercial development		Application complete. NOP released in April 2014. Initial application included 112 acres in Tahoe Basin. Project revised to remove all Basin	Slight change in expression of commercial development.

Table 18-2 Cumulative Project List

					land, and revised NOP circulated in February 2015. EIR target is spring/summer 2015. Approved by the Placer County Board of Supervisors in October 2016. Project approvals litigated. Litigation complete and project approvals invalidated.	
17	Lake Tahoe Passenger Ferry	Cross-lake ferry service with a South Shore Ferry Terminal at the Ski Run Marina in South Lake Tahoe and a North Shore Ferry Terminal at the Grove Street Pier west of the Tahoe City Marina	Year-round waterborne transit between north and south shores of Lake Tahoe.	-	NOP/NOI released in November 2013. Draft EIS/EIS/EIR in preparation.	No change.
18	Caltrans' Highway Improvement Projects (and Resort Triangle Transportation Plan [RTTP])	SR 267	Planned Improvements (those included in a long-term plan that can be funded) and Programmed Improvements (those included in a near-term programming document that identifies funding amounts by year) in the 2012 Transportation Corridor Concept Report for SR 267 include: widening to four lanes between the Placer County line and Northstar Drive, rehabilitating pavement and widening shoulders between Placer County line and Brockway Summit, plant establishment and protection from Northstar Drive to SR 28, class II bike lane from Brockway Summit to SR 28. <u>The RTTP (adopted by Placer County in 2020) envisions SR 267 as a 3-lane roadway, with one lane in each direction, plus a reversible bus-only lane that switches direction with peak traffic flows.</u>	-	<u>Caltrans' Highway Improvement Projects:</u> Anticipated construction between 2014 and 2025. <u>RTTP: SR 267 improvements would be completed within 10-15 years (i.e., 2030-2035).</u>	Reduction in planned number of lanes along SR 267 from 4 lanes to 3 lanes.
19*	Tahoe Cedars Subdivision	6980 West Lake Blvd. Tahoma	Six single family residences Planned Residential Development	Six single-family residences	Approved May 2017. Project is fully constructed.	New project. Addition of 6 single-family residences.

Table 18-2 Cumulative Project List						
<u>20*</u>	<u>Alpine Village Apartments</u>	<u>235 Alpine Meadows Road</u>	<u>Conversion of three existing indoor racquetball courts to twelve (12) affordable housing apartment units. No changes to the height nor footprint of the existing 4,343 square foot building. The floor area inside the building will be increased to accommodate a second floor, increasing the floor area to 6,548 square feet.</u>	<u>12 residential units</u>	<u>Project placed on hold November 2020. Applicant is working with staff to explore alternatives to deliver an equivalent number of housing units.</u>	<u>New project. 12 additional residential units.</u>
<u>21*</u>	<u>White Wolf</u>	<u>West side of Alpine Meadows Road, immediately south of the Alpine Meadows ski area</u>	<u>38 lots ranging in size from 0.5 acre to 1.5 acres on 460-acre project area. The project includes construction of common areas with amenities for owners and their guests. Amenities to include a clubhouse/lodge, ski resort facilities and season recreational facilities, (e.g., pool, tennis courts, equestrian facilities, etc.). Also proposed is an approximate 1,770 square foot warming hut and a ski lift.</u>	<u>38 single-family dwelling units.</u>	<u>Draft EIR is being prepared.</u>	<u>New project. 38 new residential units</u>
<u>22*</u>	<u>Boatworks at Tahoe Redevelopment</u>	<u>790 North Lake Boulevard, Tahoe City</u>	<u>Redevelopment of the seven properties associated with the Boatworks mall to include: 80 to 85 hotel units, 31 residential condominiums, conference facilities, full-service spa, swimming pool/hot tubs, fitness center, food and beverage outlets and retail space. Hotel units will range from standard bedrooms to suites and with floor areas ranging from 420 to 1,440 square feet; average floor area would be 559 square feet. The condominiums will have a mix of one, two, and three-bedroom units with floor areas ranging from 1,100 to 2,000 square feet.</u>	<u>31 residential units, up to 85 hotel units</u>	<u>The EIR/EIS SOW is finalized and Placer County drafted a 4-party contract that is currently under review with TRPA and pending TRPA authorization.</u>	<u>New project. 31 additional residential units and 85 additional hotel units.</u>
<u>23*</u>	<u>39° North</u>	<u>8600 block of North Lake Boulevard, Kings Beach</u>	<u>The project proposes mixed use redevelopment of two nearby sites on North Lake Boulevard, including a 153-room hotel, 10,500 square feet of restaurant and retail space, 36 for-sale townhomes, and 74 units of for-rent workforce housing.</u>	<u>153 hotel units, 10,500 sq. ft. restaurant and retail, 36 for-sale townhomes, and 74 units of for-rent workforce housing</u>	<u>Joint EIR/EIS NOP to be issued following fine tuning of project description.</u>	<u>New project. 153 new hotel units, 36 new for-sale townhomes, 74 units of for-rent workforce housing, 10,500 sq. ft. restaurant and retail.</u>
<u>24*</u>	<u>Kings Beach Lakeside Redevelopment</u>	<u>Kings Beach</u>	<u>Redevelop the properties currently known as the Ferrari Crown Motel, Gold Crest Motel and Falcon Motel, into the "Crown Redevelopment" Project. The project proposes to include a 5,029</u>	<u>Unknown at this time. Planning Commission and Board directed applicant to prepare revised project.</u>	<u>No status to report as of October 2021.</u>	<u>New project. Project components and net effect of redeveloping</u>

Table 18-2 Cumulative Project List						
			sq. ft. lakefront amenity building (2,527 sq. ft. restaurant/bar; 2,502 sq. ft. clubhouse and fitness area), and a 2,000 sq. ft. structure for street frontage retail and 10 market rate residences.			existing property not yet identified.
25*	Martis Valley Superior Self Storage	9770 Northshore Drive, Martis Valley	70,000 gross square foot self-storage facility consisting of approximately 461 units with associated on-site parking and circulation.	=	Initial Study preparation underway. Project anticipated to proceed to Planning Commission in winter/spring 2022.	New project. Storage facility only.
26*	Dollar Creek Crossing	3202 and 3225 North Lake Boulevard, Tahoe City	11.4 acre mixed use project with both rental and for sale housing and a commercial/community building.	Up to 90 rental unit apartments; up to 60 for sale duplexes/cottages; 6,000 sq. ft. commercial/community building	Application submitted to Placer County	New project. Up to 90 new apartment units; up to 60 duplex/cottage units, and 6,000 sq. ft. commercial/community building.
27*	Alpine Meadows / Squaw Valley Base-to-Base Gondola	Olympic Valley	8-person gondola (a design capacity of approximately 1,400 persons per hour in both directions) connecting the Alpine Meadows and Palisades Tahoe (formerly, Squaw Valley) Ski Resorts.	=	EIR certified in July 2019 and Final Record of Decision (ROD) issued in December 2019.	New project. Under construction. Recreational facility. No housing or retail component.

Net Increase from 2016: ~~322~~ 352 residential units (all outside Olympic Valley); ~~205~~ 238 hotel units (all outside Olympic Valley)

Olympic Valley Cumulative Projections to 2039¹

	Units	Bedrooms	Commercial sq. ft.	Changes Since 2016
Approved Projects				
Resort at Squaw Creek Phase 2	441 condo units	464 bedrooms	-	No change.
Olympic Estates	16 residential units	64 bedrooms	-	No change. <u>Project complete.</u>
Foreseeable Projects				
Squaw Valley Ranch Estates (Pavel)	8 residential lots	40 bedrooms	-	Project withdrawn. 8 fewer residential units.
Mancuse	4 residential units	20 bedrooms	-	Project withdrawn. 4 fewer residential units.

Table 18-2 Cumulative Project List				
PlumpJack Redevelopment	-	104 net hotel rooms/condo bedrooms	10,000 sq. ft. net new commercial	No change.
<u>Olympic Valley Museum Snow Sports Museum and Community Cultural Project</u>	-	-	14,500 <u>20,000</u>	Name change and increase in museum square footage.
Truckee River Syphon	-	-	-	No change. Complete.
Palisades Subdivision	33 single-family units and 30 half-plex units	<u>Information not yet available.</u>	-	New project. 63 additional residential units
<u>Granite View Condominiums</u>	<u>52 hotel condominium units</u>	<u>98 bedrooms</u>	-	New project. 52 additional hotel condominium units.
<u>Sierra Family Meadows</u>	<u>10 residential lots</u>	<u>Information not yet available.</u>	-	New project. 10 additional residential units.
Forecast Development				
Single-Family Residential	66 units 8 units	264 bedrooms 32 bedrooms	-	Most of these forecast development units reflected in the new projects above. Removed units no longer part of future development projection.
Resort/hotel/condo	34 units	52 bedrooms	-	These forecast development units reflected in the new projects above. No longer part of future development projection.
General Commercial	-	-	56,000	No change.

Table 18-2 Cumulative Project List

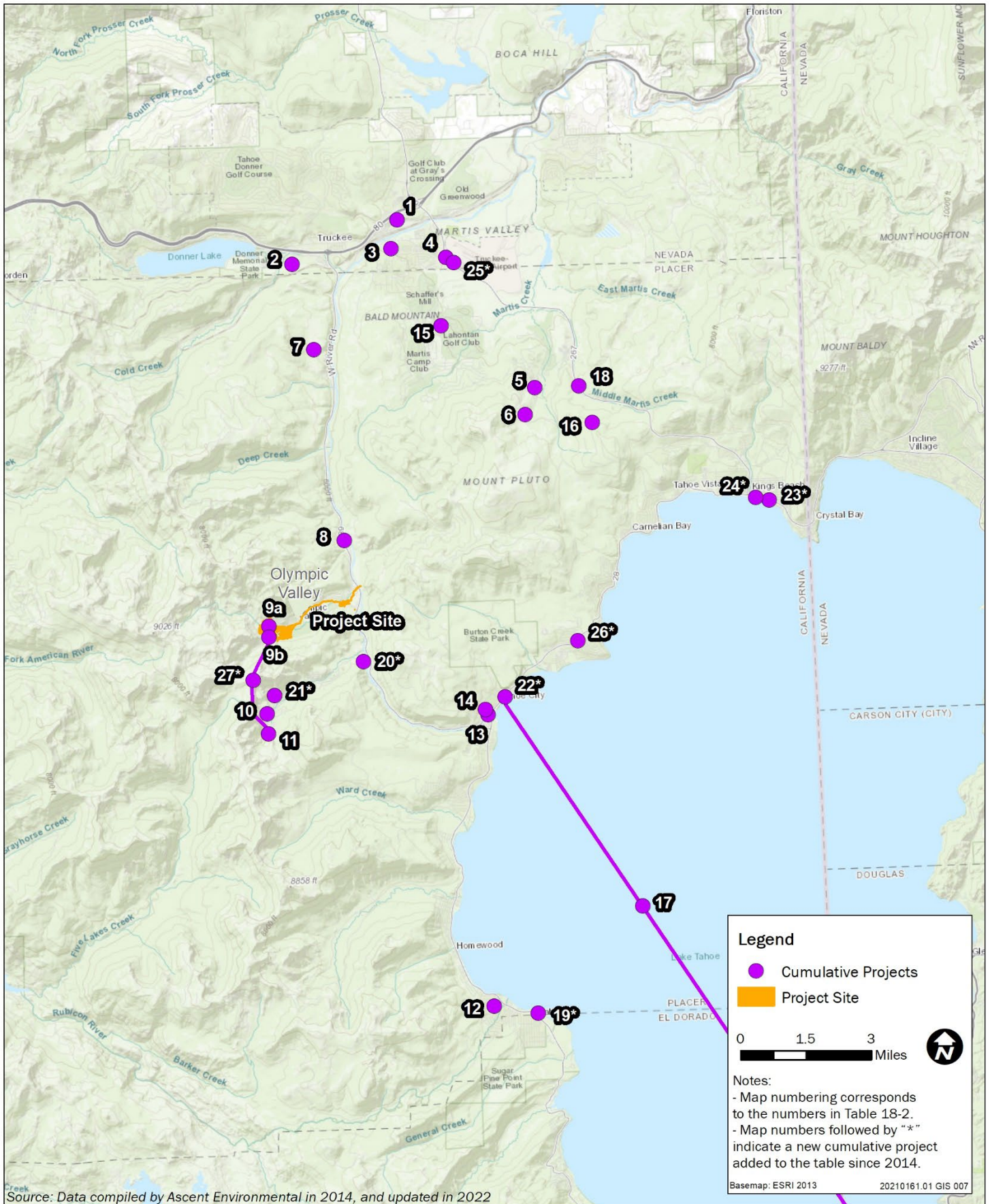
Total Development				
	569 590 units	1,008 762 bedrooms (with no data from Palisades Subdivision, Palisades Subdivision, and Sierra Family Meadows)	80,500 86,000 sq. ft.	No net increase in residential units.

Total Net Increase from 2016: 282 352 residential units (all outside Olympic Valley); 205 238 hotel units (all outside Olympic Valley)

Note: Map numbers followed by “*” indicate a new cumulative project added to the table since 2014.

¹ For the VSVSP project, which is proposed to build out over a 25-year period, the County determined that it was appropriate to use both a list and forecast approach to determine cumulative development within the Olympic Valley study area. The cumulative development projections in this table, therefore, include approved projects that have not yet been built, such as the Resort at Squaw Creek Phase 2 and the Olympic Estates Subdivision, project applications that the County has on file, and valley-wide development projections forecast out to 25 years.

Source: Data compiled by Ascent Environmental in 2014, and updated in 2022.



Source: Data compiled by Ascent Environmental in 2014, and updated in 2022

Exhibit 18-1

Locations of Cumulative Projects



Attachment

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

The following Mitigation Monitoring and Reporting Program (MMRP) was prepared in compliance with the requirements of California Public Resources Code (PRC) Section 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines. This MMRP identifies specific funding, timing, and monitoring requirements for implementation of all mitigation measures identified in the EIR for the Village at Palisades Tahoe (formerly, Squaw Valley) Specific Plan (State Clearinghouse No. 2012102023). Since its initial adoption in November 2016, this MMRP has been updated to include new and clarified mitigation measures identified in the Partially Revised EIR (REIR) for the Village at Palisades Tahoe Specific Plan Project (VPTSP).

STANDARD MITIGATION MONITORING PROGRAM

Placer County has adopted a standard mitigation monitoring program (Section 18.28.030 of the Placer County Environmental Review Ordinance) in order to implement PRC Section 21081.6. This program requires that mitigation measures recommended for discretionary projects, such as the VPTSP, be included in the conditions of approval monitored by the County through a variety of permit processes as listed below.

- ▲ Development Review Committee
- ▲ Improvements Plan Approval
- ▲ Improvements Construction Inspection
- ▲ Encroachment Permit
- ▲ Final Map Recordation
- ▲ Acceptance of Project as Complete
- ▲ Building Permit Approval

MMRP and Required Approvals and Permits/Format of Table

The issuance of any of the listed permits or County actions must be preceded by verification by County staff that certain conditions of approval/mitigation measures have been met. This verification shall serve as the required monitoring for those conditions of approval/mitigation measures. All of the mitigation measures for the Village at Palisades Tahoe Specific Plan (VPTSP) Project included in the EIR would be monitored through the County's Standard Mitigation Monitoring Program. As indicated in the text of each mitigation measure, compliance with each would be verified by County staff prior to issuance of required approvals and permits. Table 1 identifies each mitigation measure that would be monitored through the County's Standard Mitigation Monitoring Program. In addition, some mitigation measures require ongoing implementation and would require monitoring after the point at which a Final Map is recorded, a Certificate of Occupancy is issued, or other discretionary permit is vested or ministerial permit is accepted as complete. Table 1 also identifies the mitigation measures that require ongoing implementation, the party(ies) responsible for funding implementation, the necessary timing of implementation that would occur outside the scope of the County's Standard Mitigation Monitoring Program, and the mechanisms for monitoring compliance with each mitigation measure.

Table 1 is organized as follows: if an EIR topic, such as biological resources, includes mitigation measures, it is included in the MMRP table. The EIR chapter number for the relevant section (Chapter 11 for noise) is also included. The same numbering system for mitigation measures (11-1a, 11-1b, 11-3, etc.) is carried over from the EIR discussion into the table. If an issue addressed in the EIR does not result in mitigation, it is not included in the table.

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
5 Population, Employment, and Housing			
<p><u>Mitigation Measure 5-3: Develop VPTSP Employee/Workforce Housing Plan.</u></p> <p>The project applicant shall develop a detailed “VPTSP Employee/Workforce Housing Plan” for Placer County review and approval. Provision of sufficient housing opportunities to accommodate a minimum of half of new FTEs generated by project operation will be assured through a combination of one or more of the following:</p> <ul style="list-style-type: none"> ▲ development of new on-site employee/workforce housing; ▲ development/renovation of off-site employee/workforce housing; ▲ dedication of sufficient land for needed units; and/or ▲ payment of an in-lieu fee. <p>The designs of applicant-provided on-site and off-site employee/workforce housing shall be reviewed and approved by the County. An approved VPTSP Employee/Workforce Housing Plan shall be approved prior to recordation of each Small Lot Final Map or approval of a building permit for any new-employee generating project that does not require a Small Lot Final Map, whichever occurs first. The VPTSP Employee/Workforce Housing Plan shall provide an accounting of the final number of net new FTE employees expected to be created by the project with identified phasing; the number, locations, and capacity of new employee/workforce housing units to be developed; location and capacity of dedicated land for new employee/workforce housing; in-lieu fees paid to the County; and implementation schedule to ensure that sufficient new housing is available for new employees as project construction is completed and operations begin. The VPTSP Employee/Workforce Housing Plan shall be updated, at the discretion of the County, by the developer concurrent with review and implementation each project or project phase that generates new FTE employees.</p>	Placer County Planning Services Division	Prior to recordation of each Small Lot Final Map or approval of a building permit for any new-employee generating project that does not require a Small Lot Final Map, whichever occurs first	The VPTSP Employee/Workforce Housing Plan shall be updated, at the discretion of the County, by the developer concurrent with review and implementation each project or project phase that generates new FTE employees
6 Biological Resources			
<p><u>Mitigation Measure 6-1a: Conduct delineation of waters of the United States, obtain authorization for fill and required permits, and compensate for regulated and unregulated wetlands.</u></p> <p>The following would apply to any potentially affected jurisdictional resources that have not been delineated or verified by USACE prior to project implementation, or those resources that have been verified as jurisdictional but cannot be avoided. As noted above, the areas that have not yet been delineated or verified consist of limited areas that would be affected by utility installation.</p> <ul style="list-style-type: none"> ▲ Prior to the start of on-site construction activities on any potentially affected jurisdictional resource that has not been previously delineated or verified by USACE, a qualified biologist shall survey the project area for sensitive natural communities. Sensitive natural communities or habitats are those of special concern to resource agencies or those that are afforded specific consideration, based on Section 404 of the CWA and other applicable regulations. 	Placer County Development Review Committee	Prior to the start of on-site construction activities on any potentially affected jurisdictional resource that has not been previously delineated or verified by USACE (i.e. limited areas potentially affected by utility installation)	Completion prior to the start of on-site construction activities on any potentially affected jurisdictional resource that has not been previously delineated or verified by USACE

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>▲ Prior to recordation of the Final Subdivision Map(s), the wetlands report shall be field verified by USACE, USFWS, and CDFW.</p>	Placer County Development Review Committee	Prior to recordation of the Final Subdivision Map(s)	Completion prior to recordation of the Final Subdivision Map(s)
<p>▲ If sensitive natural communities or habitats that are afforded specific consideration, based on Section 404 of the CWA, are determined to be present within 50 feet of any groundbreaking activity within the plan area, a delineation of waters of the United States, including wetlands that would be affected by the project, shall be prepared by a qualified biologist through the formal Section 404 wetland delineation process. The delineation will be submitted to and verified by USACE. If, based on the verified delineation (or previous delineations that have already been verified), it is determined that fill of waters of the United States cannot be fully avoided during implementation of the project, authorization for such fill will be secured from USACE through the Section 404 permitting process prior to the fill being undertaken. The project applicant shall implement all permit conditions.</p>	Placer County Development Review Committee	Prior to the fill being undertaken	Completion prior to the fill being undertaken
<p>▲ Prior to the County Improvement Plan approval, the project applicant shall furnish to DRC, evidence that CDFW, USFWS, and USACE have been notified by letter regarding the existence of wetlands or streams on the property if any are present within the area subject to the Improvement Plans. Prior to Improvement Plan approval, if permits are required, they shall be obtained and copies submitted to DRC. Any clearing, grading, or excavation work shall not occur until the Improvement Plans have been approved.</p>	Placer County Development Review Committee	Prior to Improvement Plan approval	Completion prior to Improvement Plan approval
<p>▲ The project applicant shall replace on a “no net loss” basis (minimum 1:1 ratio) (in accordance with USACE and/or the Lahontan RWQCB) the acreage and function of all wetlands and other waters (as well as unregulated wetlands per County policy) that would be removed, lost, or degraded as a result of project implementation or operations. Wetland habitat shall be replaced at acreage and location agreeable to USACE and the Lahontan RWQCB and as determined during the Section 401 and Section 404 permitting processes. Any temporarily disturbed riparian habitats, water bodies, and wetlands shall be restored to pre-project conditions.</p>	Placer County Development Review Committee	Timing to be identified through the Section 404 and 401 permitting processes.	Specific conditions (e.g., timing, location, amount) of wetland/other waters replacement identified in permit to be provided to Development Review Committee prior to Improvement Plan Approval
<p>▲ This project plans to construct all or a portion of replacement wetlands onsite. An Improvement Plan for habitat restoration activities shall be prepared and submitted by the project applicant to the Planning Services Division for review concurrent with Improvement Plan review. A Mitigation Monitoring Implementation Program (MMIP) for the replacement of wetlands/riparian vegetation shall be prepared by a qualified wetlands biologist. Said MMIP shall be submitted to the Planning Services Division concurrent with, or prior to the Improvement Plan, and shall comply with Article 18.28 of the Placer County Environmental Review Ordinance. Where sediment capture is proposed in conjunction with wetlands replacement or enhancement, the</p>	Placer County Planning Services Division	Submit Improvement Plan for habitat restoration activities concurrent with Improvement Plan review; submit	An annual monitoring report for a minimum period of 5 years from the date of installation

Table 1 Mitigation Monitoring and Reporting Program

Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>monitoring program shall consider sediment removal and restoration within disturbed areas after sediment removal activities. Project construction and project monitoring shall comply with the criteria defined in the Environmental Impact Report Mitigation Monitoring Implementation Plan and the requirements of CDFW.</p> <ul style="list-style-type: none"> ➤ An annual monitoring report for a minimum period of 5 years from the date of installation, prepared by the above-cited professional, shall be submitted to the Planning Services Division for review and approval. Any corrective action shall be the responsibility of the applicant. The report shall include baseline (pre-restoration) and post-restoration measurements of suspended sediment concentration, streamflow, and turbidity as described on page 27 of the Channel Restoration Design Basis Report (Balance Hydrologics 2014). ➤ Prior to the Improvement Plan approval, a Letter of Credit, Certificate of Deposit, or cash deposit in the amount of 100 percent of the accepted proposal shall be deposited with the Placer County Planning Services Division to assure on-going performance of the monitoring program. Evidence of this deposit shall be provided to the satisfaction of the DRC prior to the approval of Improvement Plans. For the purposes of administrative and program review by Placer County, an additional 25 percent of the estimated cost of the Monitoring Program shall be paid to the County, in cash, at the time that the 100 percent deposit is made. With the exception of the 25 percent administrative fee, 100 percent of the estimated costs of implementing the monitoring program shall be returned to the applicant once the applicant has demonstrated that all 5 years of monitoring have been completed to the satisfaction of the DRC. Refunds will only be available at the end of the entire review period. ➤ It is the project applicant's responsibility to ensure compliance with the MMIP. Violation of any components of the approved MMIP may result in enforcement activities per Placer County Environmental Review Ordinance, Section 18.28.080. If a monitoring report is not submitted for any one year, or combination of years, as outlined in these conditions, the County has the option of utilizing these funds and hiring a consultant to implement the MMIP. Failure to submit annual monitoring reports could also result in forfeiture of a portion of, or all of, the deposit. An agreement between the applicant and County shall be prepared which meets DRC approval that allows the County use of this deposit to assure performance of the MMIP in the event the project applicant fails to perform. 		<p>Mitigation Monitoring Implementation Program (MMIP) for the replacement of wetlands/riparian vegetation concurrent with, or prior to the Improvement Plan</p>	
<ul style="list-style-type: none"> ▲ The Mitigation and Monitoring Implementation Plan shall, at a minimum, include the following specific criteria, standards, and information: <ul style="list-style-type: none"> ➤ Baseline locations of jurisdictional habitat including species along the western and upper eastern channel of Washeshu Creek (West Cells E through J and East Cells A through D) within the plan area shall be documented before initiation of construction of the VPTSP. Conduct vegetation monitoring or additional groundwater modelling as described in Mitigation Measure 6-1c below. Any jurisdictional habitat lost within the western portion of Washeshu Creek from groundwater drawdown that affects streambank instability shall be replaced with native vegetation (riparian preferably) that will stabilize the streambank and prevent sediment mobilization. ➤ identification of compensatory mitigation sites and criteria for selecting these mitigation sites onsite and offsite; ➤ in kind reference habitats within the Tahoe-Truckee region for comparison with compensatory wetlands habitats (using performance and success criteria) to document success; ➤ monitoring protocol, including schedule and annual report requirements (compensatory habitat shall be monitored for a 	<p>Placer County Planning Services Division</p>	<p>Submit Mitigation Monitoring Implementation Program (MMIP) for the replacement of wetlands/riparian vegetation concurrent with, or prior to the Improvement Plan</p>	<p>An annual monitoring report for a minimum period of 5 years from the date of installation</p>

Table 1 Mitigation Monitoring and Reporting Program

Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>minimum of five years from completion of mitigation or last human intervention [including recontouring and grading and irrigation], or until the success criteria identified in the approved mitigation plan have been met, whichever is longer);</p> <ul style="list-style-type: none"> ▀ ecological performance standards, based on the best available science and including specifications for native wetland and riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, indicators of stress that might result in mortality, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80 percent survival of planted wetland species by the end of the five-year maintenance and monitoring period or dead and dying species shall be replaced and monitoring continued until 80 percent survivorship is achieved; ▀ corrective measures if performance standards are not met; ▀ responsible parties for monitoring and preparing reports; and ▀ responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions. <p>▀ The project applicant shall follow requirements outlined in the MMIP and Compensatory Stream and Riparian Mitigation and Monitoring Plan (CSRMMMP) for vegetation restoration success in all areas of onsite and off-site mitigation or restoration.</p>			
<p>▀ If the project applicant elects to provide all or a part of wetland or riparian mitigation off-site, and off-site mitigation has been determined to be acceptable to the County, prior to Placer County Improvement Plan approval or recordation of the Final Subdivision Map(s) or issuance of a Building Permit, the project applicant shall provide any of the three listed mitigation measures below:</p> <ul style="list-style-type: none"> ▀ Provide written evidence of payment that compensatory habitat has been established through the purchase of mitigation credits at a County-qualified wetland mitigation bank. Evidence of payment shall describe the amount and type of habitat purchased at the bank site. The amount of money required to purchase credits shall be equal to the amount necessary to replace wetland or riparian habitat acreage. Evidence of payment shall describe the amount and type of habitat purchased at the bank site and resource values including compensation for temporal loss. Evidence of payment must be provided to the County prior to issuance of Improvement Plans. ▀ Construct wetland and/or riparian habitat in an off-site location acceptable to Placer County and any State or Federal resource agency with jurisdiction over the habitat. A wetland/riparian mitigation plan shall be reviewed and approved by Placer County and any affected State or Federal resource agency prior to initiation of construction of any compensatory habitat. ▀ Any offsite wetlands mitigation will occur in the Sierra Nevada bioregion and within the Tahoe-Truckee area to ensure that there is a no net loss of wetland, riparian, or wet meadow habitat within the Sierra Nevada or Tahoe-Truckee regions. ▀ Provide a combination of mitigation bank credit purchase and off-site construction as outlined above. 	Placer County	Prior to Placer County Improvement Plan approval or recordation of the Final Subdivision Map(s) or issuance of a Building Permit	Completion prior to Placer County Improvement Plan approval or recordation of the Final Subdivision Map(s) or issuance of a Building Permit
<p>▀ Wetlands and waters of the United States to be preserved within or adjacent to construction areas shall be fenced to insure protection from construction equipment and vehicles. Fencing shall consist of four-foot tall, brightly colored (usually yellow or orange), synthetic mesh material fence (or an equivalent approved by the DRC) outside the critical root zone of all protected trees within 50 feet of any grading, road improvements, underground utilities or other development activity. If the buffer extends beyond the boundary of property under the applicant’s control, the fence will then be placed at the property boundary. Any encroachment into this fenced area must first be approved by the DRC.</p>	Placer County Development Review Committee	Prior to construction activities within 50 feet of wetlands or waters of the United States	Continuously during construction activities within 50 feet of wetlands or waters of the United States

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 6-1b: Obtain and comply with a lake and streambed alteration agreement; compensate for unavoidable loss of stream and riparian habitat.</u></p> <p>The following measures would be implemented to avoid or compensate for the loss or degradation of stream or riparian habitat, ensure consistency with Fish and Game Code Section 1602 and County Policies, and further reduce potential adverse effects on riparian habitats:</p> <ul style="list-style-type: none"> ▲ The project applicant shall notify CDFW before commencing any activity within the bed, bank, or riparian corridor of any waterway. If activities trigger the need for a Streambed Alteration Agreement, the proponent shall obtain an agreement from CDFW. The project proponent will conduct construction activities in accordance with the agreement, including implementing reasonable measures in the agreement necessary to protect the fish and wildlife resources, when working within the bed or bank of waterways that function as a fish or wildlife resource or in riparian habitats associated with those waterways. ▲ The project applicant shall compensate for net permanent riparian habitat impacts at a minimum of a 1:1 ratio through contributions to a CDFW approved wetland mitigation bank in the Sierra Nevada and the Tahoe-Truckee regions or through the development and implementation of a Compensatory Stream and Riparian Mitigation and Monitoring Plan (CSRMMMP) and a County approved MMIP aimed at creating or restoring in-kind habitat within the plan area and/or in the surrounding area. Stream and riparian habitat compensation, which could be provided entirely or in part by the planned Washeshu Creek restoration, shall include establishment of riparian vegetation on currently unvegetated bank portions of streams affected by the project and enhancement of existing riparian habitat through removal of nonnative species, where appropriate, and planting additional native riparian plants to increase cover, continuity, and width of the existing riparian corridor along streams in the project site initially and then in surrounding areas. Construction activities and compensatory mitigation shall be conducted in accordance with the terms of a streambed alteration agreement as required under Section 1602 of the Fish and Game Code. 	Placer County Planning Services Division	Before commencing any activity within the bed, bank, or riparian corridor of any waterway	Completion prior to commencing any activity within the bed, bank, or riparian corridor of any waterway
<ul style="list-style-type: none"> ▲ This project plans to construct all or a portion of replacement riparian habitat onsite. An Improvement Plan shall be prepared by the project applicant and submitted to the Planning Services Division for review concurrent with Improvement Plan review. Prior to Improvement Plan submittal, an MMIP for the replacement of wetlands/riparian vegetation, which resembles the density and species composition of the existing wetland area, shall be prepared by a qualified wetlands biologist. Said MMIP shall be submitted to the Planning Services Division and shall comply with Article 18.28 of the Placer County Environmental Review Ordinance. The requirements listed under Mitigation Measure 6-1a will be followed as well. 	Placer County Planning Services Division	Submit Improvement Plan concurrent with Improvement Plan review; Submit MMIP for the replacement of wetlands/riparian vegetation prior to Improvement Plan submittal	Completion prior to or concurrent with Improvement Plan submittal
<ul style="list-style-type: none"> ▲ The Compensatory Stream and Riparian Mitigation and Monitoring Plan shall include the following: <ul style="list-style-type: none"> ■ Baseline locations of riparian vegetation and species along the western and upper eastern channel of Washeshu Creek within the plan area shall be documented before initiation of construction of the VPTSP. Conduct riparian monitoring or additional groundwater modelling as described in Mitigation Measure 6-1c below. Any riparian habitat lost within the western portion of Washeshu Creek that affects streambank instability shall be replaced with native vegetation (riparian preferably) that will stabilize the streambank and prevent sediment mobilization. 	Placer County Planning Services Division	Before initiation of construction of the VPTSP	See Mitigation Measure 6-1c, below

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<ul style="list-style-type: none"> ▀ identification of compensatory mitigation sites and criteria for selecting these mitigation sites onsite and offsite; ▀ in kind reference habitats for comparison with compensatory riparian habitats (using performance and success criteria) to document success; ▀ monitoring protocol, including schedule and annual report requirements (compensatory habitat shall be monitored for a minimum of 5 years from completion of mitigation or last human intervention [including recontouring and grading and irrigation], or until the success criteria identified in the approved mitigation plan have been met, whichever is longer); ▀ ecological performance standards, based on the best available science and including specifications for native riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, indicators of tree stress that might result in mortality, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80 percent survival of planted riparian trees and shrubs by the end of the five-year maintenance and monitoring period or dead and dying trees shall be replaced and monitoring continued until 80 percent survivorship is achieved; ▀ corrective measures if performance standards are not met; ▀ responsible parties for monitoring and preparing reports; and ▀ responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions. <p>▲ The project applicant shall follow requirements outlined in the MMIP and CSRMMMP for vegetation restoration success within any areas of proposed restoration and planting along Washeshu Creek or the Olympic Channel.</p>			
<p><u>Mitigation Measure 6-1c: Implement Mitigation Measure 13-4 and monitor and respond to groundwater effects.</u></p> <p>The project applicant shall implement Mitigation Measure 13-4, provided in Chapter 13, “Hydrology and Water Quality.” Mitigation Measure 13-4 reduces the uncertainty associated with management of well system design and operation by ensuring the adoption of performance standards, thresholds, and recommendations from the WSA for well system operation, and requiring consistency with applicable groundwater plans. By confirming that groundwater management is implemented in a manner that is consistent with the operational parameters described in the WSA, Mitigation Measure 13-4 would also result in confirmation that groundwater pumping and any future groundwater/vegetation impact modeling is consistent.</p>	See Mitigation Measure 13-4, below	See Mitigation Measure 13-4, below	See Mitigation Measure 13-4, below
<p>In addition, the project applicant shall record baseline locations and composition of species of riparian and meadow vegetation in the surrounding meadow that is hydrologically connected to the upper eastern channel of Washeshu Creek (in relation to East Cells A through D) and along the western channel (in relation to West Cells E through J) before initiation of construction of the VPTSP. If sensitive plant species are found in these areas, the project proponent will follow mitigation measures outline in Mitigation Measure 6-8 to consult with CDFW and USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for the indirect impacts that could occur as a result of project operational groundwater drawdown.</p> <p>The extent and composition of this vegetation in the western channel and associated riparian and wet meadow areas shall be monitored annually until at least 5 years after the last project element is occupied, to ensure accurate recordation of responses to groundwater level declines and any beneficial effects resulting from creek restoration. Any riparian or meadow habitat lost or degraded within these areas</p>	Placer County Planning Services Division	Before initiation of construction of the VPTSP	The extent and composition of this vegetation shall be monitored annually until 5 years after final project buildout

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>that is determined to be a result of project-related groundwater level declines shall be compensated for on or off-site (within the Olympic Valley preferred) at a minimum 1:1 ratio within the Sierra Nevada bioregion and the Tahoe-Truckee region, or conditions otherwise corrected, such as through irrigation of riparian and/or wet meadow vegetation to maintain composition and functionality of existing habitat. If monitoring shows that riparian vegetation along the streambank is not supported, other native vegetation will be planted and managed to stabilize the creek bank as per Mitigation Measure 6-1b.</p>			
<p>In order to address the potential effects of groundwater pumping outside of the VPTSP area, the following steps shall be taken:</p> <p>(a) Prior to recordation of the first Small Lot Tentative Map, conduct soil borings throughout the wet meadow east of the project boundary (see Exhibit MM 6-1c) to determine whether groundwater is available to wet meadow vegetation (i.e., there are no barriers to between groundwater and plant roots and/or moisture levels in the soil column indicate that groundwater is available to plant roots). Soil borings may be taken in multiple months and in successive seasons as needed to determine if a connection to groundwater is present. If groundwater is not available to the plants during the July-October period, then no further steps are necessary with respect to those areas. In these conditions, it is assumed that vegetation is receiving water from sources other than groundwater, such as golf course irrigation overspray.</p> <p>(b) If soil borings indicate that groundwater is available to these plants in some or all portions of the study area east of the project boundary during July through October, then it is assumed that drops in groundwater levels could affect the viability of the plants and a monitoring plan shall be implemented, and shall include the following steps.</p> <ul style="list-style-type: none"> ▲ Determine the minimum depth to groundwater needed during the critical period for existing habitat to maintain baseline conditions. ▲ Install groundwater monitoring wells in the riparian and wet meadow portions of the study area east of the project boundary where a potential connection to groundwater has been established. The location of the wells shall be based on the extent of the area that could be affected, based on part on as indicated by the data collected by soil borings conducted as part of Item (a)#1, and for which access is available. For example, if the entire wet meadow in the study area east of the project boundary is included, it is anticipated that 8 to 12 wells will need to be installed, including at least one well east of the study area. Existing and planned monitoring wells may be used, if appropriate, and permission is provided by the well operator/owner. Well locations shall be coordinated with plant survey transects. ▲ Collect data from the monitoring wells each year from July through October, at a minimum. ▲ Establish transects on a north-south heading every 50 meters or less. ▲ Determine the species that are located on each transect at one-meter intervals. ▲ Surveys shall be conducted at least once annually to determine whether the vegetation profile is changing along the transect and/or there is increased plant mortality. <p>Initial monitoring [as outlined in (b)] to establish baseline conditions of wet meadow vegetation and groundwater levels east of the VPTSP area shall be conducted annually for 5 years. The onset of monitoring may be coordinated with creek restoration efforts, but shall begin</p>	<p>Placer County Planning Services Division</p>	<p>Prior to recordation of the first Small Lot Tentative Map</p>	<p>The extent and composition of this vegetation shall be monitored annually until 5 years after final project buildout</p>

Table 1 Mitigation Monitoring and Reporting Program

Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>prior to or concurrent with recordation of the first Small Lot Tentative Map or within 2 years of project approval, whichever occurs first. After the initial 5 years, monitoring shall be conducted every 5 years, at a minimum, until 30 percent of VPTSP development has been completed. Upon occupancy of 30 percent of the VPTSP development, monitoring shall be conducted on an annual basis until 5 years after buildout of the project.</p> <p>If access cannot be gained to survey the riparian habitat and/or wet meadow and/or to install monitoring wells east of the VPTSP area, then an assessment shall be made via photo-points or other means from the property line or other nearby publicly accessible location and/or surveys of a control site with similar characteristics that is located on property that can be accessed. In order to determine whether observed changes are due to groundwater pumping, modeling methods may be used. If adverse effects are observed and can be attributed to groundwater pumping, then mitigation would be required as described below.</p> <p>If monitoring and surveys indicate that riparian and/or wet meadow vegetation is being lost and/or degraded at levels that could impair the viability and value of the wet meadow and/or riparian habitat, and that change is correlated with lowered groundwater levels as indicated by monitoring wells and pumping data, one or more of the following steps shall be undertaken to ensure that there is no net loss of acreage and/or value of wet meadow habitat:</p> <ul style="list-style-type: none"> ▲ Work with the OVPSD to adjust the pumping regime in a manner that minimizes draw down in the portion of the overall study area that is being affected; ▲ Irrigate the affected area during the critical period using water from a source other than the aquifer, such as fractured wells used for snowmaking at Olympic Valley; ▲ Provide improvements to the water system in Olympic Valley (e.g., replacement of old, leaking pipelines, replacement of high-water use fixtures) to reduce demand from other sources by an amount commensurate with the amount of irrigation water required for riparian and/or meadow vegetation. In this case, water from the aquifer could be used for irrigation of sensitive habitats; and/or ▲ Provide compensation for the affected area by restoring a commensurate area that is degraded to wet meadow and/or riparian habitat conditions outside of the study area. Preference shall be given to areas within the Olympic Valley meadow and/or in the vicinity of Washeshu Creek. Contribution to the restoration efforts for Washeshu Creek east of the VPTSP would be one method of compensation, because the creek restoration would improve the function of the creek, and thereby improve habitat conditions along the creek and within the meadow. If suitable land is unavailable within the Olympic Valley meadow and/or in the vicinity of Washeshu Creek, then restoration activities may occur outside of Olympic Valley but within the Tahoe-Truckee area. VPTSP would be responsible for restoring that portion which is attributable to its share of increased groundwater pumping. Such compensation shall ensure that there is no net loss in the quantity or function of such habitat. <p>The selection of the remediation measures shall be based in part on whether the effects on riparian and/or meadow vegetation are occurring only during certain years (e.g., particularly dry years) and the period of time that remediation would be needed to ensure vegetation viability. If irrigation is used, it shall be demonstrated that the amount of water used would be within the water demand evaluated in the 2015 Water Supply Assessment or that another source of water, such as snow making wells or reducing other demand, as discussed above, could be used. As discussed previously, water could be supplied from snow-making wells located within fractured bedrock (i.e., not drawing water from the Olympic Valley aquifer) to provide irrigation for landscaping, the creek restoration area, and</p>			

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
riparian vegetation along East Cells A through C.			
<u>Mitigation Measure 6-1d: Implement water quality protection measures.</u>			
<ul style="list-style-type: none"> ▲ The project applicant shall comply with General Plan policies pertaining to protection of water quality during construction and operation of the linear park and Class I trail. 	Placer County Development Review Committee and the Parks Division	During construction and operation of the linear park and Class I trail	Continuously during project construction and operation of the linear park and Class I trail
<ul style="list-style-type: none"> ▲ The project applicant shall implement the mitigation measures as required under Mitigation Measure 13-1 to protect water quality during the design, installation, and abandonment of wells and sewer lines. 	See Mitigation Measure 13-1, below	See Mitigation Measure 13-1, below	See Mitigation Measure 13-1, below
<ul style="list-style-type: none"> ▲ The project applicant shall implement the mitigation measures as required under Mitigation Measure 13-2a to protect water quality during construction and over the project life. 	See Mitigation Measure 13-2a, below	See Mitigation Measure 13-2a, below	See Mitigation Measure 13-2a, below
<ul style="list-style-type: none"> ▲ The project applicant shall implement the mitigation measures as required under Mitigation Measure 13-2b to address potential discovery of contaminated soils and protection of groundwater quality during construction. 	See Mitigation Measure 13-2b, below	See Mitigation Measure 13-2b, below	See Mitigation Measure 13-2b, below
<ul style="list-style-type: none"> ▲ The project applicant shall implement the mitigation measures as required under Mitigation Measure 13-7 to minimize the potential for snow storage and snowmelt runoff to degrade the quality of runoff discharged overland or through the storm drainage to Washeshu Creek adjacent to the East Parcel. 	See Mitigation Measure 13-7, below	See Mitigation Measure 13-7, below	See Mitigation Measure 13-7, below
<ul style="list-style-type: none"> ▲ The following measures shall be implemented to avoid and minimize runoff and sedimentation in Washeshu Creek and Meadows as a result of the installation of the Class I biking and hiking trail and other proposed trails within 100 feet of aquatic features: <ul style="list-style-type: none"> ▼ Trail construction shall include trail tread, drainage appurtenances, clearing, seeding, and planting as necessary for erosion control. Tread width shall be a minimum of 6 feet and shall be out sloped at approximately three percent. The trail tread shall be graded and compacted and not exceed 12 percent longitudinal slope. Water must be diverted from the trail's surface before it builds up to erosive force. To divert water, use outslopes, grade reversals, grade dips, and/or lead ditches, in conjunction with inslopes or culverts. ▼ The crossing of any wetland areas shall also be reviewed and approved by the Placer County Development Review Committee, Parks Division, and all appropriate state and federal regulatory agencies. ▼ Vegetation clearing adjacent to trails should be minimum 10 feet above ground, and two feet on each side of the trail tread. Excessive clearing is undesirable. Removal of trees should be minimized in favor of limbing, brushing, and meandering of trails around status trees. However, dead and dying trees in proximity of the trail, in the determination of the Development Review Committee and/or a professional arborist, shall be removed prior to acceptance. 	Placer County Development Review Committee and the Parks Division	During project construction of the Class I biking and hiking trail and other proposed trails within 100 feet of aquatic features	Continuously during project construction of the Class I biking and hiking trail and other proposed trails within 100 feet of aquatic features

Table 1 Mitigation Monitoring and Reporting Program

Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 6-2: Avoid and minimize effects on Sierra Nevada yellow-legged frog and its habitat.</u></p> <p>The following measures shall be implemented to avoid and minimize impacts on Sierra Nevada yellow-legged frog and are in compliance with VPTSP policies PW-1 through PW-4:</p> <ul style="list-style-type: none"> ▲ A preconstruction survey to determine the presence or absence of Sierra Nevada yellow-legged frog on the project site shall be conducted by a qualified biologist approved by USFWS, and survey methods and timing would need to be approved by USFWS. At minimum, all areas within 82 feet of suitable habitat, defined as Washeshu Creek, its tributaries and its meadows, which would be affected by construction shall be surveyed prior to construction by a qualified biologist to ensure the absence of yellow-legged frogs. 82 feet from a creek is based on the definition of upland habitat for proposed critical habitat (USFWS 2013). If a Sierra Nevada yellow-legged frog is encountered during the preconstruction survey, USACE and USFWS shall be contacted immediately to determine the appropriate course of action, which may include applying for and obtaining an incidental take permit for the project. Such a permit would require compensatory measures that would fully mitigate for any impacts (avoidance, relocation, etc.). 	<p>Placer County Planning Services Division</p>	<p>Prior to construction within 82 feet of Washeshu Creek</p>	<p>Completion prior to construction within 82 feet of Washeshu Creek</p>
<ul style="list-style-type: none"> ▲ If Sierra Nevada yellow-legged frog is determined to be present on the project site, the following measures shall apply, subject to approval and/or modification by USFWS as part of ESA consultation. <ul style="list-style-type: none"> ▼ Construction shall only occur between July 1 and November 15 in areas within 82 feet of Washeshu Creek (based on the definition of upland habitat for proposed critical habitat (USFWS 2013), its tributaries and its meadows that are not currently developed (e.g., the timing restriction would not apply to the existing parking lot or roadways within 82 feet of Washeshu Creek). Any work within the creek and its tributaries shall occur when they cease flowing and are dry. Because areas of Washeshu Creek may have pools, all pools potentially affected by construction shall be mapped and monitored by a biologist for presence/absence of adult frogs prior to construction. This limited operating period and associated monitoring would ensure that construction does not begin when yellow-legged frogs have a high likelihood of being present in the construction area. ▼ All areas within 82 feet of suitable habitat that would be affected by construction will have a qualified biologist present during construction to ensure that no individuals are injured or killed from construction. 	<p>Placer County Planning Services Division</p>	<p>During construction within 82 feet of Washeshu Creek</p>	<p>Continuously during construction within 82 feet of Washeshu Creek</p>
<ul style="list-style-type: none"> ▼ Within 82 feet of suitable habitat, to avoid entrapment of frogs, all excavated steep-walled holes or trenches more than 1 foot deep will be provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday. If escape ramps cannot be provided, then holes or trenches will be covered with plywood or similarly effective materials. Providing escape ramps or covering open trenches will prevent injury or mortality of wildlife resulting from falling into trenches and becoming trapped. A biological monitor or construction personnel designated by the contractor will be responsible for thoroughly inspecting trenches for the presence of Sierra Nevada yellow-legged frog at the beginning of each workday. If any individuals have become trapped, the qualified biological monitor will be contacted to relocate the animal, and no work will occur in that area until approved by the biologist. 	<p>Placer County Planning Services Division</p>	<p>During construction within 82 feet of Washeshu Creek</p>	<p>A biological monitor or construction personnel designated by the contractor will be responsible for thoroughly inspecting trenches for the presence of Sierra Nevada yellow-legged frog at the beginning of each workday.</p>

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<ul style="list-style-type: none"> <p> ▼ Prior to the start of any ground disturbing activities within 82 feet of suitable Sierra Nevada yellow-legged habitat, exclusion fencing shall be installed between the construction area and suitable aquatic habitat. Fencing will be installed at the edge of aquatic habitat (but outside of the USACE jurisdictional area, CDFW jurisdictional streambed area, or riparian habitat) to reduce the risk of frogs dispersing onto the construction site. The fencing material will consist of silt fence (erosion cloth) that is a minimum of 4 feet tall or suitable alternative wildlife exclusion material (such as ERTECH EFence). The lower portion of the fence will be buried in a 6-inch trench such that 6 inches of the fence is buried and at least 48 inches is above ground, or weighted down by a continuous row of sandbags or similar material if on an impervious surface. Installation of the silt fence will occur under the supervision of a qualified biologist. The exclusion fencing will also be installed in a manner that is consistent with applicable water quality requirements contained within the project's storm water pollution prevention plan or water pollution control program. The fencing and a note reflecting this condition shall be shown on the final construction documents. </p> 	Placer County Planning Services Division	Prior to the start of any ground disturbing activities within 82 feet of Washeshu Creek	Completion prior to the start of any ground disturbing activities within 82 feet of Washeshu Creek
<ul style="list-style-type: none"> <p> ▼ No monofilament netting or similar material shall be used for erosion control or other purposes within 82 feet of suitable habitat to ensure that Sierra Nevada yellow-legged frogs are not trapped. This limitation shall be communicated to the contractor through the special provisions included in the bid solicitation package. Coconut coir matting and burlap contained fiber rolls are an example of acceptable erosion control materials. </p> <p> ▼ Any worker who inadvertently injures or kills a yellow-legged frog or finds one dead, injured, or entrapped shall immediately report the incident to the biological monitor and construction foreperson. The construction foreperson will immediately notify the project applicant, who will provide verbal notification to the USFWS Sacramento Endangered Species Office and/or the local CDFW warden or biologist within 1 working day. The qualified biologist associated with the project will follow up with written notification to USFWS or CDFW within 5 working days. </p> 	Placer County Planning Services Division	During construction within 82 feet of Washeshu Creek	Continuously during construction within 82 feet of Washeshu Creek
<p> <u>Mitigation Measure 6-3: Avoid and minimize effects on nesting raptors and special-status birds.</u> </p> <p> The following measures shall be implemented and shall avoid and minimize impacts on long-eared owl, and northern harrier, as well as to other common raptors. They are in compliance with VPTSP policies PW-1 through PW-4. </p> <ul style="list-style-type: none"> <p> ▲ All Improvement Plans shall include a note that includes the wording of this measure and show placement of all protective fencing for those trees identified for protection within the raptor report described below. </p> 	Placer County Planning Services Division	With Improvement Plan submittal	Completion with Improvement Plan submittal
<ul style="list-style-type: none"> <p> ▲ Prior to any construction, grading or tree removal activities, a focused survey for raptor nests shall be conducted by a qualified biologist during the raptor nesting season (March 1 - September 1). A report summarizing the survey shall be provided to Placer County and the California Department of Fish and Wildlife (CDFW) within 30 days of the completed survey. If an active raptor nest is identified, include in the report proposed mitigation measures proposed to take place between March 1 and September 1. Typically, no construction activity or tree removal shall occur within 500 feet of an active nest (or lesser or greater distance, as determined by CDFW). Construction activities may only resume in the established buffer area after a follow up survey has been conducted and a report prepared by a qualified raptor biologist indicating that the nest (or nests) are no longer active, and that no new nests have been identified. A follow-up survey shall be conducted 2 months following the initial survey, if the initial survey occurs between March 1 and July 1. Additional follow up surveys may be required by the Development Review Committee, based on the recommendations in the raptor study and/or as recommended by the CDFW. Temporary construction fencing and signage shall be installed at a minimum 500-foot radius around trees containing active nests. If all project construction occurs between September 1 and March 1, no raptor surveys will be required. Trees previously approved for </p> 	Placer County Planning Services Division	Prior to any construction, grading, or tree removal activities	A follow-up survey shall be conducted 2 months following the initial survey, if the initial survey occurs between March 1 and July 1. Additional follow up surveys may be required by the Development Review Committee, based on the recommendations

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
removal by Placer County, which contain stick nests, may only be removed between September 1 and March 1.			in the raptor study and/or as recommended by the CDFW.
<p>The following measure shall be implemented to avoid or minimize loss of yellow warbler and olive-sided flycatcher nests during construction:</p> <ul style="list-style-type: none"> ▲ For construction activities that would occur in suitable nesting habitat for yellow warbler or olive-sided flycatcher during the nesting season (generally April 1–August 31, depending on snowpack and other seasonal conditions), a qualified wildlife biologist shall conduct focused surveys for yellow warbler and olive-sided flycatcher nests no more than 14 days before construction activities are initiated each construction season. If an active nest is located during the preconstruction surveys, the biologist shall notify CDFW. If necessary, modifications to the project design to avoid removal of occupied habitat while still achieving project objectives shall be evaluated, and implemented to the extent feasible. If avoidance is not feasible or conflicts with project objectives, appropriate buffers around nests and limited operating periods will be established through consultation with CDFW to avoid disturbances during the sensitive nesting season. 	Placer County Planning Services Division	No more than 14 days before construction activities are initiated each construction season	No more than 14 days before construction activities are initiated each construction season
<p>The following measures shall be implemented to avoid or minimize loss of willow flycatcher nests during construction:</p> <ul style="list-style-type: none"> ▲ For construction activities initiated in suitable breeding habitat for willow flycatcher after May 31, a preconstruction survey for nesting willow flycatchers will be conducted each construction season. The survey will follow A Willow Flycatcher Survey Protocol for California (Bombay et al. 2003). The protocol requires a minimum of two survey visits to determine presence or absence of willow flycatcher: one visit during survey period 2 (June 15–25) and one during either survey period 1 (June 1–14) or period 3 (June 26–July 15). ▲ If a willow flycatcher is detected and nesting is confirmed or suspected, the biologist will notify CDFW. If necessary, modifications to the project design to avoid removal of occupied habitat while still achieving project objectives will be evaluated, and implemented to the extent feasible. If avoidance is not feasible or conflicts with project objectives, construction will be prohibited within a minimum of 500 feet (or at a distance directed by the appropriate regulatory agency) of the nest to avoid disturbance until the nest is no longer active. This recommended buffer area may be reduced if approved by CDFW. 	Placer County Planning Services Division	Prior to each construction season for construction activities initiated in suitable breeding habitat for willow flycatcher after May 31	Each construction season. The protocol requires a minimum of two survey visits to determine presence or absence of willow flycatcher: one visit during survey period 2 (June 15–25) and one during either survey period 1 (June 1–14) or period 3 (June 26–July 15).
<p>The following measures shall be implemented to minimize loss of yellow warbler habitat within the western channel of Washeshu Creek:</p> <ul style="list-style-type: none"> ▲ Implement Mitigation Measures 6-1a and 6-1b to insure replacement of riparian habitat within the project site or the surrounding area and to ensure riparian and wetland habitat restoration success. ▲ Implement Mitigation Measure 6-1c to minimize new well impacts to groundwater near the western channel of Washeshu Creek. ▲ Implement Mitigation Measure 13-4 to ensure wellfield development and operations minimize potential groundwater effects on riparian vegetation. 	See Mitigation Measures 6-1a, 6-1b, and 6-1c, above, and Mitigation Measure 13-4, below	See Mitigation Measures 6-1a, 6-1b, and 6-1c, above, and Mitigation Measure 13-4, below	See Mitigation Measures 6-1a, 6-1b, and 6-1c, above, and Mitigation Measure 13-4, below

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 6-4: Avoid and minimize effects on Sierra Nevada mountain beaver.</u></p> <p>The following measures shall be implemented to avoid or minimize disturbances or removal of Sierra Nevada mountain beaver habitat, burrows, and mortality or injury to individuals from the Specific Plan activities and are in compliance with VPTSP policies PW-1 through PW-4:</p> <ul style="list-style-type: none"> ▲ Pre-construction biological surveys shall be conducted no more than 30 days prior to construction activities in potential habitat for Sierra Nevada mountain beaver to identify biological resources, including burrows, which could be impacted by construction activities. All burrows shall be inspected for use by sensitive mammals, and buffers may be established based on occupation. If an area is given clearance to proceed with construction and reproductive activities subsequently occur, it shall be assumed that the individuals are acclimated to the ongoing disturbance of construction. If circumstances exist such that future activities may result in the abandonment of the burrows, as determined by a qualified biologist, an appropriate exclusionary buffer shall be established by Olympic Valley, in coordination with CDFW. ▲ If a potentially active mountain beaver burrow is unavoidable, the biologist shall determine the species and reproductive status of the animal. If the burrow is determined to be active and does not contain young, the biologist shall remove any nesting material and/or remove any cover that allows for a reproductive site. If the animal is determined to be raising young, the biologist shall establish a 200-foot exclusionary buffer surrounding the reproductive site until it is determined that the young have left the reproductive site completely. After it is determined that young have left, the biologist shall commence to collapse, excavate or block the burrow. The project applicant shall contact CDFW prior to any burrow excavation, collapse, or blockage. 	Placer County Planning Services Division	No more than 30 days prior to construction activities in potential habitat for Sierra Nevada mountain beaver	Completion prior to construction activities in potential habitat for Sierra Nevada mountain beaver
<ul style="list-style-type: none"> ▲ The biologist shall inspect all vegetation removal, excavations and areas of active construction within areas identified as potential habitat on a daily basis for trapped mountain beaver. Mountain beaver found in active construction areas shall be allowed to passively leave the site. If necessary, mountain beaver may be relocated by a qualified biologist. The construction foreperson shall notify the environmental monitor immediately if any mountain beaver enters or becomes trapped in the work area. ▲ All trash and food shall be removed from the site at the end of each workday in order to deter wildlife from entering the site. 	Placer County Planning Services Division	During construction activities in potential habitat for Sierra Nevada mountain beaver	The biologist shall inspect areas identified as potential habitat on a daily basis; All trash and food shall be removed from the site at the end of each workday
<p><u>Mitigation Measure 6-5: Avoid and minimize effects on Sierra Nevada snowshoe hare.</u></p> <p>The following measures shall be implemented to avoid or minimize disturbances or removal of Sierra Nevada snowshoe hare reproductive sites, and mortality or injury to individuals from the Specific Plan activities and are in compliance with VPTSP policies PW-1 through PW-4:</p> <ul style="list-style-type: none"> ▲ Pre-construction biological surveys shall be conducted no more than 30 days prior to construction activities in snowshoe hare habitat to identify biological resources, including reproductive sites such as open nests or depressions on the ground, which could be impacted by construction activities. All reproductive sites shall be inspected for use by sensitive mammals, and buffers may be established based on occupancy. If an area is given clearance to proceed with construction and reproductive activities subsequently occur, it shall be assumed that the individuals are acclimated to the ongoing disturbance of construction. If circumstances exist such that future activities may result in the abandonment of the reproductive site, as determined by a 	Placer County Planning Services Division	No more than 30 days prior to construction activities in snowshoe hare habitat	Completion prior to construction activities in snowshoe hare habitat

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>qualified biologist, an appropriate exclusionary buffer shall be established by the project applicant, in coordination with CDFW.</p> <p>▲ If a potentially active snowshoe hare reproductive site is unavoidable, the biologist shall determine the species and reproductive status of the animal. If the reproductive site is determined to be active and does not contain young, the biologist shall remove any 'nesting' material and/or remove any cover that allows for a reproductive site. If the animal is determined to be raising young, the biologist shall establish a 200-foot exclusionary buffer surrounding the reproductive site until it is determined that the young have left the reproductive site completely. After it is determined that young have left, the project applicant shall commence removal of the structure. The project applicant shall contact CDFW prior to any reproductive site excavation or structure removal.</p>			
<p>▲ A qualified biologist shall inspect all vegetation removal, excavations, and areas of active construction within areas identified as potential habitat on a daily basis for trapped snowshoe hare. Snowshoe hare found in active construction areas shall be allowed to passively leave the site. If necessary, snowshoe hare may be relocated by a qualified biologist. The construction foreperson shall notify the environmental monitor immediately if any snowshoe hare enters or becomes trapped in the work area.</p> <p>▲ All trash and food shall be removed from the site at the end of each workday in order to deter wildlife from entering the site.</p>	Placer County Planning Services Division	During construction activities in potential habitat for snowshoe hare	The biologist shall inspect areas identified as potential habitat on a daily basis; All trash and food shall be removed from the site at the end of each workday

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 6-6: Avoid and minimize effects on pallid bat, western red bat, and Townsend big-eared bat.</u></p> <p>The following measures shall be implemented to avoid or minimize disturbances or removal of active roost sites for pallid bat, western red bat and Townsend big-eared bats, and mortality or injury to bats from the Specific Plan activities and are in compliance with VPTSP policies PW-1 through PW-4:</p> <ul style="list-style-type: none"> ▲ Bat surveys shall be conducted in locations proposed for construction each year that could provide roosting habitat, in the spring, no more than 30 days prior to the start of construction, in order to identify active bat roosting sites, such as snags. All potential roosting sites shall be surveyed by a qualified biologist in order to determine usage. All non-active roosting sites planned for removal as part of construction shall be removed within 30 days of the surveys in order to prevent new roosts from being established. If it is determined that an active roosting site would be adversely affected, the project applicant shall consult with the CDFW to acquire appropriate authorizations to remove the roosting sites. All active non-maternity roosting sites shall be fitted with passive exclusion devices, such as one-way flaps or doors, and all bats shall be allowed to leave voluntarily. Once it is confirmed that all bats have left the roost, crews shall be allowed to continue work in the area. If a maternity roosting site is discovered, the project applicant shall consult with the CDFW in order to establish appropriate exclusionary buffers until all young are determined to be Volant (i.e., able to fly and feed independently) by a qualified biologist. Once it is determined that all young are volant, passive exclusion devices shall be installed and all bats shall be allowed to leave voluntarily. Once it is determined by a qualified biologist that all bats have left the roost, crews shall be allowed to work within the buffer zone. 	Placer County Planning Services Division	In the spring, no more than 30 days prior to the start of construction in locations that could provide roosting habitat	Annually, prior to the start of each construction season in locations that could provide roosting habitat
<p><u>Mitigation Measure 6-7: Avoid and minimize effects on animal movement and migratory corridors.</u></p> <p>The following mitigation measures shall be implemented to avoid impacts on mule deer fawning during construction activity:</p> <ul style="list-style-type: none"> ▲ Pre-project surveys shall be conducted in suitable fawning habitat within the plan area boundaries and on lands controlled by the applicant within 500 feet of vegetation removal, construction, and development activities. Suitable fawning habitat is preliminarily defined here as willow, wet meadow and dense riparian. Final determination of suitability shall be determined by qualified biologist at the time of project implementation. Surveys shall occur between April 15 and July 31; these dates may be adjusted by the qualified biologist due to snowpack conditions and deer activity. ▲ If the qualified biologist determines that activities are occurring in or immediately adjacent to an active mule deer fawning area, they shall have the authority to temporarily halt or relocate work until the fawns move out of the project area. 	Placer County Planning Services Division	Prior to construction (and between April 15 and July 31) when construction is planned within 500 feet of suitable fawning habitat within the plan area boundaries and on lands controlled by the applicant	Completion prior to construction within 500 feet of suitable fawning habitat within the plan area boundaries and on lands controlled by the applicant
<ul style="list-style-type: none"> ▲ To protect deer from injury or mortality in areas of excavation such as utility line trenches, trenches shall not be left open overnight. Four-foot tall bright, orange warning fence shall be placed surrounding trenches or open trenches shall be covered with wooden planks or other equally effective covering (e.g., steel panels) to protect deer from accidentally falling into areas of deep excavations. The biologist will determine areas that require fencing or coverings. Escape ramps will be implemented in uncovered trenches to allow for any wildlife that may fall into a trench to escape independently. 	Placer County Planning Services Division	During excavation activities	Continuously during excavation activities

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 6-8: Avoid, minimize, and compensate for effects on special-status plants.</u></p> <p>The following measures shall be implemented to avoid, minimize, and mitigate impacts on special-status plant species, including alderleaf coffeeberry, starved Daisy, Donner Pass Buckwheat, American manna grass, Plumas ivesia, Stebbins' phacelia, Davy's sedge, Scalloped moonwort, common moonwort, and Mingan moonwort within the project area. They are in compliance with VPTSP policies PW-1 through PW-4</p> <p>▲ Groundwater impacts to sensitive species associated with riparian and meadow habitat that may be lost will be minimized with Mitigation Measures 6-1a through 6-1d. These measures will reduce impacts to the western channel from pumping and ensure successful restoration/compensation of the riparian or meadow area. General mitigation measures for consultation with the state or federal agencies for known populations below will also minimize impacts to these populations.</p>	See Mitigation Measures 6-1a through 6-1d, above	See Mitigation Measures 6-1a through 6-1d, above	See Mitigation Measures 6-1a through 6-1d, above
<p>▲ Prior to Improvement Plan approval, a Revegetation Plan, prepared by a licensed landscape architect or similar professional, shall be submitted and approved by the Development Review Committee (DRC) (and Parks Division if maintenance is provided through a CSA). This will ensure proper protection from weedy or non-native species that could impact special status plant populations if present. It would also be consistent with VPTSP policies (OS-3 and OS-6) to use native and naturalized vegetation in landscape buffers and green spaces and protect native vegetation in the Washeshu Creek corridor.</p>	Placer County Development Review Committee (and the Parks Division if maintenance is provided through a CSA)	Prior to Improvement Plan approval	Completion prior to Improvement Plan approval
<p>▲ Before construction or development is implemented on sites with proposed removal of suitable habitat for special-status plant species, and where it has been more than two years since a previous special-status plant survey has confirmed absence, preconstruction special-status plant surveys shall be conducted in suitable habitat. Preconstruction surveys shall be performed by a qualified botanist during special status plant flowering periods (May-September). No rare plant surveys have been completed for the meadow area north of the furthest east V-CP section on Washeshu Creek in the Village area and for the area west (Village Neighborhoods) and north (by the Granite Chief trailhead) of the channelized section of Washeshu Creek, as well as in the utility corridors.</p>	Placer County Development Review Committee (and the Parks Division if maintenance is provided through a CSA)	Before construction or development is implemented on sites with proposed removal of suitable habitat for special-status plant species and where it has been more than two years since a previous special-status plant survey has confirmed absence	Completion before construction or development is implemented on sites with proposed removal of suitable habitat for special-status plant species and where it has been more than two years since a previous special-status plant survey has confirmed absence
<p>▲ If, based on current or future focused surveys, a special-status plant species is located in an area to be disturbed by project construction activities or operations (development or trails), the following mitigation measures are required to protect species from direct injury and reduce the potential for introduction of weedy species at these sites:</p>	Placer County Development Review Committee (and the	After construction and for the continuation of the operation of the	After construction and for the continuation of the operation of the

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<ul style="list-style-type: none"> ➤ Preserved special-status species habitat shall be designated as Environmentally Sensitive Areas and shall be flagged by a qualified botanist. ➤ Signage to educate the public of the sensitive nature of the area and keep them on trails and pathways around the project area shall be required after construction and for the continuation of the operation of the VPTSP. 	Parks Division if maintenance is provided through a CSA)	VPTSP	VPTSP
<ul style="list-style-type: none"> ▲ A 200-foot buffer shall be implemented; including protection of those areas which may be necessary to support the hydrological regime of the special-status plants is incorporated into the project design and shall include provisions for protection and management of the avoided area in perpetuity. If fencing is required, the Improvement Plans and Information Sheet(s) recorded concurrently with the Final Subdivision Map(s) shall show Permanent Protective Fencing installation. The Improvement Plans shall include a note and show placement of Temporary Construction Fencing: The applicant shall install a four (4) foot tall, brightly colored (usually yellow or orange), synthetic mesh material fence (or an equivalent approved by the Development Review Committee (DRC) around any and all “special protection” areas, including around special status plants, as discussed in the project’s environmental review documents, prior to any construction equipment being moved on-site or any construction activities taking place. No development of this site, including grading, shall be allowed until this condition is satisfied. Any encroachment within these areas must first be approved by the DRC. Temporary fencing shall not be altered during construction without written approval of the DRC. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of the DRC has inspected and approved all temporary construction fencing. This includes both on-site and off-site improvements. 	Placer County Development Review Committee (and the Parks Division if maintenance is provided through a CSA)	With submittal of the Improvement Plans and Information Sheet(s)	Project design shall include provisions for protection and management of the avoided area in perpetuity
<ul style="list-style-type: none"> ▲ If special-status plant species are found that cannot be avoided during construction or because of operational groundwater drawdown, the project applicant shall consult with CDFW and/or USFWS, as appropriate depending on species status, to determine the appropriate mitigation measures for direct and indirect impacts that could occur as a result of project construction and will implement the agreed-upon mitigation measures to achieve no net loss of occupied habitat or individuals. Mitigation measures may include preserving and enhancing existing populations, creation of off-site populations on project mitigation sites through seed collection or transplantation, and/or restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat and/or individuals. Potential mitigation sites could include suitable locations within or outside of the project area. A mitigation and monitoring plan will be developed describing how unavoidable losses of special-status plants will be compensated. ▲ If relocation efforts are part of the mitigation plan, the plan will include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. ▲ Success criteria for preserved and compensatory populations will include: <ul style="list-style-type: none"> ➤ The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat. ➤ Compensatory and preserved populations will be self-producing. Populations will be considered self-producing when: <ul style="list-style-type: none"> ▪ plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and 	Placer County Planning Services Division to verify consultation with CDFW and/or USFWS	Prior to project construction	Prior to construction, continuously during project construction, and after project construction as applicable

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<ul style="list-style-type: none"> ▪ reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity. ▸ If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations. 			
<p><u>Mitigation Measure 6-9: Avoid and minimize effects on trees and compensate for tree removal.</u></p> <p>The following measures shall be implemented to avoid, minimize, and mitigate impacts from tree removal and are in compliance with VPTSP policies TR-1 through TR-3:</p> <ul style="list-style-type: none"> ▲ The project applicant or its selected vendor will either conduct a tree survey or use recent tree surveys to determine the number and size of trees to be removed. The number of trees to be removed will be minimized to the extent feasible. ▲ Prior to the County Improvement Plan approval, the project applicant shall furnish to the DRC, a Tree Permit for removal of trees within riparian zones or greater than 6 inches diameter breast height in areas where more than fifty percent of trees are removed, or where land conversion occurs. This will ensure compliance with Tree Removal Ordinances 12.16 and 12.20 (where necessary). The plans for removal shall be forwarded to the County early enough in the process to assure that any suggested changes made by the County can be incorporated into the final design. Suggested changes may include recommendations regarding permanent structures in relation to the driplines of trees, pruning recommendation, treat of soil within and around the dripline of trees, replacement of removed trees, revegetation, etc. "Riparian zone" means any area within fifty (50) feet from the centerline of a seasonal creek or stream, any area one hundred (100) feet from the centerline of a year round creek, stream, or river, and any area within one hundred (100) feet from the shoreline of a pond, lake or reservoir. At a minimum all streams, creeks, ponds, lakes, and reservoirs as shown on 7.5 minute USGS maps are included in this definition. (A riparian zone established in specific community or general plan may supersede this definition.) ▲ The following conditions shall apply to avoid conflict with Ordinance 12.16 (for removal of trees within riparian zones or removal of more than fifty percent of trees greater than 6 inches dbh on a parcel): <ul style="list-style-type: none"> ▸ The project applicant or its selected vendor will obtain a tree permit from Placer County, as per the County's Tree Ordinance. As stated in the Tree Ordinance (12.16.080 Replacement program and penalties), the County may condition any tree permit or discretionary approval involving removal of a protected tree upon (a) the replacement of trees in kind, (b) implementation of a revegetation plan, or (c) payment into the County's tree preservation fund. Because a project site may not support installation of all replacement trees or the implementation of a revegetation plan, the project applicant or its selected vendor could either replace trees at an off-site location or contribute to the County's tree preservation fund; this will be determined by the County. If the County conditions require replacement of trees the following may be required: <ul style="list-style-type: none"> ▪ For each diameter inch of a tree removed, replacement shall be on an inch-for-inch basis. For example, if 100 diameter inches are proposed to be removed, the replacement trees would equal 100 diameter inches (aggregate). 	Placer County Development Review Committee	Prior to the County Improvement Plan approval	Completion prior to the County Improvement Plan approval

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<ul style="list-style-type: none"> ▪ If replacement tree planting is proposed, the tree replacement/mitigation plan must be shown on Improvements Plans and must be installed by the applicant and inspected and approved by the DRC. At its discretion, the DRC may establish an alternate deadline for installation of mitigation replacement trees if weather or other circumstances prevent the completion of this requirement. ▪ A revegetation plan, as recommended by an ISA-certified arborist or similarly qualified professional, to provide an appropriate level of mitigation to offset the loss of trees, and as approved by the DRC, shall be established in the project area as shown on the approved Tentative Subdivision Map(s). ▪ If replacement tree planting is proposed, the tree replacement/mitigation plan shall be shown on Improvements Plans and shall be installed by the applicant and inspected and approved by the DRC. At its discretion, the DRC may establish an alternate deadline for installation of mitigation replacement trees if weather or other circumstances prevent the completion of this requirement. ▮ In lieu of the tree planting mitigation for tree removal listed above, a tree replacement mitigation fee of \$100 per diameter inch at breast height for each tree removed or impacted or the current market value, as established by an Arborist, Forester or Registered Landscape Architect, of the replacement trees, including the cost of installation, shall be paid to the Placer County Tree Preservation Fund. ▮ The unauthorized disturbance to the critical root zone of a tree to be saved shall be cause for the Planning Commission to consider revocation of this permit/ approval. ▮ Exemptions can be filed by the project applicant for removal of dead, dying, or diseased trees, split products, establishing a right-of way, or removing fire hazard trees within 150 feet of a structure. There is also a one-time exemption for conversion of 3 acres to another use. ▲ The following conditions shall apply to avoid conflict with Ordinance 12.20: <ul style="list-style-type: none"> ▮ If the phase of the project involves a land use conversion, the project applicant shall apply for a tree cutting permit under ordinance 12.20, follow all requirements of that permit and in addition to the general information for the permit must submit: <ul style="list-style-type: none"> ▪ A detailed statement describing how the standards and criteria of Section 12.20.050 shall be satisfied; ▪ A copy of the document approving the land use conversion issued by the applicable State Division of Forestry; ▪ In lieu of the drawing required by subsection (C)(1)(f) of this section, a map acceptable to the permit-issuing authority at a scale adequate to show the location of proposed and existing buildings and driveways, the location of proposed utility trenches, and the height, species, dbh, and location of all tree over six inches dbh proposed to be cut, and a drawing or sketch indicating the general location, characteristics and densities of trees proposed to be left and planted on the site, provided, however, in the case of a subdivision, such information may be contained in the tentative map and the vegetation preservation and protection plan as required by the subdivision ordinance. (Prior code Section 20.15) ▲ The Improvement Plans and Information Sheet(s) recorded concurrently with the Final Subdivision Map(s) shall show Permanent Protective Fencing installation. 			

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>▲ The Improvement Plans shall include a note and show placement of Temporary Construction Fencing: The applicant shall install a four (4) foot tall, brightly colored (usually yellow or orange), synthetic mesh material fence (or an equivalent approved by the Development Review Committee (DRC)) at the following locations prior to any construction equipment being moved on-site or any construction activities taking place:</p> <ul style="list-style-type: none"> ▼ At the limits of construction, outside the critical root zone of all trees six (6) inches dbh (diameter at breast height), or 10 inches dbh aggregate for multi-trunk trees, within 50 feet of any grading, road improvements, underground utilities, or other development activity, or as otherwise shown on the Tentative Subdivision Map(s). ▼ No development of the site, including grading, shall be allowed until this condition is satisfied. Any encroachment within these areas, including critical root zones of trees to be saved, must first be approved by the DRC. Temporary fencing shall not be altered during construction without written approval of the DRC. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of the DRC has inspected and approved all temporary construction fencing. This includes both on-site and off-site improvements. Efforts should be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. 			
<p>▲ If trees proposed for removal are to be sold as timber, a Registered Professional Forester (RPF) shall prepare a THP that outlines the proposed stand removal operations, and submit this to the state (CAL FIRE). Prior to Improvement Plan approval or recordation of the Final Subdivision Map(s), if the property has been logged within six years prior to the hearing date of the Tentative Subdivision Map(s), the applicant shall provide the Development Review Committee (DRC) with a letter from the California Department of Forestry stating that all requirements of the Z'Berg-Nejedly Forest Practices Act have been met to the satisfaction of the California Department of Forestry.</p>	CAL FIRE and the Placer County Development Review Committee	Prior to Improvement Plan approval or recordation of the Final Subdivision Map(s)	Completion prior to Improvement Plan approval or recordation of the Final Subdivision Map(s)
<p>▲ The applicant shall implement the following conditions to protect remaining trees after tree removal permits or THP approvals are obtained:</p> <ul style="list-style-type: none"> ▼ For those trees designated to be saved within 50 feet of any development activity within the plan area or as recommended by the arborist, or as required by the approving body, a minimum four-foot tall brightly colored synthetic fence shall be installed at the outermost edge of the protected zone of each protected tree or groups of protected trees. The fence shall not be removed until written authorization is received from the planning director. Exceptions to this policy may occur in cases where protected trees are located on slopes that shall not be graded. However, approval must be obtained from the Planning Department to omit fences in any area of the project. The fences must be installed in accordance with the approved fencing plan prior to the commencement of any grading operation or such other time as described by the approving body. The developer shall call the Planning Department for an inspection of the fencing prior to initiation of grading operations. ▼ For discretionary projects, signs must be installed on the fence in four locations around each individual protected tree. The size of each sign must be a minimum of two feet by two feet and must contain the following language: "WARNING THIS FENCE SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM PLACER COUNTY." On fencing around a grove of protected trees, the signs must be placed approximately fifty-foot intervals. Fencing shall consist of four-foot tall, brightly colored (usually yellow or orange), synthetic mesh material fence (or an equivalent approved by the DRC) outside the critical root zone of all protected trees within 50 feet of any grading, road improvements, underground utilizes or 	Placer County Development Review Committee	Prior to tree removal	Completion prior to and during tree removal

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>other development activity. Any encroachment into this fenced area must first be approved by the DRC.</p> <ul style="list-style-type: none"> ➤ Once approval has been obtained, the fences must remain in place throughout the entire construction period and may not be removed without obtaining written authorization from the Planning Department. ➤ Existing healthy trees and native vegetation on the site shall be preserved in accordance with standards contained in an agency-approved design manual, if any, and shall be protected by adequate means during any construction. ➤ Existing trees shall be preserved within any right-of-way when such trees are suitably located, healthy, and when approved grading allows. ➤ Appurtenances, except utility connections, such as television antennas, signs, and outdoor lights shall not be attached to trees. ➤ Tree cutting within the one hundred (100) year floodplain of a perennial or intermittent stream shall be limited to cutting diseased or hazardous trees or to thinning needed to protect the health and vigor of remaining trees. ➤ Damage to trees not to be cut and to residual vegetation shall be avoided. Damaged trees shall be repaired with tree sealer and any necessary tree surgery. ➤ No tree shall be felled into a perennial or intermittent stream without specific approval of the permit-issuing authority. ➤ Any stump to be left in the ground shall be treated with approved chemicals or methods to prevent the spread of forest tree diseases. ➤ Ground skidding shall not be allowed within the dripline of trees. ➤ Slash, debris, and nonmerchantable timber generated by the operation shall be disposed of in the manner and to a location approved by the permit-issuing authority. ➤ All tree removal sites shall be winterized before the end of the construction season, or stabilized before the end of the construction season so as to prevent erosion and soil loss from the site. ➤ In the case of land use conversion, approval shall be conditioned on compliance with all requirements of the timberland conversion certificate issued by the appropriate State Division of Forestry. (Prior code Section 20.20) ▲ For hazardous, diseased, or insect infested trees the following conditions apply: <ul style="list-style-type: none"> ➤ In cutting trees for land use conversion, all diseased, infested, or overmature trees shall be removed prior to construction. ➤ All diseased and insect-infested trees shall be treated prior to removal by approved methods to prevent the spread of such disease or infestation. (Prior code Section 20.25) 			
<p><u>Mitigation Measure 6-10: Implement previous applicable mitigation measures during trail development.</u></p> <p>Once a proposed alignment and the location of specific improvements are identified, a qualified biologist shall survey the new trail routes and segments of existing trails identified for improvements outside the project boundary identified in this EIR to determine the biological resources present and the impacts identified within this chapter that could occur. Based on the results of this site review, the biologist shall identify mitigation measures within this chapter applicable to the specific trail route segments and the mitigation measures shall be implemented as appropriate during trail construction/improvement.</p>	Initially Placer County Planning Services Division, then consistent with applicable elements of Mitigation Measures 6-1 through	Prior to initiation of trail construction, then consistent with applicable elements of Mitigation Measures 6-1 through	See Mitigation Measures 6-1 through 6-9, above

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
	6-9, above	6-9, above	
<p><u>Mitigation Measure 6-11: Implement Mitigation Measures 13-1 and 13-2.</u></p> <ul style="list-style-type: none"> ▲ The project applicant shall implement Mitigation Measures 13-1 and 13-2 provided in Chapter 13, “Hydrology and Water Quality.” ▲ Implementation of Mitigation Measure 13-1, requires proper abandonment of sewer lines with review and approval of Placer County, helping ensure that existing codes and regulations that require measures to protect water quality are properly implemented during these activities, and ▲ Implementation of Mitigation Measure 13-2 (a and b), would ensure that construction phase, site-specific risks to water quality that might result from improper implementation of water quality protection measures and, discovery and disturbance of contaminated soil or water would be fully addressed and avoided. 	See Mitigation Measures 13-1 and 13-2, below	See Mitigation Measures 13-1 and 13-2, below	See Mitigation Measures 13-1 and 13-2, below
<p><u>Mitigation Measure 6-12: Prepare and implement fish rescue plan.</u></p> <p>A fish rescue plan shall be created prior to construction, to identify areas where fish are to be rescued and the methods to be used. The fish rescue plan shall be submitted to CDFW for approval with streambed alteration agreement applications. After the rescue, a report shall be submitted to CDFW stating the species captured, the number captured, the relocation sites, and any incidental injuries or mortalities that occurred.</p>	Placer County Planning Services Division	Prior to construction	Completion prior to construction
<p><u>Mitigation Measure 6-13: Implement Mitigation Measures 13-4 and 6-1c.</u></p> <p>The project applicant shall implement Mitigation Measure 13-4, provided in Chapter 13, “Hydrology and Water Quality,” which requires that well-field configuration and operations are consistent with the parameters of the WSA and applicable groundwater plans. By confirming that groundwater management is implemented in a manner that is consistent with the operational parameters described in the WSA, Mitigation Measure 13-4 would also result in confirmation that groundwater pumping does not result in losses of riparian vegetation in the west channel or upper east channel of Washeshu Creek. Furthermore, Mitigation Measure 6-1c requires monitoring of riparian vegetation in the portions of the creek that would be most affected by reduction in groundwater levels, and replacement of such vegetation if it is lost.</p> <p>The OVPSD and the project applicant are responsible for implementation of Mitigation Measure 13-4, but mechanisms are also included in Mitigation Measure 13-4 that require secondary approval by Placer County.</p>	See Mitigation Measure 13-4, below	See Mitigation Measure 13-4, below	See Mitigation Measure 13-4, below
7 Cultural Resources			
<p><u>Mitigation Measure 7-1a: Document historic buildings before removal.</u></p> <p>The project applicant shall complete documentation of the Olympic Valley Lodge (formerly Athlete’s Center) and Far East Center (formerly Nevada Spectator’s Center) before any construction/demolition work conducted at these buildings. Documentation shall consist of a written history of the property, plans and drawings of the historic resource, and photographs, as described below.</p> <ul style="list-style-type: none"> ▲ Written History. The Carey & Co. report, Historic Resource Evaluation Report, Olympic Valley Ski Resort, shall be used for the written history of each building. The report shall be reproduced on archival bond paper. 	Placer County Planning Services Division	Before any construction/demolition work conducted at the Olympic Valley Lodge (formerly Athlete’s Center) and Far East Center	Completion before any construction/demolition work conducted at the Olympic Valley Lodge (formerly Athlete’s Center) and

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>▲ Plans and Drawings. An architectural historian (or historical architect, as appropriate) shall conduct research into the availability of plans and drawings of the Nevada Spectators' Center and the Athletes' Center as the buildings currently exist. If such plans/drawings exist, their usefulness as documentation for the two buildings shall be evaluated by the architectural historian. If deemed adequate, the plans/drawings shall be reproduced on archival mylar. If no plans/drawings are available, or if the existing plans/drawings are not found to be useful in documenting the historic resources, a historical architect shall prepare dimensioned plans and exterior elevations of each building. A combination of existing and new drawings is acceptable. All drawings shall be reproduced on archival mylar.</p> <p>The architectural historian shall conduct research into the existence of the original architectural plans and drawings of the two buildings as designed for the Winter Olympics. If found, the plans shall be reproduced on archival mylar. Alternatively, the architectural plans can be scanned and saved as TIFF files. The scanning resolution shall be not less than 300 dpi.</p> <p>All digital files, including drawing files, shall be saved on media and labeled following the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation Digital Photography Specifications.</p> <p>▲ Photographs. Digital photographs shall be taken of the Nevada Spectators' Center and the Athletes' Center following the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation Digital Photography Standards. The documentation shall be prepared by an architectural historian, or historical architect as appropriate, meeting the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Professional Qualification Standards. The documentation shall be submitted to the Placer County Library, Placer County Museums, and Olympic Valley Ski Museum Foundation.</p>		(formerly Nevada Spectator's Center)	Far East Center (formerly Nevada Spectator's Center)
<p>▼ Consistent with Specific Plan Policy CR-3, before, or during demolition of the Nevada Spectator's Center and the Athlete's Center, significant architectural features and historic artifacts shall be salvaged and prominently displayed within the Olympic Valley Village as part of an interpretive exhibit, or made available to an appropriate historical society or museum dedicated to preservation and interpretation of data and information from the 1960 Winter Olympics.</p>	Placer County Planning Services Division	Before or during demolition of the Nevada Spectator's Center and the Athlete's Center	Completion before or during demolition of the Nevada Spectator's Center and the Athlete's Center
<p><u>Mitigation Measure 7-1b: Create an interpretive program, exhibit, or display.</u></p> <p>The project applicant shall prepare a permanent exhibit/display of the history of each building including, but not limited to, historic and current photographs, interpretive text, drawings, video, interactive media, and oral histories. The exhibit/display shall be developed in consultation with Placer County, local historical organizations, and those with an interest in the history of the 1960 Winter Olympics. The exhibit/display shall be displayed in a location in Olympic Valley that is accessible to the public and may be incorporated into the interpretive exhibit identified as part of Specific Plan Policy CR-3.</p>	Placer County Planning Services Division	Before demolition of the Nevada Spectator's Center and the Athlete's Center	Within 1 year of demolition of each building
<p><u>Mitigation Measure 7-2: Stop work if human remains are discovered.</u></p> <p>California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097.</p>	Placer County Planning Services Division	During any demolition/ construction activities	Continuously during any demolition/ construction activities

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>If human remains are discovered during any demolition/construction activities, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the project applicant shall notify the Placer County coroner and the NAHC immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined by the NAHC to be Native American, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project applicant shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by the NAHC. Following the coroner’s and NAHC’s findings, the archaeologist, and the NAHC-designated MLD shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California Public Resources Code Section 5097.94.</p>			
<p><u>Mitigation Measure 7-3a: Conduct Native American monitoring.</u></p> <p>Before commencement of earth-disturbing activities within 100 feet of the most up to date identified boundary of site CA-PLA-164 (including the extension), a tribal site monitor from the Washoe Tribe shall be contacted and retained, if possible, by the project applicant. The tribal monitor shall be on site for all earth-disturbing construction and pre-construction activities within 100 feet of site CA-PLA-164. In the event that no such Native American monitor is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted by the project applicant. If Native American archaeological, ethnographic, or spiritual resources are discovered, all identification and treatment of the resources shall be conducted by a qualified archaeologist and Native American representatives who are approved by the local Native American community as scholars of the cultural traditions.</p>	Placer County Planning Services Division	Before commencement of earth-disturbing activities within 100 feet of the most up to date identified boundary of site CA-PLA-164 (including the extension)	Continuously during all earth-disturbing construction and pre-construction activities within 100 feet of site CA-PLA-164
<p><u>Mitigation Measure 7-3b: Develop and implement a Worker Environmental Awareness Program.</u></p> <p>The project applicant shall design and implement a Worker Environmental Awareness Program (WEAP) that will be provided to all construction personnel and supervisors who will have the potential to encounter and alter heritage and cultural resources. The topics to be addressed in the WEAP will include, at a minimum:</p> <ul style="list-style-type: none"> ▲ types of heritage and cultural resources expected in the project area; ▲ types of evidence that indicates heritage or cultural resources might be present (e.g., ceramic shards, trash scatters, lithic scatters, mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints); ▲ what to do if a worker encounters a possible resource; ▲ what to do if a worker encounters bones or possible bones; and ▲ penalties for removing or intentionally disturbing heritage and cultural resources, such as those identified in the Archeological Resources Protection Act (ARPA). 	Placer County Planning Services Division	Before any demolition/ construction activities	Continuously during any demolition/ construction activities

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 7-3c: Stop work in the event of an archaeological discovery.</u></p> <p>In the event that evidence of any prehistoric or historic-era subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., ceramic shard, trash scatters, lithic scatters), all ground-disturbing activity in the area of the discovery shall be halted until a qualified archaeologist can access the significance of the find. Consistent with Specific Plan Policy CR-1, the Placer County Planning Services Division and the Department of Museums will be notified of the potential find concurrent with the retention of a qualified archeologist. If an archeological site, the appropriate Native American group shall be notified. If the archaeologist determines that the find does not meet the CRHR standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, the Planning Services Division shall be notified and a data recovery plan shall be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the project applicant to avoid disturbance to the resources, and if completed avoidance is not possible, follow accepted professional standards in recording any find including submittal of the standard DPR Primary Record forms (Form DPR 523) and location information to the appropriate California Historical Resources Information System office for the project area (the NCIC). Consistent with Specific Plan Policy CR-4, artifacts that are found during project development that are related to the 1960 Winter Olympics, and which the project applicant has authority over or ownership of, shall be made available to the appropriate historical society or museum dedicated to preservation and interpretation of data and information from the 1960 Winter Olympics.</p>	Placer County Planning Services Division and the Department of Museums	During construction-related earth-moving activities	Continuously during construction-related earth-moving activities
<p><u>Mitigation Measure 7-3d: Prepare subsequent evaluation reports.</u></p> <ul style="list-style-type: none"> ▲ Phase 2 Evaluation Report: Once the exact location of the new sewer line has been determined and before commencement of earth-disturbing activities for construction of the sewer line, a Phase 2 Evaluation Report shall be prepared for the archaeological resources as identified in the report titled Squaw Valley Sewer Line Project Heritage Resources Study: Phase 1B Preliminary Report. In the Phase 2 Evaluation Report, resources will be evaluated and recorded on standard DPR Primary Record forms (Form DPR 523) in accordance with one or more national, state and/or regional criteria and a determination of eligibility/ineligibility to the NRHP and/or CRHR and/or local register will be recommended. The Phase 2 Evaluation Report shall be completed by a qualified archaeologist who meets the Secretary of the Interior’s professional qualifications for Archaeology and submitted to the Placer County Planning Services Division with the first application for County construction permits. ▲ Phase 3 Evaluation Report: If significant resources are identified in the Phase 2 Evaluation Report, an assessment of project impacts on these resources will be included in a Phase 3 Evaluation Report, as well as detailed measures to avoid impacts. Avoidance measures could include, but are not limited to actions such as re-routing of the sewer line around the resources, direction drilling under the resource, site testing to confirm the boundary of a significant resource and avoidance of that boundary, and construction monitoring in sensitive areas to prevent disturbance of currently unknown subsurface resources. Adopted avoidance measures shall be implemented as appropriate during project design and construction. If project redesign to completely avoid impacts is infeasible, then measures shall be developed and implemented in coordination with Placer County Planning Services Division and appropriate Native American representatives to recover the significant information contained within these archaeological resources before disturbance of the resource site. The Phase 3 Evaluation Report and any data recovery (if needed) shall be completed by a qualified archaeologist who meets the Secretary of the 	Placer County Planning Services Division	After the exact location of the new sewer line has been determined, and before commencement of earth-disturbing activities for construction of the sewer line	Completion with submittal of the Improvement Plans for new sewer line

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
Interior’s professional qualifications for Archaeology. Mitigation, or data recovery, typically involves additional archival research, field excavation, photo documentation, mapping, and/or archaeological monitoring. If a Phase 3 Evaluation Report is needed, it will be submitted to the Placer County Planning Services Division with the first application for County Construction permits. Any avoidance and data recovery measures shall be developed in consultation with the archeologist and finalized in consultation with the Placer County Planning Services Division to confirm the effectiveness of the measures.			
8 Visual Resources			
<p><u>Mitigation Measure 8-1: Install screening to reduce the visual effects of construction.</u></p> <p>Screening fences with opaque or semi-opaque mesh screening or similar shall be strategically employed to reduce the visual effects of construction on adjacent residential and resort areas. Prior to approval of Improvement Plans or Building Permits for each phase of construction, a screening plan shall be approved by the Placer County Planning Services Division. The screening plan shall be implemented concurrent with initial ground-disturbing phases of construction and maintained through completion of exterior construction phases for buildings. The screening plan shall include details to specify construction equipment staging areas and materials storage areas. Construction staging and materials storage areas shall be located away from Olympic Valley Road and adjacent existing resort facilities to the extent feasible.</p>	Placer County Planning Services Division	Prior to approval of Improvement Plans or Building Permits for each phase of construction	Concurrent with initial ground-disturbing phases of construction and maintained through completion of exterior construction phases for buildings
<p><u>Mitigation Measure 8-2a: Implement Mitigation Measure 8-1.</u></p> <p>The project applicant shall implement Mitigation Measure 8-1, which requires the installation of screening to reduce the visual effects of construction.</p>	See Mitigation Measure 8-1, above	See Mitigation Measure 8-1, above	See Mitigation Measure 8-1, above
<p><u>Mitigation Measure 8-2b: Comply with plan area development standards and obtain Design Review approval.</u></p> <p>Prior to submittal of Improvement Plans or Building Permits, the project applicant shall obtain Design Review approval from the Placer County Design/Site Review Committee (D/SRC). All project phases must be compatible with the Plan Area Development Standards prescribed in Appendix B of the VPTSP. Review and approval by the County shall apply to such project components as: colors, materials, and textures of all structures; landscaping; signs; exterior lighting; and entry features.</p>	Placer County Design/Site Review Committee	Prior to submittal of Improvement Plans or Building Permits	Completion prior to submittal of Improvement Plans or Building Permits
<p><u>Mitigation Measure 8-3: Implement Mitigation Measures 8-1 and 8-2b.</u></p> <p>The project applicant shall implement Mitigation Measures 8-1 and 8-2b, which require the installation of screening to reduce the visual effects of construction and adherence to the VPTSP design guidelines, respectively.</p>	See Mitigation Measures 8-1 and 8-2b, above	See Mitigation Measures 8-1 and 8-2b, above	See Mitigation Measures 8-1 and 8-2b, above

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 8-5a: Install landscaping on the north and west sides of the East Parcel to screen night lighting for adjacent residential areas.</u></p> <p>Landscaping, consisting of a mixture of evergreen and deciduous trees and shrubs, shall be installed to enhance existing vegetation in the open space buffers on the west and north sides of the East Parcel to reduce the effects of night lighting on adjacent residential neighborhoods. Landscape screening shall be installed concurrent with the first phase of development on the East Parcel and shall be reviewed for effectiveness with each successive phase of development. If after the initial installation of landscape screening it is subsequently determined that additional screening is required to improve screening effectiveness, the Development Review Committee (DRC) may require installation of additional landscaping during future construction phases.</p>	Placer County Development Review Committee	Concurrent with the first phase of development on the East Parcel	Landscape screening shall be reviewed for effectiveness with each successive phase of development
<p><u>Mitigation Measure 8-5b: Implement Mitigation Measure 8-2b.</u></p> <p>The project applicant shall implement Mitigation Measure 8-2b, which requires adherence to the VPTSP Design Guidelines.</p>	See Mitigation Measure 8-2b, above	See Mitigation Measure 8-2b, above	See Mitigation Measure 8-2b, above
<p>An Improvement Plan shall be developed that includes a detailed lighting and photometric plan. Specifically, the plan must:</p> <ul style="list-style-type: none"> ▲ Demonstrate compliance with the VPTSP Master Lighting Plan (see Appendix B of the VPTSP). This includes minimizing impacts to adjoining and nearby land uses. No lighting shall be permitted on top of structures. ▲ Show streetlights designed in accordance with the Caltrans Traffic Manual and Standard Plans and installed to the satisfaction of the Department of Public Works. Streetlights shall be of a type, height, and design to direct lighting downward, shielding, to the greatest extent practical, light exposure beyond that needed for proper intersection lighting. Streetlights shall not exceed the minimum number required by the Department of Public Works unless otherwise approved by the DRC. Street lighting would be kept to a minimum and full cut off luminaires shall be used. Streetlights lighting vehicular and pedestrian access ways at key intersections where safety is a concern would be no more than 30 feet tall, and in the commercial core streetlights would be no more than 20 feet tall. Parking lots would be lit, but would allow gaps in lighting. ▲ Include the type of lighting fixtures proposed in parking areas, including pole height. All site lighting in parking lots shall be full cut-off design. The metal pole color shall be such that the pole will blend into the landscape (i.e., black, bronze, or dark bronze). ▲ Include building lighting that is shielded and directed downward, such that the bulb or ballast is not visible. Lighting fixture design shall complement the building colors and materials and shall be used to light entries, soffits, covered walkways and pedestrian areas such as plazas. Roof and wall pack lighting shall not be used. Lighting intensity shall be of a level that only highlights the adjacent building area and ground area and shall not impose glare on any pedestrian or vehicular traffic. ▲ Include landscape lighting that will not impose glare on any pedestrian or vehicular traffic. <p>The Improvement Plan will be submitted to the DRC for review and approval.</p>	Placer County Development Review Committee	Prior to submittal of Design Review application	Prior to submittal of Improvement Plans or Building Permits
<p><u>Mitigation Measure 8-5c: Design parking structures to block direct illumination of adjacent residential buildings.</u></p> <p>Design of parking structures will be subject to design review by the DRC to ensure that parking structures are designed to avoid direct</p>	Placer County Development Review	During design review of parking structures	Completion during design review of

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
illumination of adjacent buildings from headlights. This may include design elements such as partial walls or other screening on all floors of the structure, and orientation of ramps and access points away from adjacent residential uses.	Committee		parking structures
9 Traffic and Circulation			
<u>Mitigation Measure 9-1a: Conduct traffic management along Olympic Valley Road between SR 89 and the Village area.</u>			
<p>Prior to recordation of the first Small Lot Final Map, the project applicant shall prepare a traffic management plan (TMP) to the satisfaction of the Placer County Department of Public Works and the Engineering and Surveying Division. The TMP shall include but not be limited to:</p> <ul style="list-style-type: none"> ▲ Prediction of days when traffic management is needed: The project applicant shall work with the County to develop a predictive model for identifying when the 13,500 ADT threshold is expected to be reached so that staff and equipment can be available to execute traffic management measures on the morning of ski days where the threshold is expected to be crossed. The predictive model may take into account factors such as snow conditions; weather conditions; on-line lift ticket sales; hotel/condo reservations at Palisades Tahoe; available data on projected lodging occupancy in Truckee, Tahoe City, and other areas; previous day(s) traffic conditions; year-over-year data comparisons; holidays; and local/regional special events. ▲ Traffic management programs and implementation: The project applicant shall operate traffic management (i.e., three-lane operation with cones, signage, and traffic control personnel) along Olympic Valley Road between SR 89 and the Village Area during all ski days (including the morning peak period) in which the expected amount of daily traffic on Olympic Valley Road would reach or exceed 13,500 ADT unless, otherwise directed by the Placer County Department of Public Works that such activities are not necessary. ▲ A monitoring mechanism that demonstrates implementation when needed: Use of the predictive model will include a monitoring and adaptive management component to refine the accuracy of the model over time. 	Placer County Department of Public Works and the Engineering and Surveying Division	Prior to recordation of the first Small Lot Final Map	Continuously during project operations
<u>Mitigation Measure 9-1b: Develop and distribute real-time information regarding Village area parking and average travel speeds on Olympic Valley Road.</u>			
<p>Prior to recordation of the first Small Lot Final Map, the project applicant shall prepare a “real time” information system to the satisfaction of the Placer County Department of Public Works and the Engineering and Surveying Division. The system shall provide information for parking and roadway conditions, to be operated by the project applicant, which can be accessed via the internet and a smartphone app, or the equivalent in terms of access to information. The system shall be designed to display areas of available parking spaces in lots/garages in the Village Area and average travel speeds on Olympic Valley Road.</p> <p>Real-time data regarding available parking and travel speeds will be made available to day-use skiers via the information system and would enable day-use skiers to make more informed decisions regarding which ski resort they would prefer to visit. Many skiers/boarders have passes that provide access to multiple resorts. Other skiers/boarders may have the flexibility to make a last-minute decision to visit one resort over another, or to select alternative modes of transportation if continuing to Olympic Valley, if such information is available. These technologies are available and in use at other ski resorts (e.g., Vail, Colorado).</p>	Placer County Department of Public Works and the Engineering and Surveying Division	Prior to recordation of the first Small Lot Final Map	Continuously during project operations

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 9-2a: Restrict and redirect northbound movements on Far East Road.</u></p> <p>For all ski days in which the projected amount of daily traffic on Olympic Valley Road would reach or exceed 13,500 ADT (per results of predictive model described in Mitigation Measure 9-1a), the project applicant shall restrict northbound movements on Far East Road to right-turns only during the afternoon peak period, and direct those movements (via signage and coning) into the beginning of the outside of the two eastbound travel lanes (three-lane coning program from Mitigation Measure 9-1a).</p> <p>Information provided by the project applicant team suggests that the configuration may already be in existence when traffic management is implemented. This mitigation measure formalizes the need for this configuration to be employed during traffic management. In addition, temporary signs would need to be placed in Lot 11 (within the Village Core) at Far East Road to advise motorists that this route only directs motorists to eastbound Olympic Valley Road.</p>	Placer County Department of Public Works and the Engineering and Surveying Division	For all ski days in which the projected amount of daily traffic on Olympic Valley Road would reach or exceed 13,500 ADT	Continuously during project operations
<p><u>Mitigation Measure 9-2b: Conduct traffic management at either the Olympic Valley Road/Wayne Road or Olympic Valley Road/Eric Road intersections.</u></p> <p>For all ski days in which the projected amount of daily traffic on Olympic Valley Road would reach or exceed 13,500 ADT (per results of predictive model described in Mitigation Measure 9-1a), the project applicant shall situate traffic control personnel at either the Olympic Valley Road/Wayne Road or Olympic Valley Road/Eric Road intersection during the morning and afternoon peak periods to direct traffic. Traffic control personnel shall actively control traffic by stopping motorists on Olympic Valley Road to give the right-of-way to side-street traffic. The project applicant shall publicize this traffic control plan on the internet, with temporary signage, etc. such that residents know when traffic management would occur and are aware of the preferred access to/from the areas north of Olympic Valley Road.</p> <p>Residents in the area north of Olympic Valley Road who currently use Christy Hill Road, Eric Road, Wayne Road, and Russell Road to access Olympic Valley Road would be informed by the project applicant that a traffic management controlled intersection (either at Eric Road or Wayne Road) would be available on peak ski days. Traffic control personnel shall emphasize the need to balance delays for Olympic Valley Road through traffic and side-street traffic, while not causing excessive queuing along Olympic Valley Road.</p>	Placer County Department of Public Works and the Engineering and Surveying Division	For all ski days in which the projected amount of daily traffic on Olympic Valley Road would reach or exceed 13,500 ADT	Continuously during project operations
<p><u>Mitigation Measure 9-2c: Conduct traffic management at the Olympic Valley Road/Squaw Creek Road intersection (ski season).</u></p> <p>For all ski days in which the projected amount of daily traffic on Olympic Valley Road would reach or exceed 13,500 ADT (per results of predictive model described in Mitigation Measure 9-1a), the project applicant shall situate traffic control personnel at the Olympic Valley Road/Squaw Creek Road intersection during the morning and afternoon peak periods to direct traffic. Traffic control personnel shall actively control traffic by stopping motorists on Olympic Valley Road to give the right-of-way to side-street traffic.</p>	Placer County Department of Public Works and the Engineering and Surveying Division	For all ski days in which the projected amount of daily traffic on Olympic Valley Road would reach or exceed 13,500 ADT	Continuously during project operations (ski season)

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 9-2d: Monitor and when warranted, conduct traffic management at the Olympic Valley Road/Squaw Creek Road intersection (summer season).</u></p> <p>Based on the analysis results, operations on the Squaw Creek Road approach are expected to degrade to LOS E upon development of approximately 50 percent of the project. The project applicant shall conduct annual summer season (for peak conditions) monitoring of delays on the Squaw Creek Road approach at such time that project buildout reaches 30 percent. Once operations are found to degrade to LOS E conditions, the project applicant shall situate traffic control personnel at the Olympic Valley Road/Squaw Creek Road intersection to direct traffic. Traffic control personnel shall actively control traffic (i.e., stop motorists on Olympic Valley Road to give the right-of-way to side-street traffic).</p>	Placer County Department of Public Works and the Engineering and Surveying Division	When project buildout reaches 30 percent	Conduct annual summer season (for peak conditions) monitoring of delays on the Squaw Creek Road approach
<p><u>Mitigation Measure 9-4: Lengthen northbound left-turn lane and modify the traffic signal timing at the SR 89/Olympic Valley Road intersection.</u></p> <p>Currently during the winter Saturday a.m. peak hour, the northbound left-turn phase at the SR 89/Olympic Valley Road intersection is given a maximum green time of 45 seconds per cycle. As long as vehicle demand exists, the left-turn arrow remains green for up to 45 seconds. If the maximum green time for this time period were to be increased from 45 to 55 seconds (and the maximum green time for the southbound through movement was decreased by ten seconds), the 95th percentile vehicle queue under existing plus project conditions would be reduced to 375 feet. This signal timing adjustment would not adversely affect overall delay at the intersection. To meet the applicable design standard, the turn lane (and taper) would need to have a combined length, including bay taper, of 610 feet (375 feet + 235 feet). Because the existing turn lane is 565 feet, the applicable design standard would be met by lengthening the turn lane 50 feet and implementing this (or another equally effective) signal timing modification. As evidenced by the existing condition, turn pockets on state highways do not always provide the deceleration and storage prescribed in the Highway Design Manual.</p>	Placer County and Caltrans	Subject to Caltrans approval and conditions	Subject to Caltrans approval and conditions
<p><u>Mitigation Measure 9-5: Improve operations on select segments of SR 89 and SR 28.</u></p> <p>The State Route 89 Transportation Corridor Concept Report (Caltrans 2012b) identifies the segment of SR 89 between Deerfield Drive and West River Street as a concept four-lane conventional highway. The document lists a conceptual widening from two to four lanes. However, such a widening project is not currently included in any adopted planning documents or fee programs.</p> <p>No capacity-increasing improvements are proposed for the segment of SR 28 east of SR 89 according to the State Route 28 Transportation Corridor Concept Report (Caltrans 2012c).</p>	None; no current plans to implement needed roadway improvement	None; no current plans to implement needed roadway improvement	None; no current plans to implement needed roadway improvement
<p><u>Revised Mitigation Measure 9-7: Establish a Community Service Area (CSA) Zone of Benefit (ZOB) or Community Facilities District (CFD), or annex into an existing CSA ZOB to fund expansion of transit capacity.</u></p> <p>Prior to recordation of the Initial Small Lot Final Map, the project applicant shall either establish a Community Service Area (CSA) Zone of Benefit (ZOB) or Community Facilities District (CFD), or the project applicant shall annex into an existing CSA ZOB or CFD. The CSA ZOB or CFD shall provide funding for capital costs and ongoing operation of transit services. Ongoing annual fees will be identified and paid by the applicant to fund expansion of transit capacity as necessary to expand seating capacity to accommodate typical peak-period passenger loads on bus routes serving the project site. Fees would be assessed on all VPTSP future land uses that generate an increased demand for</p>	Placer County Engineering and Surveying Division and Department of Public Works	Either establish a CSA ZOB or CFD, or annex into an existing CSA ZOB prior to recordation of the Initial Small Lot Final Map	Ongoing annual fees will be identified and paid by the applicant; fees would be assessed on all future land uses that generate an increased

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
transit services, including residential, lodging, commercial, civic, and recreation land uses.			demand for transit services
<p>Prior to establishing, or annexing into, the ZOB or CFD, the applicant shall submit to the County for review and approval a complete and adequate report supporting the level of assessments/fees necessary for the establishment and continuation of the ZOB or CFD. The report shall be prepared by a registered engineer, in consultation with a qualified financial consultant, if a ZOB is formed or annexed into and shall establish the basis for the special benefit appurtenant to the project. A qualified financial consultant shall prepare the report if a CFD is formed. The report shall identify the transit services intended to be funded by the ZOB or CFD, the cost to establish and operate these services, the portion of the overall costs to be funded by the applicant, and the assessment/fees to obtain the necessary funding, including a methodology for calculating fee increases over time. A transit service to be explicitly funded by the ZOB or CFD and included in the report will be the establishment of 30 minute headways during peak periods on the TART Highway 89 route between Tahoe City and Truckee as well as ongoing availability of a "second bus" during peak period (as currently implemented) if needed.</p> <p>The engineers report for <i>A Special Zone of Benefit for The Palisades at Squaw; Zone of Benefit 223 Eastern Placer County Transit Program; County Service Area No. 28</i> (LSC 2017) is available as an example report for another project in Olympic Valley. This report supports the establishment of a ZOB encompassing a 63 lot development on the east side of Olympic Valley and contains all the components identified above. The report identifies the transit services that would benefit the proposed development, and therefore the services the ZOB annual assessments would help fund. These transit services include establishment of 30 minute headways during peak periods on the TART Highway 89 route between Tahoe City and Truckee identified above, indicating the multiple sources of funding that may be applied to a single transit service improvement. The transit services to be funded by the ZOB are included in an adopted plan, the <i>Systems Plans Update for the Tahoe Truckee Area Regional Transit in Eastern Placer County</i> (LSC 2016). The report calculates both the annual operating and annual capital costs of providing identified services (\$1,704,200), funding from sources other than the development that would be applied to these costs (\$1,441,900), the remaining annual cost to be funded by development inside the ZOB (\$312,738), and the total development units anticipated to be encompassed by the ZOB (4,630). The development funded annual cost is divided by the total number of development units that would fund this cost, resulting in an annual assessment of \$67.55 for each development unit in the ZOB. Increases in the assessment fee are identified as being based on the Consumer Price Index prepared by the San Francisco/Oakland/San Jose Consumer Price Index for all Urban Consumers. Although the exact methodology used for this ZOB 223 engineering report would not necessarily be applied to the VPTSP, especially given differences in scale of the project and mix of uses, the ZOB 223 report is illustrative of the key process components and outcomes in using such a report to calculate ZOB or CFD fees to provide transit improvement funding.</p>	Placer County Engineering and Surveying Division and Department of Public Works	Complete a report for County review and approval prior to establishing, or annexing into, the ZOB or CFD	Once, prior to recordation of the Initial Small Lot Final Map
As identified above, TART service is funded from a number of sources. TART may also direct funding to a variety of planned service improvements. For these reasons, although unlikely, it cannot be assured that TART would fund and continuously implement 30 minute headways during peak periods on the TART Highway 89 route between Tahoe City and Truckee, or fund and continuously operate a "second bus" during peak period, prior to the time that the ZOB/CFD is formed. Therefore, to ensure the project generated employee transit riders do not result in an exceedance of transit system capacity before the ZOB is formed, and in order to ensure that sufficient capacity exists during peak periods, prior to the recordation of the first final map, the project applicant shall commence fare-free employee	Placer County Engineering and Surveying Division and Department of Public Works	Before the ZOB or CFD is formed and prior to the recordation of the first final map	Shuttle service shall remain in operation until such time as a ZOB/CFD is established

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>shuttle service during those periods when the transit capacity analysis shows that demand from the project, plus existing demand, will exceed TART capacity (Sunday 7:30 a.m. northbound from TCTC; Sunday 5:05 p.m. southbound from Palisades Tahoe). The project applicant may adjust the arrival and departure times in response to peak TART ridership demand, or peak employee demand, in order achieve the objective of TART busses not exceeding capacity due to project employee ridership. The project applicant shall notify Placer County Department of Public Works of the arrival and departure times of such service and shall coordinate with Placer County Department of Public Works to ensure that the service does not interfere with TART operations. Every 12 months the project applicant shall report to the Placer County Department of Public Works the days that the employee shuttle operated, the times of operation, and the number of riders. The project applicant shall notify Village area employees of this service. The service shall be scaled so that it accommodates transit demand as the project builds out; at build-out, the service shall accommodate 30 passengers. The applicant may contract with the Placer County Department of Public Works to provide this service. This service shall remain in operation until such time as a ZOB/CFD, as described above, is established.</p>			
<p>Mitigation Measure 9-8: Develop a Construction Traffic Management Plan.</p> <p>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:</p> <ul style="list-style-type: none"> ▲ 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; ▲ approved truck circulation patterns, including coordination with the Town of Truckee if the aggregate mine in the Town is used as a material source; ▲ 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 Olympic Valley to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences if 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 Olympic Valley residents and guest to obtain construction information, have questions answered, and convey complaints. 	<p>Placer County Department of Public Works and the Engineering and Surveying Division</p>	<p>Prior to recordation of the first Small Lot Final Map</p>	<p>Continuously during project construction</p>

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>The CTMP should be developed such that the following minimum set of performance standards is achieved throughout project construction. It is anticipated that additional performance standards will be developed once details of more project construction are better known.</p> <ol style="list-style-type: none"> 1) Delivery trucks do not idle/stage on Olympic Valley Road. 2) Olympic Valley Road does not feature any construction-related lane closures on peak activity days. 3) All construction employees shall park in designated lots owned or leased by Palisades Tahoe 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. 			
10 Air Quality			
<p><u>Revised Mitigation Measure 10-2: Implement an ongoing ROG and NO_x emissions review and reduction program.</u></p> <p>Mitigation measures for reducing operational emissions of ozone precursors were developed using PCAPCD guidance (PCAPCD 2012:C-1 through C-2) and mitigation guidance published by the California Air Pollution Control Officers Association (CAPCOA 2010) and the California Attorney General’s Office (2010). The Lake Tahoe Sustainability Collaborative’s Sustainability Action Plan was also reviewed for mitigation options as it includes multiple emission reduction measures that are well-suited to the climate and development patterns in the Sierra Nevada (Lake Tahoe Sustainability Collaborative 2013:4-1 through 4-37).</p> <p>Prior to recordation of each Small Lot Final Map, the project applicant shall prepare, to the satisfaction of Placer County Planning Services Division and PCAPCD, a chart or table with supporting analysis, which demonstrates that construction and operation of the proposed phase, combined with emissions from all past approved phases, will not result in ROG or NO_x emissions in excess of 55 lbs/day. Compliance with this threshold may be achieved through project design and/or other “on-site” measures, which may include any of the project-level reduction measures listed below. Alternatively, the project applicant may demonstrate compliance with this mitigation measure, partially or wholly, through off-site measures (i.e., emission reductions not directly associated with the proposed project but funded/implemented by the applicant, such as reducing emissions associated with ski operations) and/or purchase of offset credits identified below.</p> <p>Placer County Planning Services Division shall maintain a file for the charts to provide future applicants with the historical emissions record and approved tracking methodology.</p> <p>The project applicant shall be responsible for the funding and implementation of all identified reduction measures. The ROG and NO_x reduction benefits achieved by all measures must occur during the ozone season (May through October). The method used to quantify the reduction or offset amount achieved by each measure must be approved by the County and PCAPCD.</p> <p>Subsequent to the implementation of all selected reduction measures, the project applicant shall evaluate and report the effectiveness of the measures annually to the County and PCAPCD to verify that the suite of measures result in the combined reduction in ROG and NO_x that was expected. This annual reporting shall be completed and submitted to the County and PCAPCD within 30 days of the end of each</p>	<p>Placer County Planning Services Division and PCAPCD</p>	<p>Prior to recordation of each Small Lot Final Map</p>	<p>Annual reporting shall be completed and submitted to the County and PCAPCD within 30 days of the end of each ozone season</p>

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
ozone season. If it is determined that the effectiveness of reduction measures has been overestimated, then additional reduction measures must be implemented. Similarly, if it can be verified that reduction measures achieve better than anticipated results, or previous emission estimates were above actual emission levels, the overall emission reduction approach can be adjusted accordingly.			
Types of reduction and offset measures implemented by the project applicant may include, but are not limited to, the measures listed below, so long as the combination of selected measures results in calculated emissions below the target threshold. Note that not all of these measures need to be implemented; rather, the project applicant will be required to implement a combination of those measures needed to reduce ROG and NO _x emissions below the 55 lbs/day threshold:	Placer County Planning Services Division and PCAPCD	During project operation	Continuously during project operation
<p>TRIP EMISSION REDUCTION MEASURES</p> <ul style="list-style-type: none"> ▲ Provide free or discounted transportation service between the Village and the Amtrak station in Truckee to all overnight visitors who arrive by train. This may be implemented in coordination with a local taxi service, the North Tahoe-Truckee Free Ski Shuttle, or other public or private shuttle service. ▲ Offer discounted overnight accommodations, meals, activities, or other incentives to visitors who arrive by train to the Amtrak station in Truckee and/or to groups who arrive by bus or some other emissions-efficient vehicle type. ▲ Provide preferential parking to alternatively-powered vehicles, including electric cars, natural gas vehicles, and hydrogen fuel cell vehicles. ▲ Provide charging stations for electric vehicles. ▲ Designate a location for the future installation of a hydrogen fueling station in the event that hydrogen fuel vehicles become readily available and widely used. ▲ Offer free, shared, or discount rental bicycles to all visitors staying in the hotel or resort residential units. ▲ Provide shuttle service to other key destinations in the region (e.g., North/West Shore of Lake Tahoe, casinos, Truckee) to serve guests who want to tour regional offerings. ▲ Provide a covered bicycle parking area near entrance of all commercial establishments. ▲ Provide parking for, and subsidize a car-sharing service for resort employees and/or patrons. ▲ Provide “end-of-trip” facilities for employees who bike to their work sites from outside of Olympic Valley including showers, secure weather-protected bicycle lockers, storage lockers for other gear, and changing spaces. This measure is consistent with measure TRT-5 in guidance published by the California Air Pollution Control Officers Association (CAPCOA 2010:234-236). ▲ Provide free transit passes or reimburse the transit costs of employees who commute from outside Olympic Valley using Tahoe Area Regional Transit or another transit service. This measure is consistent with measure TRT-4 in CAPCOA’s guidance (CAPCOA 2010:230-233). ▲ Provide adequate secure weather-protected bicycle lockers or storage area for employees living at the East Parcel. The number of lockers or size of the storage area shall be adequate to meet the demand of employee residents. ▲ Provide virtual and/or real bulletin boards in common areas of employee housing units and other areas where employees congregate to foster the development of carpools and other ride sharing opportunities. 	Placer County Planning Services Division and PCAPCD	During project operation	Continuously during project operation

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>AREA-SOURCE MEASURES</p> <ul style="list-style-type: none"> ▲ Prohibit diesel trucks from idling more than 5 minutes at all loading docks, including those at the East Parcel. Prior to the issuance of an Improvement/Grading Plan, the project applicant shall show on the submitted building elevations that all truck loading and unloading docks will be equipped with one 110/208-volt power outlet for every two dock doors. Diesel trucks idling for more than 5 minutes shall be required to connect to the 110/208-volt power to run any auxiliary equipment. A requirement for minimum 2 foot by 3 foot signage at loading docks that indicates “Diesel engine Idling limited to a maximum of 5 minutes” shall be included with the submittal of building plans. This measure is recommended in PCAPCD’s CEQA Handbook (PCAPCD 2012:C-1) and is also consistent with measure VT-1 in the CAPCOA guide (CAPCOA 2010:300-303). ▲ On- and off-road service and maintenance vehicles used by the operators of land uses developed under the Specific Plan, including landscape maintenance vehicles, housekeeping vehicles, and maintenance vehicles, shall be electric, electric-hybrids, or alternatively fueled. ▲ Electrify new and existing well pumps. ▲ Design and engineer new and remodeled resort-residential, commercial, institutional, and civic construction to exceed 2019 Title 24 State energy-efficiency requirements by a designated percentage. This measure is consistent with Specific Plan Policy CC-1, which encourages that 2019 Title 24 standards be exceeded by 15 percent. ▲ Design all new resort-residential buildings and major renovations to meet or exceed the guidelines for the California Energy Star Certified Homes Program or similar accreditation. The Energy Star Certified Homes Program is a joint program of EPA and the Department of Energy. The program establishes criteria for energy efficiency for household products and labels energy efficient products with the Energy Star seal. Homes and residential buildings can be qualified as Energy Star homes as well if they meet efficiency standards. In California, Energy Star homes must use at least 15 percent less energy than Title 24 regulations, pass the California Energy Star Homes Quality Insulation Installation Thermal Bypass Checklist Procedures, have Energy Star windows, and have minimal duct leakage. This measure is consistent with Specific Plan Policy CC-2, which encourages this performance standard. ▲ Only include outdoor cooking grills or outdoor cooking appliances that are fueled by propane or natural gas, or are electrified. No charcoal grills shall be allowed. This measure is recommended in PCAPCD’s CEQA Handbook (PCAPCD 2012:C-1 and C-2). ▲ Install all pools with integrated insulation that has a verified insulation R-value that exceeds what is required by the building code at the time of construction, or insulate walls and floor of swimming pools with insulation that has a verified insulation R-value that exceeds what is required by the building code at the time of construction. ▲ Incorporate solar heating into pool heating systems. ▲ Cover outdoor pools with a cover designed to absorb heat from the sun when pools are not open (i.e., a transparent or bubble cover). ▲ Equip all heated swimming pools with energy efficient pumps and automatic covers for maintaining water temperature when not in use. This measure is recommended by the California Attorney General’s Office (2010). ▲ Install into each dwelling unit Energy Star-rated programmable thermostats that can be controlled remotely (e.g., via internet and/or phone) by property owners/overnight patrons and building management/maintenance staff. The system should allow property management staff to monitor and adjust the thermostats when the dwelling units are unoccupied. Develop a system 	<p>Placer County Planning Services Division and PCAPCD</p>	<p>During project operation</p>	<p>Continuously during project operation</p>

Table 1 Mitigation Monitoring and Reporting Program

Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>of default interior temperatures when dwelling units are unoccupied in order to prevent freezing water pipes and maximize heating and cooling efficiently throughout the occupied portions of the multi-story, multi-unit buildings.</p> <ul style="list-style-type: none"> ▲ Install an occupancy-sensing energy management system into residential units. This occupancy sensing system may consist of a master keycard unit that relies on a key card’s presence in an electronic sensor, or a Passive Infra-Red System to positively determine room occupancy status, or equally effective technology. The system must prevent the use of all light fixtures, exhaust fans, ceiling fans, and televisions when the unit is unoccupied. ▲ Install Energy Star-rated ceiling fans in residential units. ▲ Install on-demand (tankless or instantaneous) hot water heaters in residential units and commercial areas that are not served by a central water boiler in the building. Install systems that recirculate hot water. ▲ Renovate off-site buildings to make them more energy efficient, particularly regarding their levels of propane consumption for space and water heating. ▲ Prohibit the application of ROG-emitting paint or other architectural coatings as part of regular ongoing maintenance during peak activity periods when ROG emissions from other sources are the highest. 			
<p>OFFSET MEASURES</p> <ul style="list-style-type: none"> ▲ Establish mitigation off-site within the portion of Placer County that is within the MCAB by participating in an off-site mitigation program, coordinated through PCAPCD. Examples include, but are not limited to retrofitting, repowering, or replacing heavy duty engines from mobile sources (e.g., busses, construction equipment, on-road haulers, boilers, ski lift equipment, grooming equipment); or other programs that the project proponent may propose to reduce emissions. ▲ Participate in PCAPCD’s Off-site Mitigation Program by paying the equivalent amount of fees for the project’s contribution of ROG and NO_x that exceeds the 55 lbs/day. The applicable fee rates is adjusted annually to account for Consumer Price Index (CPI) rates. At the time of writing this EIR, the fee rate is \$20,873 per ton emitted during the ozone season. The actual amount to be paid shall be determined, and satisfied per PCAPCD and current California Air Resource Board guidelines, at the time of recordation of the Final Map (residential projects), or issuance of a Building Permit (non-residential projects) 	<p>Placer County Planning Services Division and PCAPCD</p>	<p>At the time of recordation of the Final Map (residential projects), or issuance of a Building Permit (non-residential projects)</p>	<p>Completion at the time of recordation of the Final Map (residential projects), or issuance of a Building Permit (non-residential projects)</p>
<p>CONSTRUCTION MEASURES</p> <ul style="list-style-type: none"> ▲ Cease or substantially limit ROG- and NO_x -generating construction activity during peak operations (i.e., peak occupancy periods) of buildings and facilities that are already built and operational under the Specific Plan. ▲ Prior to approval of Grading or Improvement Plans, whichever occurs first, the applicant shall submit a Construction Emission/Dust Control Plan to PCAPCD. The applicant shall deliver approval from the PCAPCD to the Placer County Planning Services Division. ▲ The prime contractor shall provide a plan for approval by PCAPCD demonstrating that the heavy-duty (50 horsepower [hp] or more) land-based, off-road vehicles to be used for project-related demolition and construction activity, including owned, leased, and subcontractor equipment, shall achieve a project wide fleet-average percent reduction in ROG and/or NO_x compared to the most current ARB fleet average that exists at the time of construction. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels (such as 	<p>Placer County Planning Services Division and PCAPCD</p>	<p>During project construction</p>	<p>Continuously during project construction</p>

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>LNG/CNG/biodiesel), engine retrofit technology, after-treatment products, and/or other options as they become available. The prime contract shall use SMAQMD’s Construction Mitigation Calculator (SMAQMD 2012), which is approved by PCAPCD (or the approved calculator in effect at the time of construction), to demonstrate that its selected equipment fleet achieves these reductions.</p> <ul style="list-style-type: none"> ▲ During construction the contractors shall utilize existing power sources (e.g., power poles) or natural gas- or propane-fueled generators that emit less ROG and NO_x rather than temporary diesel power generators. ▲ Signs shall be posted in the designated queuing areas of the construction site to remind off-road equipment operators that idling shall be limited to a maximum of 5 minutes. 			
11 Noise			
<p>Revised Mitigation Measure 11-1a: Implement construction-noise reduction measures.</p> <p>To minimize noise levels during construction activities, construction contractors shall comply with the following measures during all proposed construction work:</p> <p>Equipment Restrictions</p> <ul style="list-style-type: none"> ▲ For individual construction projects, the construction equipment staging area shall be located on the opposite side from sensitive receptors, unless site specific conditions preclude that, in which case the staging area shall be located as far away as possible from the nearest sensitive land use. All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers’ recommendations. Equipment engine shrouds shall be closed during equipment operation. ▲ All construction equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an object is detected. The self-adjusting backup alarms shall automatically adjust to 5 dBA over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels. In addition to the use of backup alarms, the construction contractor shall implement the use of observers and the scheduling of construction activities such that alarm noise is minimized. <p>Quieter Alternative Methods and Equipment</p> <ul style="list-style-type: none"> ▲ Each construction contractor shall use noise reducing operations measures, techniques, and equipment. This requirement shall be enforced through its inclusion on all construction bid specifications for all potential construction contractors hired within the Village at Palisades Tahoe Specific Plan. The bid specifications shall require that construction contractors provide an equipment inventory list for all equipment within the fleet with greater than 50 horsepower engines, that includes (at a minimum), make, model, and horsepower of equipment; operating noise levels at 50 feet, available noise control device that are installed on each piece of equipment; and associated noise reduction from the installed technology. Control devices shall include, but are not limited to, high-efficiency mufflers, acoustic dampening and protected internal noise absorption layers to vibrating panels, enclosures, and electric motors. In addition, the contractor shall specify how proposed alternative construction procedures will be employed to reduce noise at sensitive receptors compared to other more traditional methods. Examples include, but are not limited to, welding instead of riveting, mixing concrete off-site instead of on-site, use of thermal lance instead of drive motors 	Placer County Planning Services Division	During all proposed construction work	Continuously during all proposed construction work

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>and bits, and hydraulic pile driving or auger piles instead of impact pile driving. In all cases, the requirement is that the best commercially available noise-reducing technology and noise-reducing alternative construction method shall be used, provided that there are no safety concerns, engineering limits, or environmental constraints preventing it from being used. If a unique circumstance does exist that prevents an alternative quieter construction method to be used, the contractor shall provide evidence to support their proposal. The noise reduction elements of construction bid submittals shall be approved by Placer County, in coordination with a qualified acoustical professional.</p> <ul style="list-style-type: none"> ▲ When existing and future noise sensitive uses are within close proximity (i.e., 4,800 feet during daytime construction and 2,667 feet during nighttime construction) to prolonged (i.e., construction equipment use for more than 30 days, based on FTA's use of a 30-day average noise level standard for the purpose of evaluating long-term construction noise exposure, affecting the same offsite receptor) construction noise, noise attenuating buffers such as structures, truck trailers, temporary noise curtains or sound walls, or soil piles shall be located between noise sources and the receptor to shield sensitive receptors from construction noise. ▲ Construction on the East Parcel shall be planned and implemented to avoid intrusive noise, defined as an interior noise level of 45 dBA L_{eq}/65 dBA L_{max} or greater, during the time when classroom activities take place at the Lake Tahoe Preparatory School. The applicant shall coordinate with administrators at the academy and shall achieve these performance standards either by adjusting the timing of construction, adjusting construction methods during times of classroom instruction, using temporary screening, and/or improving noise attenuation at the school by replacing windows, increasing insulation, etc., as needed. The applicant shall prepare and submit to Placer County an acoustical study that demonstrates these criteria will be met prior to approval of each Small Lot Tentative Map for all construction on the East Parcel. ▲ The project applicant shall sponsor and create a website that includes information on construction activities and includes when, where, and for how long noise generating construction activities would occur. In addition, prior to the beginning of each construction season written notification of construction activities shall be provided to all noise-sensitive receptors located within 4,800 feet of proposed daytime construction activities and 2,667 feet of proposed nighttime construction activities. Additional notifications shall be provided if there are substantive changes in construction operations or noise generating activities (e.g., need for nighttime construction, special notice for blasting). Notification shall include anticipated dates and hours during which construction activities are anticipated to occur and contact information, including a daytime telephone number, for the project representative to be contacted in the event that noise levels are deemed excessive. 			

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 11-1b: Implement construction-noise reduction measures during noise-sensitive time periods.</u></p> <p>For all construction activity that is to take place outside of the Placer County construction noise exception timeframes (i.e., 6:00 a.m. and 8:00 p.m., Monday through Friday, and between 8:00 a.m. and 8:00 p.m. Saturday and Sunday), and that is anticipated to generate more than 45 dBA L_{eq} / 65 dBA L_{max} at 50 feet, the construction contractor shall comply with the following measures:</p> <ul style="list-style-type: none"> ▲ Consistent with Section 9.36.080 Exceptions, of the Placer County Code, obtain an exception to Article 9.36 Noise standards for nighttime construction. Implement noticing to adjacent landowners called for in Section 9.36.080 and implement conditions included in the exception, if approved. ▲ Install temporary noise curtains that meet the following parameters: <ul style="list-style-type: none"> ▼ Install temporary noise curtains as close as possible to the boundary of the construction site within the direct line of sight path of the nearby sensitive receptor(s). ▼ Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot. ▲ Noise-reducing enclosures or acoustic barriers shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors). ▲ Operate heavy-duty construction equipment at the lowest operating power possible. 	Placer County Planning Services Division	During all construction activity that is to take place outside of the Placer County construction noise exception timeframes (i.e., 6:00 a.m. and 8:00 p.m., Monday through Friday, and between 8:00 a.m. and 8:00 p.m. Saturday and Sunday), and that is anticipated to generate more than 45 dBA L_{eq} / 65 dBA L_{max} at 50 feet	Continuously during project construction during noise-sensitive time periods
<p><u>New Mitigation Measure 11-1c: Prepare pre-construction acoustical study.</u></p> <p>In lieu of implementing all of the measures set forth in Revised Mitigation Measure 11-1a and Adopted Mitigation Measure 11-1b, a project applicant may submit an acoustical study that demonstrates that construction noise levels would meet the adopted Placer County Code requirements set forth in Section 9.36.060, established for the protection of noise exposure at sensitive receptors. The acoustical study shall be prepared by a qualified acoustical professional and shall determine based on project-specific parameters, including construction schedule and duration, whether nighttime or daytime construction would occur, specific construction equipment that would be used and associated noise levels, and if a potential noise impact could occur at nearby sensitive receptors. The study shall be prepared and submitted for county review prior to issuance of any construction/grading permits at the time of final plot plan review.</p>	Placer County Planning Services Division	Prior to issuance of any construction/grading permits at the time of final plot plan review	As needed where construction activities included in a construction/grading permit application are not addressed in an acoustical study

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 11-2a: Implement vibration noise reduction measures.</u></p> <p>To reduce vibration and noise impacts from construction activities, the construction contractor shall comply with the following measures:</p> <ul style="list-style-type: none"> ▲ Pile driving activities shall be limited to the daytime hours between 6:00 a.m. and 8:00 p.m. Monday through Friday and between 8:00 a.m. and 8:00 p.m. Saturday and Sunday. ▲ If pile driving is used, pile holes shall be predrilled to the maximum feasible depth to reduce the number of blows required to seat a pile. ▲ All construction equipment on construction sites shall be operated as far away from vibration-sensitive sites as reasonably possible. ▲ Earthmoving and ground-impacting operations shall be phased so as not to occur simultaneously in areas close to sensitive receptors, to the extent feasible. The total vibration level produced could be significantly less when each vibration source is operated at separate times. 	Placer County Planning Services Division	During project construction	Continuously during project construction
<p><u>Mitigation Measure 11-2b: Develop and implement a vibration control plan.</u></p> <p>This mitigation measure would be applicable to pile driving activities located within 100 feet of any building or within 300 feet of an occupied residence/building.</p> <p>A vibration control plan shall be developed by the project applicant and his/her construction contractors to be submitted to and approved by Placer County prior to issuance of any Improvement Plans or Grading Permits for the project. The plan shall consider all potential vibration-inducing activities that would occur within the distance parameters described above and include various measures, setback distances, precautions, monitoring programs, and alternative methods to traditional pile driving activities with the potential to result in structural damage or excessive noise. Items that shall be addressed in the plan include, but are not limited to, the following:</p> <ul style="list-style-type: none"> ▲ Minimum setback requirements for different types of ground vibration-producing activities (e.g., pile driving) for the purpose of preventing damage to nearby structures shall be established based on the proposed pile driving activities and locations, once determined. Factors to be considered include the specific nature of the vibration producing activity (e.g., type and duration of pile driving), local soil conditions, and the fragility/resiliency of the nearby structures. Established setback requirements (i.e., 100 feet) can be breached if a project-specific, site specific analysis is conducted by a qualified geotechnical engineer or ground vibration specialist that indicates that no structural damage would occur at nearby buildings or structures. ▲ Minimum setback requirements for different types of ground vibration producing activities (e.g., pile driving) for the purpose of preventing negative human response shall be established based on the proposed pile driving activities and locations, once determined. Established setback requirements (i.e., 300 feet) can be breached only if a project-specific, site-specific, technically adequate ground vibration study indicates that the buildings would not be exposed to ground vibration levels in excess of 80 VdB, and ground vibration measurements performed during the construction activity confirm that the buildings are not being exposed to levels in excess of 80 VdB. ▲ All vibration-inducing activity within the distance parameters described above shall be monitored and documented for ground vibration noise and vibration noise levels at the nearest sensitive land use and associated recorded data submitted to Placer County so as not to exceed the recommended FTA and Caltrans levels. 	Placer County Planning Services Division	Prior to issuance of any Improvement Plans or Grading Permits for the project	Continuously during pile driving activities located within 100 feet of any building or within 300 feet of an occupied residence/building

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>▲ Alternatives to traditional pile driving (e.g., sonic pile driving, jetting, cast-in-place or auger cast piles, non-displacement piles, pile cushioning, torque or hydraulic piles) shall be considered and implemented where feasible to reduce vibration levels.</p>			
<p><u>Mitigation Measure 11-3: Reduce noise exposure to existing sensitive receptors from proposed stationary noise sources.</u></p> <p>The project applicant shall implement the following measures to reduce the effect of noise levels generated by on-site stationary noise sources:</p> <p>▲ Routine testing and preventive maintenance of emergency electrical generators shall be conducted during the less sensitive daytime hours (i.e., 7:00 a.m. to 10:00 p.m.), per the Placer County Noise Ordinance. All electrical generators shall be equipped with noise control (e.g., muffler) devices in accordance with manufacturers' specifications.</p> <p>▲ External mechanical equipment, including HVAC units, associated with buildings shall incorporate features designed to reduce noise emissions below the stationary noise source criteria. These features may include, but are not limited to, locating equipment within equipment rooms or enclosures that incorporate noise reduction features, such as acoustical louvers, and exhaust and intake silencers. Equipment enclosures shall be oriented so that major openings (i.e., intake louvers, exhaust) are directed away from nearby noise-sensitive receptors.</p>	Placer County Planning Services Division	During project operations	Continuously during project operations
<p>▲ Loading docks shall be located and designed so that noise emissions do not exceed the stationary noise source criteria established in this analysis (i.e., exterior daytime [7:00 a.m. to 10:00 p.m.] standards of 55 dB L_{eq}/ 70 dB L_{max} and the exterior nighttime [10:00 p.m. to 7:00 a.m.] standards of 45 dB L_{eq} / 65 dB L_{max}) at any existing or planned sensitive receptor. At the time of conformity review application submittal for discretionary entitlement, the project applicant shall provide to the County a specialized noise study to evaluate specific design and ensure compliance with Placer County noise standards. Reduction of loading dock noise can be achieved by locating loading docks as far away as possible from noise sensitive land uses, constructing noise barriers between loading docks and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. Final design, location, and orientation shall be dictated by findings in the noise study, if applicable.</p>	Placer County Planning Services Division	At the time of conformity review application submittal for discretionary entitlement	Completion at the time of conformity review application submittal for discretionary entitlement
<p>▲ Parking lots and structures shall be located and designed so that noise emissions do not exceed the stationary noise source criteria identified in this analysis (i.e., exterior daytime [7:00 a.m. to 10:00 p.m.] standards of 55 dB L_{eq}/ 70 dB L_{max} and the exterior nighttime [10:00 p.m. to 7:00 a.m.] standards of 45 dB L_{eq} / 65 dB L_{max}) at any existing or planned sensitive receptor. At the time of conformity review application submittal for discretionary entitlement, the project applicant shall provide to the County a specialized noise study to evaluate specific design and ensure compliance with Placer County noise standards. Reduction of parking lot noise can be achieved by locating parking lots away from noise sensitive land uses, constructing noise barriers between parking lots/structures and noise-sensitive land uses, incorporating noise barriers into parking structure designs (e.g., providing solid walls around the top levels of parking structures), or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. Final design, location, and orientation shall be dictated by findings in the noise study, if applicable.</p>	Placer County Planning Services Division	At the time of conformity review application submittal for discretionary entitlement	Completion at the time of conformity review application submittal for discretionary entitlement
<p><u>Mitigation Measure 11-4a: Reduce stationary noise exposure to new sensitive receptors.</u></p> <p>Implement Mitigation Measure 11-3, which would also reduce noise exposure to new sensitive receptors within the Specific Plan area. In addition, the project applicant shall comply with the following noise rules and regulations:</p>	Placer County Planning Services Division	During project operations	Continuously during project operations

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<ul style="list-style-type: none"> ▲ For the quiet enjoyment by owners and guests, any onsite activities that could generate outdoor noise levels greater than 45 dB (e.g., outdoor skating rink operations, outdoor entertainment events) should continue no later than 12 a.m./midnight each night. ▲ No outdoor amplified music that exceeds 65 dB at residential/transient lodging after 10:00p.m., as measured at the exterior wall of structures. ▲ No ambient patio music after 11 p.m., unless special occasions warrant such and under no circumstances after 12 midnight. ▲ Exceptions to these noise standards can be provided on limited days for specific events through issuance of a Temporary Outdoor Event permit, subject to Placer County approval. ▲ The project applicant shall provide access to Placer County enforcement officers for the assessment and investigation of noise complaints and monitoring of noise generating activities, including the placement and operation of sound measurement equipment consistent with Placer County Code section 9.36.040 Sound measurement methodology. ▲ Should a noise complaint arise, it would be at the discretion of the individual Placer County enforcement officer at the time of noise violation to issue a fine to the band, business owner, event organizer, or other individual responsible for the noise violation. The process for addressing violations and fines would follow Placer County Code Article 9.36 Noise. 			
<p><u>Mitigation Measure 11-4b: Conduct site specific noise study.</u></p> <p>To ensure compliance with Placer County night time interior noise standard and the California Building Code Section 1207, Sound Transmission interior noise standards of 45 dBA L_{dn}, the project applicant shall comply with the following:</p> <ul style="list-style-type: none"> ▲ At the time of conformity review application submittal for discretionary entitlement for a structure containing residential units, the project applicant shall provide to the County a site specific noise study prepared by a qualified acoustical engineer addressing interior noise levels in residential units. ▲ The noise study shall consider the types of land uses being proposed in the same building as the residential units in a mixed use structure and existing noise sources adjacent to the proposed structure. ▲ The noise study shall confirm, using approved calculation methodologies, that building design and materials are sufficient to maintain a maximum 45 dB L_{dn} interior noise level, with windows closed, in residential units given the reasonably foreseeable noise generation sources within the building, and existing noise sources adjacent to the building. 	Placer County Planning Services Division	At the time of conformity review application submittal for discretionary entitlement for a structure containing residential units	Completion at the time of conformity review application submittal for discretionary entitlement for a structure containing residential units
<p><u>Mitigation Measure 11-5: Reduce roadway noise levels on Olympic Valley Road.</u></p> <p>To reduce noise levels associated with increased traffic on Olympic Valley Road, the project applicant shall install a rubberized hot mix asphalt overlay (RHMA) or equivalent surface treatment with known noise reducing properties on top of the existing conventional asphalt of Olympic Valley Road along the segment identified below. Sufficient project generated traffic resulting in a significant contribution to the exceedance of noise standards does not occur until the later portions of project implementation. Therefore, the RHMA overlay need not be installed immediately at project initiation. The RHMA overlay shall be installed when development reaches 30 percent of all proposed Hotel/Condo/Cabin Units Land uses (i.e., 255 units or more), which would be the point where current modeling indicates traffic noise may</p>	Placer County Planning Services Division	During project design	Completion prior to issuance of building permits

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>exceed standards. The RHMA overlay shall meet the following conditions:</p> <ul style="list-style-type: none"> ▲ A RHMA overlay shall be installed on top of the existing conventional asphalt on Olympic Valley Road beginning at its' intersection with SR 89 and terminating at its intersection with Christy Lane. ▲ The RHMA overlay shall be designed with appropriate thickness and rubber component quantity (typically 15 percent by weight of the total blend), such that traffic noise levels are reduced by an average of 4-6 dB (noise levels vary depending on travel speeds, meteorological conditions, and pavement quality) as compared to current noise levels. ▲ Prior to installation of any RHMA overlay, the applicant shall hire a qualified acoustical engineer to review all design parameters to ensure that the RHMA design is adequate, based on most current technology, practices, and availability of products, such that, at a minimum, 4 dB in noise reduction relative to conditions without a RHMA overlay would be achieved. 			
12 Soils, Geology, and Seismicity			
<p><u>Mitigation Measure 12-1: Prepare final fault evaluation and implement recommendations.</u></p> <p>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).</p> <ul style="list-style-type: none"> ▲ Prior to the recordation of each 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, Registered Geologist, Certified Engineering Geologist, or Geotechnical Engineer. The Final Fault Evaluation Report shall make recommendations which, at a minimum, include: <ul style="list-style-type: none"> ▼ 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. 	Placer County Engineering and Surveying Division	Prior to the recordation of each 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	Completion prior to the recordation of each 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
<p><u>Mitigation Measure 12-2: Prepare final geotechnical engineering report and implement recommendations.</u></p> <p>The project applicant shall prepare and submit a site-specific geotechnical engineering report for each Improvement Plan submittal, to be</p>	Placer County Engineering and	With each Improvement Plan	Completion prior to approval of

Table 1 Mitigation Monitoring and Reporting Program

Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>produced by a California Registered Civil Engineer or Geotechnical Engineer for Engineering and Surveying Division (ESD) review and approval to confirm compliance with applicable seismic and building codes. The report shall address and make recommendations on the following:</p> <ul style="list-style-type: none"> ▲ road, pavement, and parking area design; ▲ structural foundations, including retaining wall design; ▲ grading practices; ▲ erosion/winterization; ▲ special problems discovered on-site (i.e., groundwater, expansive/unstable soils, etc.); ▲ slope stability; and ▲ recommendations for areas potentially subject to debris flows, which could include relocation and/or layout modifications, off-site source area control, catchment structures, and/or deflection structures. <p>Once approved by the ESD, two copies of the final report shall be provided to the ESD and one copy to the Building Services Division for its use. The Building Services Division shall review all building permit applications to confirm that they incorporate the specifications of the corresponding Geotechnical Engineering Report. It is the responsibility of the project applicant to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.</p>	<p>Surveying Division and Building Services Division</p>	<p>submittal</p>	<p>Improvement Plans</p>
<p><u>Mitigation Measure 12-3: Confirm implementation of avalanche hazard mitigation actions.</u></p> <p>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 OVFD, 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:</p> <ul style="list-style-type: none"> ▲ 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 Palisades Tahoe 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 	<p>Placer County and the OVFD</p>	<p>Prior to approval of a Tentative Small-Lot Subdivision Map that includes lands within a PAHA</p>	<p>Completion prior to approval of a Tentative Small-Lot Subdivision Map that includes lands within a PAHA</p>

Table 1 Mitigation Monitoring and Reporting Program			
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<p>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.</p>			
13 Hydrology and Water Quality			
<u>Mitigation Measure 13-1: Implement water and sewer infrastructure water quality protection measures.</u>			
<p>The project applicant shall implement the following actions, including standard mitigation measures as required by the County, to protect water quality during the design, installation, and destruction/abandonment of wells and sewer lines:</p> <ul style="list-style-type: none"> ▲ Prior to providing final authorization for drilling of a well (e.g., initiating an applicant directed test well, providing access to property for a well drilled by another entity, final agreement to fund a well drilled by another entity), the project applicant shall confirm that required fees are paid and a drilling permit is obtained from Environmental Health Services for each well and that the location of the well meets applicable DWR criteria for distances from utility infrastructure (e.g., stormwater, sewer, and petroleum pipelines and petroleum storage tanks). 	Placer County Environmental Health Services	Prior to providing final authorization for drilling of a well	Completion prior to providing final authorization for drilling of a well
<ul style="list-style-type: none"> ▲ Prior to approval of a Final Subdivision Map, the applicant shall provide to Placer County Environmental Health Services final design drawings indicating that separation between any planned or existing wells in the map area and any planned or existing stormwater, sewer, and petroleum pipelines and petroleum storage tanks is sufficient to meet applicable DWR separation requirements. 	Placer County Environmental Health Services	Prior to approval of a Final Subdivision Map	Completion prior to approval of a Final Subdivision Map
<ul style="list-style-type: none"> ▲ Prior to approval of a Final Small-Lot Subdivision Map, complete or provide for the proper destruction under permit and inspection, of existing wells and abandonment of sewer lines located within the project site. 	Placer County Environmental Health Services	Prior to approval of a Final Small-Lot Subdivision Map	Completion prior to approval of a Final Small-Lot Subdivision Map
<ul style="list-style-type: none"> ▲ Prior to approval of an Improvement Plan that includes the need for well destruction or sewer line abandonment, well destruction and/or sewer line abandonment shall be shown on the Improvement Plans; the actions shall be included in the engineers' estimate of costs for subdivision improvements; and the Improvement Plan will include a Plan Note indicating proper destruction, under permit and inspection, of the existing wells and abandonment of sewer lines located within the Improvement Plan area. 	Placer County Environmental Health Services	Prior to approval of an Improvement Plan that includes the need for well destruction or sewer line abandonment	Completion prior to approval of an Improvement Plan that includes the need for well destruction or sewer line abandonment
<p>The project applicant shall also implement relevant provisions of Mitigation Measures 13-2a and 13-2b.</p>	See Mitigation Measures 13-2a and 13-2b, below	See Mitigation Measures 13-2a and 13-2b, below	See Mitigation Measures 13-2a and 13-2b, below

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 13-2a: Implement standard construction water quality protection measures.</u></p> <p>The project applicant shall implement the following standard mitigation measures as required by the County to help ensure that water quality protection measures are implemented properly and to generally protect water quality during construction and over the project life:</p> <ul style="list-style-type: none"> ▲ The project applicant shall prepare and submit Improvement Plans, specifications, and cost estimates (per the requirements of Section II of the Land Development Manual [LDM] that are in effect at the time of submittal) to the Engineering and Surveying Division (ESD) for review and approval. The plans shall show all physical improvements as required by the conditions for the project as well as pertinent topographical features both on and off site. All existing and proposed utilities and easements, on site and adjacent to the project, which may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities within the public right-of-way (or public easements), or landscaping within sight distance areas at intersections, shall be included in the Improvement Plans. It is the project applicant’s responsibility to obtain all required agency signatures on the plans and to secure department approvals. If the Design/Site Review process and/or Development Review Committee (DRC) review is required as a condition of approval for the project, said review process shall be completed prior to submittal of Improvement Plans. Record drawings shall be prepared and signed by a California Registered Civil Engineer at the applicant’s expense and shall be submitted to the ESD in both hard copy and electronic versions in a format to be approved by the ESD prior to acceptance by the County of site improvements. ▲ The Improvement Plans shall show all proposed grading, drainage improvements, vegetation and tree removal and all work shall conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and Stormwater Quality Ordinance (Ref. Article 8.28, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee (DRC). All cut/fill slopes shall be at a maximum of 2:1 (horizontal: vertical) unless a soils report supports a steeper slope and the ESD concurs with said recommendation. Fill slopes shall not exceed 1.5:1 (horizontal: vertical). 	Placer County Engineering and Surveying Division and the Development Review Committee	With submittal of Improvement Plans	During review of Improvement Plans
<ul style="list-style-type: none"> ▲ The project applicant shall revegetate all temporarily disturbed areas. Revegetation, undertaken from April 1 to October 1, shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is the applicant’s responsibility to ensure proper installation and maintenance of erosion control/winterization before, during, and after project construction. Soil stockpiling or borrow areas, shall have proper erosion control measures applied for the duration of the construction as specified in the Improvement Plans. Provide for erosion control where roadside drainage is off of the pavement, to the satisfaction of the ESD. 	Placer County Engineering and Surveying Division	April 1 to October 1	Continuously during project construction
<ul style="list-style-type: none"> ▲ The project applicant shall submit to the ESD a letter of credit or cash deposit in the amount of 110 percent of an approved engineer’s estimate for winterization and permanent erosion control work prior to Improvement Plan approval to guarantee protection against erosion and improper grading practices. Upon the County’s acceptance of improvements, and satisfactory completion of a one-year maintenance period, unused portions of said deposit shall be refunded to the project applicant or authorized agent. 	Placer County Engineering and Surveying Division	Prior to Improvement Plan approval	Completion prior to Improvement Plan approval

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<p>▲ If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the DRC/ESD for a determination of substantial conformance to the project approvals prior to any further work proceeding. Failure of the DRC/ESD to make a determination of substantial conformance may serve as grounds for the revocation/modification of the project approval by the appropriate hearing body.</p>	Placer County Engineering and Surveying Division and the Development Review Committee	During project construction	Continuously during project construction
<p>▲ The project applicant shall prepare and submit a final drainage report in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of submittal, to the Engineering and Surveying Division for review and approval. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: a written text addressing existing conditions, the effects of the improvements, all appropriate calculations, a watershed map, increases in downstream flows, proposed on- and off-site improvements and drainage easements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used both during construction and for long-term post-construction water quality protection. Best Management Practice measures shall be provided to reduce erosion, water quality degradation, and prevent the discharge of pollutants to stormwater to the maximum extent practicable.</p>	Placer County Engineering and Surveying Division	With submittal of Improvement Plans	During review of Improvement Plans
<p>▲ The Subsequent Conformity Review Process and the Improvement Plans shall show that water quality treatment facilities/BMPs shall be designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development/Redevelopment, and for Industrial and Commercial (or other similar source as approved by the ESD such as the guidance of the Erosion & Sediment Control Guidelines for Developing Areas of the Sierra Foothills and Mountains (or other similar source as approved by the ESD). Construction (Temporary) BMPs for the project include, but are not limited to: straw mulch, fiber rolls, silt fence, sedimentation basins, drain inlet protection, stabilized construction accesses and material management.</p> <p>▲ There shall be no grading or other disturbance of ground between October 15 of any year and May 1 of the following year, unless a Variance has been granted by the Lahontan RWQCB and the ESD.</p>	Placer County Engineering and Surveying Division	With submittal of Improvement Plans	During review of Improvement Plans and during grading

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Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>Mitigation Measure 13-2b: Implement additional construction water quality protection measures.</p> <p>Prepare a Hazardous Materials Contingency Plan: Prior to issuance of the first grading permit, provide to EHS a hazardous materials contingency plan. The plan will describe the necessary actions that would be taken if evidence of contaminated soil or groundwater is encountered during construction. The contingency plan shall identify conditions that could indicate potential hazardous materials contamination, including soil discoloration, petroleum or chemical odors, presence of USTs, or buried building material. Compliance with the plan will be included as a requirement within all construction bid specifications.</p> <p>If at any time during the course of constructing the proposed project evidence of soil and/or groundwater contamination with hazardous material is encountered, the project applicant shall immediately stop the project and contact Placer County EHS Hazardous Materials Section. The project shall remain stopped until there is resolution of the contamination problem (through such mechanisms as soil or groundwater sampling and remediation if potentially hazardous materials are detected above threshold levels) to the satisfaction of Placer County EHS and to the Lahontan RWQCB.</p> <p>The plan, and obligations to abide by and implement the plan, shall be incorporated into the construction and contract specifications of the project.</p>	Placer County Environmental Health Services	Prior to issuance of the first grading permit	Continuously during project construction
<p>Sample Excavated Site Soils Intended for Reuse in Restoration of Washeshu Creek: Final design plans and specifications for creek restoration activities shall require sampling of any excavated soils taken from outside the Washeshu Creek or Olympic Channel corridors that would be reapplied within the Washeshu Creek or Olympic Channel corridors, or any other surface water. Only soils that do not have potentially hazardous materials in excess of regulatory thresholds will be used for creek restoration. If any contaminated materials are found, they will be separated and properly transported and disposed of at legally permitted, off-site disposal facilities.</p>	Placer County Environmental Health Services	During preparation of final design plans and specifications for creek restoration activities	Completion prior to submittal of final design plans and specifications for creek restoration activities
<p>Prepare a Construction Dewatering and Discharge Plan: A dewatering and discharge plan shall be developed and submitted to the Lahontan RWQCB for approval prior to initiating any excavation activities. The plan will be implemented during project construction to address protection of groundwater resources and surface water quality in the event that groundwater is intercepted during project activities. The dewatering and discharge plan shall provide methods to protect groundwater during excavations from potential contaminant releases during equipment use and refueling, such as specific spill control and clean up and response measures in the vicinity of excavations.</p> <p>Dewatering operations and creek and river diversions are authorized under the NPDES California General permit as long as activities conform to the following requirements:</p> <ul style="list-style-type: none"> ▲ Construction site dewatering waste must not be discharged to surface waters or tributaries thereto, including municipal separate storm sewer systems. ▲ Before conducting dewatering or clear water diversion activities, the Discharger must prepare a dewatering/diversion plan as part of the SWPPP for review and approval by the Lahontan RWQCB. ▲ The Dewatering/Diversion plan must have the following minimum elements: <ul style="list-style-type: none"> ▼ location of the discharge area or outfall and name of receiving water; 	Placer County Engineering and Surveying Division	Prior to initiating any excavation activities	Implement plan during project construction

Table 1 Mitigation Monitoring and Reporting Program			
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<ul style="list-style-type: none"> ➤ a description of the discharge or diversion method and plan drawings; ➤ the frequency and estimated volume and rate of discharge; ➤ expected pollutants and concentration in discharge, and control measures to be applied and maintained for pollutant control; and ➤ planned effluent and/or receiving water monitoring (visual and other). ➤ Protect Vulnerable Far East Bridge Sewer Pipeline Crossing During Washeshu Creek Restoration <p>Final design, specifications, and methods for the physical relocation and lowering of the existing Far East Bridge sewer pipeline crossing shall be coordinated with and implemented prior to, or concurrently with, the Washeshu Creek Restoration Plan to avoid the increased potential for damage to the existing pipe during restoration implementation.</p> <p>Or,</p> <p>Improvement plans and specifications for the Washeshu Creek Restoration Plan shall include special provisions to ensure that pre-construction verification of the existing Far East Bridge sewer crossing location, depth below ground surface, and condition across the entire proposed excavation area is performed; appropriate vertical and lateral buffers to avoid travel of heavy equipment over the pipe are specified and adhered to; specific rock placement techniques to reduce potential impact forces on the pipe are required and monitored; and, temporary limits on raw sewage conveyance and/or emergency shut off systems are in place and functional while excavations for creek restoration are underway in the vicinity of the pipe.</p>			
<p><u>Mitigation Measure 13-4: Verify performance of groundwater pumping system.</u></p> <p>This measure is written under the assumption that OVPSD would be the water provider to the proposed project; however, if a Mutual Water Company or other water provider is established that draws groundwater from the Olympic Valley aquifer, this mitigation measure would be applied to that entity.</p> <p>The OVPSD is the agency that would operate wells providing groundwater to the VPTSP. The OVPSD is responsible for groundwater planning and management for most of the Olympic Valley, including the project area. The OVPSD currently implements a monitoring plan that includes collection and analysis of groundwater elevation and use data from monitoring and production wells throughout the western portion of the Groundwater Basin. In addition, the OVPSD is among the group of stakeholders that develops and implements the Groundwater Management Plan (GMP) for the Groundwater Basin. The existing GMP includes goals and objectives for groundwater management in the Basin. The OVPSD will include the proposed new wells in the existing monitoring plan and assess future groundwater use and conditions against the goals and objectives in the GMP. The OVPSD has also stated that it will prepare and implement a Pumping Management Plan, and may also elect to prepare a Groundwater Sustainability Plan (GSP) in accordance with the recent Sustainable Groundwater Management Act of 2014 (SGMA). Any OVPSD Pumping Management Plan will be included as a component of future updates to the GMP or new GSP for the Groundwater Basin. These plans would address, at a minimum, the following topics that relate to the adequacy of supply and the minimization of impacts due to groundwater pumping:</p> <ul style="list-style-type: none"> ▲ Standard operating procedures for well operation; 	<p>The OVPSD (or other water provider), Placer County Planning Services Division, and Placer County Environmental Health Services</p>	<p>Requirements to be incorporated into Development Agreement with OVPSD (or other water provider). Each time well is proposed, proposed well to be reviewed to determine whether well is consistent with assumptions incorporated into WSA analysis.</p>	<p>At time that new wells are sited if such wells are proposed for locations other than those identified in the WSA</p>

Table 1 Mitigation Monitoring and Reporting Program			
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<p>▲ Criteria for new well siting and well destruction that seek to manage water supply throughout the year and in low- and high-water years;</p> <p>▲ Criteria that prioritize expansion of the well field in the west side of the valley in areas that have less effect on surface water and streamflow;</p> <p>▲ A monitoring and reporting program that documents the effects of groundwater pumping on Washeshu Creek; and</p> <p>▲ Use of data from the existing OVPSD monitoring program and any future monitoring.</p> <p>Further, it is anticipated that, consistent with OVPSD’s existing practice, the groundwater plans would be reviewed and updated on a periodic basis as new wells are installed, monitoring data is evaluated, and when assessments of groundwater plan effectiveness, groundwater model refinement, and additional groundwater assessment reports are completed.</p> <p>Future groundwater plans, whether a Pumping Management Plan, GMP update, or GSP, will guide installation and operation of groundwater wells needed to supply the proposed project. Therefore, any changes to the well field analyzed in the WSA must be consistent with and incorporated into these groundwater plans.</p> <p>The project applicant will enter into a Development Agreement with the OVPSD (or other water provider), which will specify the terms of service, including the roles and responsibilities of both parties.</p> <p>In order to ensure that the use of groundwater for the proposed project is consistent with applicable groundwater plans and that withdrawals are managed in a manner that maintains adequate water supply and protects water quality, Washeshu Creek, and biological habitat that is affected by groundwater levels, the following measures shall be implemented.</p> <p>A. If the OVPSD (or other water provider) and/or applicant propose an individual well and/or all or a portion of a well-field to meet water demand associated with the project that would differ from the well field analyzed in the WSA, the new well(s) shall not be installed until the applicant provides additional modeling demonstrating that the following thresholds, or their functional equivalent, would be met. OVPSD shall be consulted during preparation of the analysis:</p> <ul style="list-style-type: none"> i. Average saturated thickness in the western well-field wells does not fall below 65 percent for more than three consecutive months or more than four times total for the entire study period; ii. Drawdown from wells in proximity to the upper meadow (modelling Cells A through E) does not cause substantially more refugia pool drying than shown in the 2014 Potential Impacts of Increased Groundwater Pumping on Fisheries; iii. The well placement and well-field operation would meet all applicable criteria identified in the applicable groundwater plans; and iv. Any additional measures requested by the OVPSD (or other water provider) or the County to address operational concerns and protection of water quality. <p>The OVPSD (or other water provider) and the County may alter the criteria in (i) through (iii) if it can be demonstrated that the revised criteria would maintain adequate water supply and would not result in degradation of water quality and/or loss of riparian vegetation and/or aquatic habitat substantially greater than described in Impacts 6-1, 6-3 and 6-13.</p>			

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>The findings of the modeling shall be incorporated into the applicable groundwater plan(s).</p> <p>B. At a minimum, the Development Agreement between the OVPSD (or other water provider) and the applicant shall identify the roles and responsibilities for the testing, construction, verification of operational readiness and monitoring of new wells. In addition, the Development Agreement shall reflect the requirements of Item A above, and shall specify the process and funding responsibility for updating existing or future groundwater plans as needed to address new wells and/or changes to the proposed well field.</p>			
<p>C. Standard County procedures require the project applicant to provide a “will-serve” letter or “letter of availability” from the OVPSD (or other water provider) to Environmental Health Services prior to approval of an Improvement Plan. With the will-serve letter/letter of availability provided with each Improvement Plan, the applicant shall also provide the following:</p> <ul style="list-style-type: none"> i. With the first Improvement Plan containing facilities that require domestic water service, the applicant shall provide verification from the OVPSD (or other water provider) that the water demands associated with the Improvement Plan can be met with existing or planned infrastructure and that operation of that infrastructure complies with the Development Agreement and applicable groundwater plan(s). ii. With all subsequent Improvement Plans the applicant shall provide a determination from the OVPSD (or other water provider) whether the water demand associated with the proposed development would require installation of a new well or wells to ensure that the overall groundwater system can be operated consistent with the assumptions of the WSA and the criteria of the applicable groundwater plan(s). 	Placer County Environmental Health Services	With the first Improvement Plan containing facilities that require domestic water service	With all subsequent Improvement Plans
<p><u>Mitigation Measure 13-5: Implement Mitigation Measure 13-4.</u></p> <p>The project applicant shall implement Mitigation Measure 13-4, which directs the construction and operation of a well system that is consistent with the parameters of the WSA and applicable groundwater plans. By confirming that groundwater management is implemented in a manner that is consistent with the operational parameters described in the WSA, Mitigation Measure 13-4 would also result in confirmation that groundwater pumping does not result in losses of riparian vegetation in the west channel or upper east channel of Washeshu Creek. Furthermore, Mitigation Measure 6-1c requires monitoring of riparian vegetation in the portions of the creek that would be most affected by reduction in groundwater levels, and replacement of such vegetation if it is lost. The applicant and OVPSD (or other water provider) are responsible for implementation of Mitigation Measure 13-4, but mechanisms are also included in Mitigation Measure 13-4 that require secondary approval by Placer County.</p>	See Mitigation Measure 13-4, above	See Mitigation Measure 13-4, above	See Mitigation Measure 13-4, above
<p><u>Mitigation Measure 13-6: Implement Mitigation Measures 6-1a and 6-1b.</u></p> <p>The project applicant shall implement Mitigation Measures 6-1a and 6-1b, which assure the development of performance criteria for creek restoration, monitoring and adaptive management for the restoration, and ongoing funding to support these activities,</p>	See Mitigation Measures 6-1a and 6-1b, below	See Mitigation Measures 6-1a and 6-1b, below	See Mitigation Measures 6-1a and 6-1b, below
<p><u>Mitigation Measure 13-7: Reduction of long-term water quality degradation from snow and runoff management.</u></p>	Placer County Planning Services	Concurrent with the first Subsequent	Completion with the first Subsequent

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>To minimize the potential for snow storage and snowmelt runoff to degrade the quality of runoff discharged overland or through the storm drainage to Washeshu Creek adjacent to the East Parcel, the project applicant shall submit with the first Subsequent Conformity Review Process for the East Parcel, a final snow storage plan for the parcel that either:</p> <ul style="list-style-type: none"> ▲ relocates snow storage away from margin of the stream and wetland to an area within the core developed area (e.g., parallel to the road along the margin of the parking area); and/or ▲ provides specific containment and treatment features that would prevent discharge of sediment and/or urban pollutants to Washeshu Creek and nearby wetland areas. 	Division	Conformity Review Process for the East Parcel	Conformity Review Process for the East Parcel
<p><u>Mitigation Measure 13-8: Provide flood hazard prevention and signage.</u></p> <p>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:</p> <ul style="list-style-type: none"> ▲ 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 modelling 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. 	Placer County Planning Services Division	During the Subsequent Conformity Review Process	Completion during the Subsequent Conformity Review Process
<p>The following measure shall be implemented to avoid or minimize the risk of flood hazards to recreational trail users:</p> <ul style="list-style-type: none"> ▲ Improvement Plans submitted to the County that include recreational facilities within the Washeshu 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 include 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. 	Placer County Engineering and Surveying Division	With Improvement Plan submittal	Completion with Improvement Plan submittal
14 Public Services and Utilities			
<p><u>Mitigation Measure 14-1a: Implement Mitigation Measure 13-4.</u></p> <p>The project applicant shall implement Mitigation Measure 13-4. Mitigation Measure 13-4 would ensure that wellfield configuration and operation are consistent with the parameters of the WSA and applicable groundwater plans, so that there is adequate water supply to serve the proposed project and projected growth even in dry and multiple dry years.</p>	See Mitigation Measure 13-4, above	See Mitigation Measure 13-4, above	See Mitigation Measure 13-4, above
<p><u>Mitigation Measure 14-1b: Obtain water supply verification letter from the public service district.</u></p> <p>During the Subsequent Conformity Review Process, the project applicant shall provide written verification of the availability of a sufficient water supply from the proposed water supplier to describe whether the project would trigger construction of water supply improvements.</p>	Placer County Planning Services Division	During the Subsequent Conformity Review Process	Completion during the Subsequent Conformity Review Process

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p><u>Mitigation Measure 14-1c: Obtain will-serve requirements letter from the public service district.</u></p> <p>Prior to Improvement Plan approval, the project applicant shall submit to Environmental Health Services, for review and approval, a "will-serve" letter or a "letter of availability" from the OVPSD or the identified water supplier for domestic water service. The project applicant shall connect the project to this treated domestic water supply.</p>	Placer County Environmental Health Services	Prior to Improvement Plan approval	Completion prior to Improvement Plan approval
<p><u>Mitigation Measure 14-2a: Provide sufficient on-site wastewater storage.</u></p> <p>In the event that T-TSA finds that project-generated peak wastewater flows may exceed the capacity of the TRI, wastewater detention facilities, such as enlarged pipes, vaults, or tanks, shall be incorporated into the Specific Plan to time wastewater flows to off-peak conditions when the TRI has sufficient capacity. These facilities will be located within the plan area and will be underground or otherwise incorporated into project's development footprint (e.g., incorporated into a building podium). All facilities will be designed and maintained according to applicable design standards such that effluent would be fully contained. The project applicant shall work directly with T-TSA to determine a sufficient volume of detention capacity for the project and to define the methodology for determining when wastewater detention facilities should be used, and timing for releases from these facilities. The capacity of the on-site storage shall only be sufficient to meet the peak capacity needs associated with the project. A OVPSD representative's signature shall be provided on the Improvement Plans.</p>	Placer County Planning Services Division	Prior to Improvement Plan approval	Completion prior to Improvement Plan approval
<p><u>Mitigation Measure 14-2b: Obtain will-serve requirements letter from the public service district.</u></p> <p>Prior to Improvement Plan approval, the project applicant shall submit to Environmental Health Services a "will-serve" letter from the OVPSD indicating that the district can and will provide sewer service to the project. Connection of each lot in this project to a public sanitary sewer is required.</p>	Placer County Environmental Health Services	Prior to Improvement Plan approval	Completion prior to Improvement Plan approval
<p><u>Mitigation Measure 14-7a: Implement Mitigation Measure 9-8.</u></p> <p>The project applicant shall implement Mitigation Measure 9-8, provided in Chapter 9, "Transportation and Circulation," which would require that a Construction Traffic Management Plan be developed, and that measures contained therein be implemented to maintain emergency vehicle access on area roadways.</p>	See Mitigation Measure 9-8, above	See Mitigation Measure 9-8, above	See Mitigation Measure 9-8, above
<p><u>Mitigation Measure 14-7b: Provide additional fire protection facilities and staffing.</u></p> <p>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 OVPSD 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 Small Lot 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.</p> <p>The following development benchmarks that trigger staffing additions may occur in any order, but the staffing increases outlined in the five</p>	Placer County Planning Services Division	Prior to approval of the initial Small Lot Tentative Map	At various phases of project development

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<p>steps below shall be followed in order, until the fifth staffing measure is met.</p> <ul style="list-style-type: none"> ▲ 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. <p>Fire Staffing Mitigation Phases:</p> <ol style="list-style-type: none"> 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. <p>Also included in the development agreement will be the provision for project applicant support of a new fire substation in the western Olympic 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 OVFD 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 it’s equitable share of any gap in financing for the new fire substation, which is more specifically defined as it’s pro-rata share of the cost (based on qualified assessment benefit engineering) less incremental and cumulative tax revenues earned by the OVPSD 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.</p>			

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15 Hazardous Materials and Hazards			
<p><u>Mitigation Measure 15-2a: Minimize potential for accidental release of hazardous materials.</u></p> <ul style="list-style-type: none"> ▲ Prior to demolition of existing structures, the project applicant shall (1) identify locations that could contain hazardous residues; (2) remove plumbing fixtures known to contain, or potentially containing, hazardous materials; (3) determine the waste classification of the debris; (4) package contaminated items and wastes; and (5) identify disposal site(s) permitted to accept such wastes. These activities will be conducted in compliance with all applicable federal, state, and local laws. ▲ Prior to demolition of existing structures, the project applicant shall provide written documentation to the County that asbestos testing and abatement, as appropriate, has occurred in compliance with applicable federal, state, and local laws. ▲ Prior to demolition of existing structures, the project applicant shall provide written documentation to the County that lead-based paint testing and abatement, as appropriate, has been completed in accordance with applicable state and local laws and regulations. Abatement shall include the removal of lead contaminated soil (considered soil with lead concentrations greater than 400 parts per million in areas where children are likely to be present). If lead contaminated soil is to be removed, the project applicant shall submit a soil management plan to Placer County EHS. 	Placer County Environmental Health Services	Prior to demolition of existing structures	Completion prior to demolition of existing structures
<p><u>Mitigation Measure 15-2b: Implement Mitigation Measure 13-2b.</u></p> <p>Mitigation Measure 13-2b, which requires the preparation of a Hazardous Materials Contingency Plan, shall be implemented by all personnel during construction. The plan will develop a response to evidence of previously undocumented, potentially hazardous materials that includes cessation of work and notification of Placer County EHS.</p>	See Mitigation Measure 13-2b, above	See Mitigation Measure 13-2b, above	See Mitigation Measure 13-2b, above
<p><u>Mitigation Measure 15-4: Implement Mitigation Measure 9-8.</u></p> <p>The project applicant shall implement Mitigation Measure 9-8, which requires the preparation of a Construction Traffic Management Plan to, among other objectives, require removing potential traffic obstructions during emergency evacuation events.</p>	See Mitigation Measure 9-8, above	See Mitigation Measure 9-8, above	See Mitigation Measure 9-8, above
<p><u>Mitigation Measure 15-6a: Verify compliance with CAL FIRE regulations, California Government Code 66474.02.</u></p> <p>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:</p> <ul style="list-style-type: none"> ▲ 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: <ul style="list-style-type: none"> ▼ A county, city, special district, political subdivision of the state, or another entity organized solely to provide fire protection 	Placer County Planning Services Division	With each application for a tentative map with land in a state responsibility area or a high fire hazard severity zone	With each application for a tentative map with land in a state responsibility area or a high fire hazard severity zone

Table 1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	Agency Responsible for Monitoring and Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring
<p>services that is monitored and funded by a county or other public entity; or</p> <ul style="list-style-type: none"> ▸ 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. 			
<p><u>Mitigation Measure 15-6b: Implement Mitigation Measures 14-7b and 9-8.</u></p> <p>As described further in Chapter 14, “Public Services and Utilities,” the project applicant would be required to enter into an agreement with the OVFD to ensure that they will be afforded the necessary assets to maintain or improve the level of service currently provided to existing customers; this agreement would include appropriate benchmarks and thresholds to correlate infrastructure needs with phases of development (see Mitigation Measure 14-7b).</p> <p>The project applicant shall implement Mitigation Measure 98, provided in Chapter 9, “Transportation and Circulation,” which would require that a Construction Traffic Management Plan be developed, and that measures contained therein be implemented to maintain emergency vehicle access on area roadways.</p>	See Mitigation Measures 14-7b and 9-8, above	See Mitigation Measures 14-7b and 9-8, above	See Mitigation Measures 14-7b and 9-8, above
<p><u>Mitigation Measure 15-7: Address potential public health risks related to mosquitos.</u></p> <p>The project applicant shall abide by the Placer Mosquito Abatement District Guidelines and Standards for Vector Prevention in Proposed Development. Prior to Final Subdivision Map(s) approval, a mosquito control management/maintenance program shall be prepared by the project applicant and approved by the Placer Mosquito Abatement District. If the District determines that the project would create new temporary or permanent mosquito breeding habitats during construction or operation, the District shall recommend design modifications and best management practices. In addition, the project applicant shall provide District technicians access to the project site to inspect and treat breeding habitats, as necessary to reduce risks to public health.</p>	Placer Mosquito Abatement District	Prior to Final Subdivision Map(s) approval	Completion prior to Final Subdivision Map(s) approval
<p>16 Greenhouse Gases and Climate Change</p>			
<p><u>Mitigation Measure 16-2: Implement ongoing operational greenhouse gas review and reduction program.</u></p> <p>The state legislature or Governor’s Office may establish new GHG targets or other programs or metrics that apply both before and after 2020, as discussed in the First Update to the Climate Change Scoping Plan, released by ARB in May 2014 (and discussed above in Section 16.2.2) and in response to <i>CBD v CDFW</i> as it relates to connecting Scoping Plan targets to individual projects. Any projects processed by the County will be required to reduce, to the extent needed and feasible, GHG emissions such that the project operates within the targets or adopted plan established at the time the project is submitted for approval, as explained below.</p> <p>The County shall require the following actions for all subdivision maps submitted for approval:</p> <ul style="list-style-type: none"> ▴ In consultation with the PCAPCD and Placer County, the applicant shall demonstrate, based on currently adopted regulations 	Placer County Planning Services Division and the PCAPCD	With all subdivision maps submitted for approval	With all subdivision maps submitted for approval

Table 1 Mitigation Monitoring and Reporting Program			
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<p>and industry-accepted GHG calculation methods, whether operation of the subdivision would be consistent with GHG targets adopted by the State. “Adopted” means that a specific GHG reduction target, such as is currently specified in the Global Warming Solutions Act of 2006 (achieve 1990 levels by 2020), is required by state legislative action, state administrative action, by legislative action of Placer County, or an applicable qualified Climate Action Plan or similar GHG reduction plan approved by Placer County. The target or plan shall be based on a substantiated linkage between the project (or Placer County projects in general if a countywide qualified GHG reduction plan is approved) and statewide GHG reduction goals.</p> <ul style="list-style-type: none"> ▲ If the subdivision achieves or exceeds the reduction target or plan, no further actions shall be required. ▲ If the subdivision does not meet the target, then measures shall be incorporated into the subdivision to reduce GHG emissions to the target or level and to the extent feasible. Emissions reductions provided by these measures shall be calculated to determine if targets can be achieved. These measures may include any combination of GHG reduction actions needed to achieve the target, including: <ul style="list-style-type: none"> ▸ Actions included in Mitigation Measure 10-2 that also reduce GHG emissions (menu of options to reduce ROG and NO_x emissions to a specified level such as trip reduction and energy management; nearly all of these measures would similarly reduce GHG emissions); ▸ Actions specified in Specific Plan Section 7.6, “Climate Change Initiatives,” but with mandated actions (instead of “should” or “encourage” the actions, use “shall”), such as requiring that all buildings exceed Title 24 energy-efficiency requirements by 15 percent; requiring incorporation of on-site renewable energy production to meet at least 25 percent of the subdivision’s electricity needs, etc. ▸ Payment of GHG offset fees to an ARB-approved GHG reduction program. Project applicant will consent to any GHG reduction fees that may be applicable after January 1, 2020. 			
18.1 Cumulative Impacts (Transportation and Circulation)			
<p><u>Mitigation Measure 18-19: Implement Mitigation Measures 9-1a and 9-1b.</u></p> <p>Implementation of Mitigation Measure 9-1a, which includes conducting traffic management when the expected amount of daily traffic on Olympic Valley Road would reach or exceed 13,500 ADT, and Mitigation Measure 9-1b, which includes developing and distributing real-time information regarding available parking spaces in lots/garages in the Village Area and average travel speeds on Olympic Valley Road, would reduce this cumulative impact to a less-than-significant level as a result of the added roadway capacity the measures would provide.</p>	See Mitigation Measures 9-1a and 9-1b, above	See Mitigation Measures 9-1a and 9-1b, above	See Mitigation Measures 9-1a and 9-1b, above
<p><u>Mitigation Measure 18-20: Implement Mitigation Measures 9-2a through 9-2d.</u></p> <p>Implementation of Mitigation Measures 9-2a through 9-2d, which include conducting traffic management along Olympic Valley Road, would reduce this cumulative impact to a less-than-significant level because operations would be restored to acceptable levels. The traffic management procedures recommended for the Olympic Valley Road/Wayne Road and Olympic Valley Road/Squaw Creek Road intersections were analyzed to determine how the LOS would change. With the use of traffic management personnel, they would each operate similar to a two-phased signalized intersection.</p>	See Mitigation Measures 9-2a through 9-2d, above	See Mitigation Measures 9-2a through 9-2d, above	See Mitigation Measures 9-2a through 9-2d, above

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<p><u>Mitigation Measure 18-22: Lengthen northbound left-turn lane and modify the traffic signal timing at the SR 89/Squaw Valley Road intersection.</u></p> <p>If the maximum green time for the winter Saturday a.m. peak hour were to be set to 55 seconds for the northbound left-turn movement and 40 seconds for the southbound through movement, the northbound left-turn 95th percentile queue would be reduced 675 feet. This signal timing adjustment would not adversely affect overall delay at the intersection. To meet the applicable design standard, the turn lane (and taper) would need to have a combined length including bay taper of 910 feet (675 feet + 235 feet). Because the existing turn lane is 565 feet, the applicable design standard would be met by lengthening the turn lane 350 feet and implementing this (or another equally effective) signal timing modification. As evidenced by the existing condition, turn pockets on state highways do not always provide the deceleration and storage prescribed in the Highway Design Manual.</p>	Placer County and Caltrans	None; timing dependent on Caltrans	None; timing dependent on Caltrans
<p><u>Mitigation Measure 18-24: Implement Mitigation Measure 9-7.</u></p> <p>Mitigation Measure 9-7 requires the creation of a Community Service Area (CSA) Zone of Benefit (ZOB) or Community Facilities District (CFD), or annexation into an existing CSA ZOB to fund expansion of transit capacity. This would ensure that the project contribution to cumulative transit demand is not considerable, thus reducing this cumulative impact to a less-than-significant level.</p>	See Mitigation Measure 9-7, above	See Mitigation Measure 9-7, above	See Mitigation Measure 9-7, above
<p><u>Mitigation Measure 18-25: Implement Mitigation Measure 9-8.</u></p> <p>Implementation of Mitigation Measure 9-8, which requires the development and implementation of a Construction Traffic Management Plan and would include coordination of activities between the proposed project and any other construction-activities in the Olympic Valley, would reduce this cumulative impact to a less-than-significant level.</p>	See Mitigation Measure 9-8, above	See Mitigation Measure 9-8, above	See Mitigation Measure 9-8, above