

## **3.0 PROJECT DESCRIPTION**

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The purpose of the project description is to describe the project in a way that will be meaningful to the public, reviewing agencies, and decision-makers. As described in Section 15124 of the State CEQA Guidelines, the project description in an environmental impact report (EIR) is required to contain the following information:

- The location of the proposed project;
- A statement of project objectives;
- A general description of the project's technical, economic, and environmental characteristics; and
- A statement briefly describing the intended uses of the EIR.

The State CEQA Guidelines state that a project description need not be exhaustive but should provide the level of detail needed for the evaluation and review of potential environmental impacts. The project description is the starting point for all environmental analysis required by the State CEQA Guidelines. Section 15146 of the State CEQA Guidelines states that the degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

The Northstar Mountain Master Plan (NMMP) proposes upgrades to existing ski facilities as well as the creation of additional ski facilities on the eastern slopes of Mt. Pluto, on the northeastern slopes of Sawtooth Ridge, and on Lookout Mountain within the Northstar California Ski Resort. These lands are owned by CLP Northstar, LLC, and managed through a lease agreement by Trimont Land Company dba Northstar California.

The NMMP identifies planned on-mountain improvements including upgrades to existing ski lifts, widening of existing ski trails, new/replaced ski lifts and ski trails, and infrastructure to accommodate these features including on-mountain skier service facilities and upgrades, snowmaking facilities, utilities, and seasonal spur roads. In addition, the NMMP includes other recreation components such as camping and relocation of cross-country ski facilities.

### 3.1 PROJECT LOCATION

Placer County is located in the central and eastern portion of California and extends from the Central Valley/Sierra Nevada foothills east to the Nevada state line (**Figure 3-1**). The Martis Valley is located in the northeastern portion of Placer County and extends into Nevada County and the Town of Truckee to the north. The Martis Valley encompasses approximately 44,800 acres. Approximately 25,570 acres of the Martis Valley are within Placer County.

Northstar is approximately 6 miles southeast of the town of Truckee, California; approximately 5 miles northwest of the northern shore of Lake Tahoe; approximately 96 miles northeast of the city of Sacramento, California; and approximately 40 miles west of the city of Reno, Nevada (**Figure**

**3-1).** The Northstar California Ski Resort (resort or Northstar) is located in the southern portion of the Martis Valley Community Plan area and consists of approximately 5,500 acres, while the overall Northstar community (resort and residential/commercial development) consists of approximately 8,000 acres (**Figure 3-2**). Northstar provides year-round recreational activities, including skiing, snowboarding, hiking, biking, and golf.

Regional access to the project vicinity is provided by Interstate 80 (I-80), which connects the Martis Valley region to Sacramento and San Francisco to the west and Reno to the east. State Route (SR) 267 provides access from I-80 to the north shore of Lake Tahoe.

## 3.2 STUDY AREA CHARACTERISTICS

Locally, Northstar is a major destination for winter and summer recreation activities. Land uses and development have been guided by the 1971 Northstar-at-Tahoe Master Plan (LDA 674, April 12, 1971) and the associated use permit as well as subsequent approvals and use permits. The 1971 Master Plan and associated use permit has since expired and carries no regulatory authority. Development at Northstar is guided by the Placer County General Plan, Placer County Zoning Ordinance, Martis Valley Community Plan, and development-specific entitlements. Large-scale development projects associated with Northstar (**Figure 3-3**) include the following:

- Martis Valley Community Plan
- Northstar Village (revitalization and expansion of the existing village site)
- Northstar Highlands (expansion of residential, resort commercial, and lodging facilities)
- Sawmill Heights (employee housing project)
- Northside (residential and commercial expansion near the existing Northstar Village)

Historically, Northstar has been primarily a wintertime, day-use recreation destination. However, the recent above-mentioned development is converting the Northstar community into a blend of year-round destination and day use recreation. In addition, new development has caused an increase of residents and guests internal to the community who place additional demands on existing recreation opportunities at the resort.

### 3.2.1 SITE CHARACTERISTICS

The project site is located off of Northstar Drive via SR 267 and includes the following Assessor's Parcel Numbers (APNs): 080-260-002, -008, -010, -013, -015, -016, -017, 091-100-022, -025, -027, 110-030-069, -078, -080, 110-050-017, -040, -041, -052, -053, -054, -055, -057, -063, -069, -071, -072, -073, -075, 110-070-008, -010, 110-081-004, -012, -014, -015, -017, -021, -022, -034, -041, -043, 110-600-017, -024, 110-660-026, -027, 114-020-004 and 114-040-001.

The characteristics of the proposed project site and surrounding area are typical of a mountain forest. The project area consists of mountain terrain, with low to steep slope conditions. The project site is covered with vegetation communities and habitats that include several upland forest,

chaparral, herbaceous, and riparian types. Aquatic habitats include perennial and intermittent streams, a reservoir, and aquatic conditions associated with wet meadows. Numerous resident and migratory wildlife species use habitats within the project study area for foraging, shelter, and breeding. Elevations at the resort range between approximately 6,330 feet above mean sea level (amsl) at the Village at Northstar (Village) to 8,610 feet amsl at the top of Mt. Pluto.

### 3.2.2 EXISTING USES

Existing land uses include ski resort facilities (trails, lifts, restaurants, ancillary uses) and residential, lodging, and retail development associated with the Northstar Village, Northstar Highlands, and Northside projects. Large portions of the site are in open space and/or undeveloped. The site is currently surrounded by forestlands, existing ski terrain features, and existing residential development associated with Martis Camp (**Figure 3-4**).

### 3.2.3 EXISTING LAND USE AND ZONING DESIGNATIONS

The project site is located within the Martis Valley Community Plan. The resort is currently designated Forest (40–160 acre minimum), Low Density Residential (1–5 dwelling units per acre), Medium Density Residential (5–10 dwelling units per acre), Public/Quasi-Public, Public Facility, and Tourist/Resort Commercial (**Figure 3-5**). The Forest designation makes up the majority of the site, with the residential and commercial designations located near existing development.

The majority of the project site is zoned FOR (Forestry) and TPZ (Timberland Production Zone), with some residential, resort, and commercial districts in the more developed portions of the site. **Table 3-1** summarizes the existing land use and zoning designations within and adjacent to the NMMP (**Figure 3-6**).

**TABLE 3-1  
LAND USE AND ZONING DESIGNATIONS FOR THE NORTHSTAR MOUNTAIN  
MASTER PLAN AND SURROUNDING AREA**

Location	Zoning	General Plan/Community Plan	Existing Conditions & Improvements
Site	FOR (Forestry), Plan Area Statement 015 North Star, FOR-B-X-160 (Forestry combining Building Site 160 acres minimum), TPZ (Timberland Production Zone), RM-B-X-20-Ds PD-5.8 (Residential Multi-Family combining Building Site 20 acres minimum, combining Design Sierra, Planned Development 5.8 Units/Acre) RES-Ds PD-5.8 (Resort combining Design Sierra, Planned Development 5.8 Units/Acre) RES-Ds PD 15 (Resort, combining Design Sierra, Planned Development 15 Units/Acre) RS PD 3 (Residential Single-Family, Planned Development 3 Units/Acre) RES-UP-Ds (Resort, combining Use Permit, combining Design Sierra)	Martis Valley Community Plan Forest 40–60 acre minimum Medium Density Residential 5–10 DU/Acre Tourist/Resort Commercial Public/Quasi-Public Public Facility Low Density Residential 1–5 DU/Acre	Northstar California Ski Resort
North	RM (Residential Multi-Family) RES-Ds (Resort, combining Design Sierra) RS (Residential Single-Family) FOR-B-X-160 (Forestry, combining Building Site 160 Acre Minimum)	Martis Valley Community Plan Forest 40–60 acre minimum Medium Density Residential 5–10 DU/Acre Low Density Residential 1–5 DU/Acre Open Space Rural Residential 0.4–1 DU/Acre	Martis Lake, Undeveloped Residential/Truckee-Tahoe Airport and Overflight Zone
South	FOR (Forestry) Plan Area Statement 015 North Star TPZ (Timberland Production Zone)	Martis Valley Community Plan Forest 40–60 acre minimum Agriculture Timberland 80 acre minimum	Forest Service Land, Undeveloped
East	TPZ (Timberland Production Zone) FOR (Forestry) RES-Ds (Resort, combining Design Sierra)	Martis Valley Community Plan Forest 40–60 acre minimum Open Space High Density Residential 10–15 DU/Acre Tourist/Resort Commercial	Undeveloped
West	TPZ (Timberland Production Zone) FOR-B-X-160 (Forestry, combining Building Site 160 acres minimum)	Martis Valley Community Plan Forest 40–60 acre minimum Low Density Residential 1-5 DU/Acre Rural Residential 0.4–1 DU/Acre Open Space Medium Density Residential 5–10 DU/Acre	Martis Camp Lahontan residential subdivisions Forest Service Land, Undeveloped

### 3.3 PROJECT OBJECTIVES

The proposed NMMP would improve skier circulation within existing terrain and diversify the types of terrain available to skiers and snowboarders at the resort. The quality of snow conditions, out-of-base access, and non-skiing recreation opportunities would also be improved. The planning, design, and implementation of current and planned future land uses at Northstar are driven by the following objectives. The first three objectives are identified as “primary objectives,” as they are fundamental in meeting the goals of the proposed project.

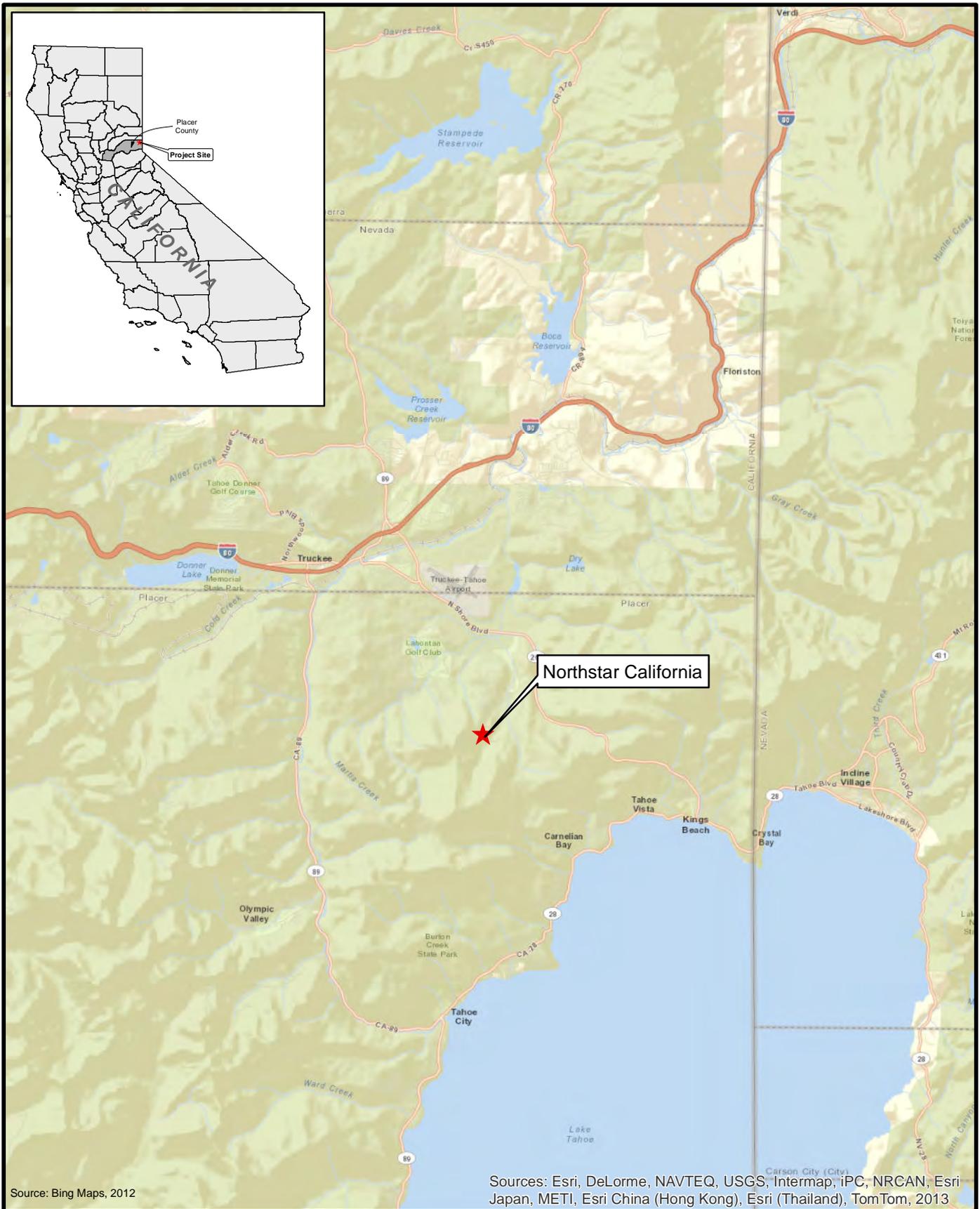
#### 3.3.1 PRIMARY OBJECTIVES

- 1) Maintain Northstar’s competitiveness as a resort destination by upgrading existing services, amenities, and operations. This includes providing a better balance of skier amenities, improving lift technology, and increasing the variety and mix of recreational activities.
- 2) Implement a plan consistent with habitat and land use goals defined in the Northstar Habitat Management Plan (HMP).
- 3) Increase the variety and improve the balance of beginner, intermediate, and expert terrain by creating a wider, more diverse array of terrain offerings, such as access to the Sawtooth Range, which will facilitate an improved and extended vacation experience for the destination guest and day use skier.

#### 3.3.2 GENERAL PROJECT OBJECTIVES

- 4) Continue providing a high quality recreational experience for both the day use skier and the “destination” oriented guest.
- 5) Maintain and/or enhance natural resource values of Northstar lands while allowing for current and planned future land uses in a manner that is compatible with those values.
- 6) Concentrate more intensive land uses (i.e., characterized as recreation and development in the HMP) in the central-western portions of the Northstar property, and emphasize habitat management, open space conservation, and less intensive recreation in the more easterly and westerly portions of the property, consistent with the HMP.
- 7) Enhance Northstar’s status as a self-sustaining, self-contained destination resort that provides the necessary services and amenities to guests and residents on-site.
- 8) Improve skier/snowboarder terrain and the amount and type of services offered (i.e., skier service sites, cross-country ski center relocation).
- 9) Enhance guests’ recreation experience through innovative trail design that would provide the visitor with broader and more varied on-mountain experiences.

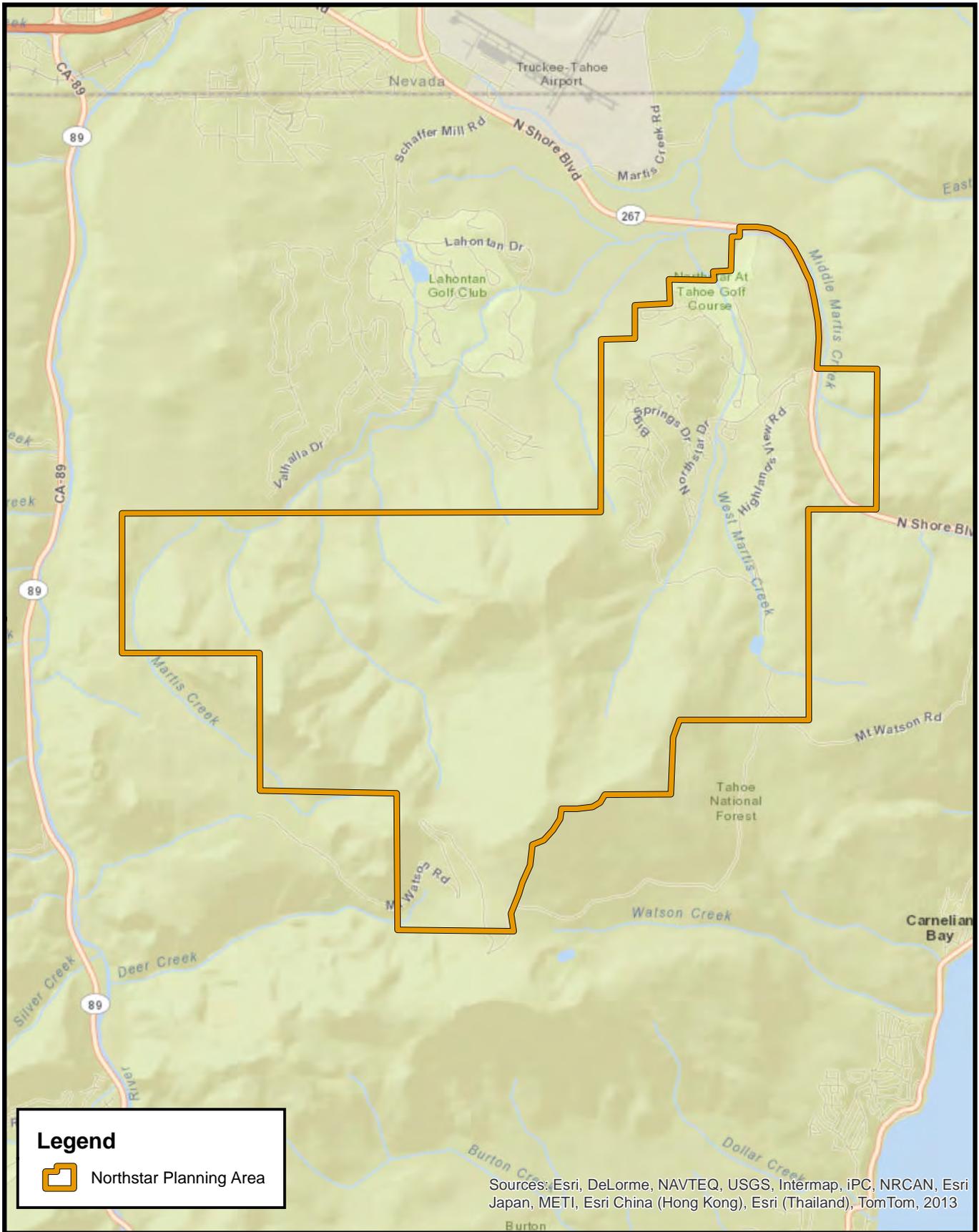
- 10) Implement trail widths and widening of existing trails adjacent to the Vista, Rendezvous, Arrow, Comstock, and Backside lifts to better accommodate modern shaped ski/snowboard technology.
- 11) Improve distribution of skiers/snowboarders across the mountain to facilitate circulation and reduce congestion in the higher-use areas and on trails returning to the Village.
- 12) Improve the capacity of existing out-of-base mountain access points for skiers and snowboarders during peak access times.
- 13) Provide ski trail access for residential development within Northstar to reduce vehicle trips to the Village and on-site day use parking areas.
- 14) Provide redundancy for critical access lifts and generally improve the reliability of the overall lift and trail system.
- 15) Increase snowmaking coverage and the efficiency of the snowmaking system for early season consistency and low snow years.
- 16) Add or develop non-skiing recreation opportunities that are consistent with the overall management and use of the resort (i.e., proposed program-level campsites).
- 17) Recognize Northstar's role and contribution to natural resources conservation and management in the Martis Valley region.



Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013



Figure 3-1  
Regional Vicinity Map



**Legend**

 Northstar Planning Area

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013



Figure 3-2  
Location Map



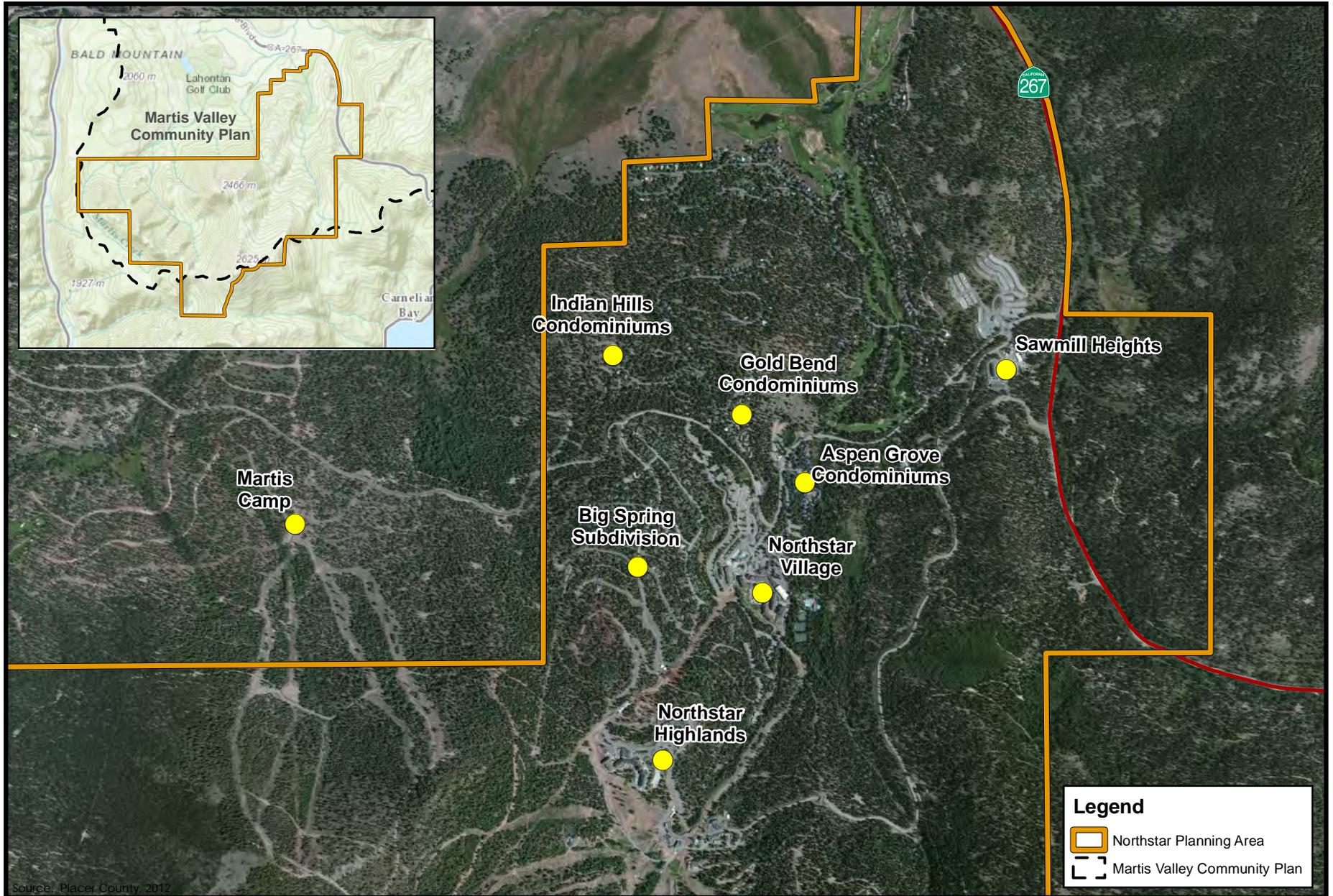


Figure 3-3  
Existing Land Uses and Approved Development Projects

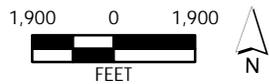
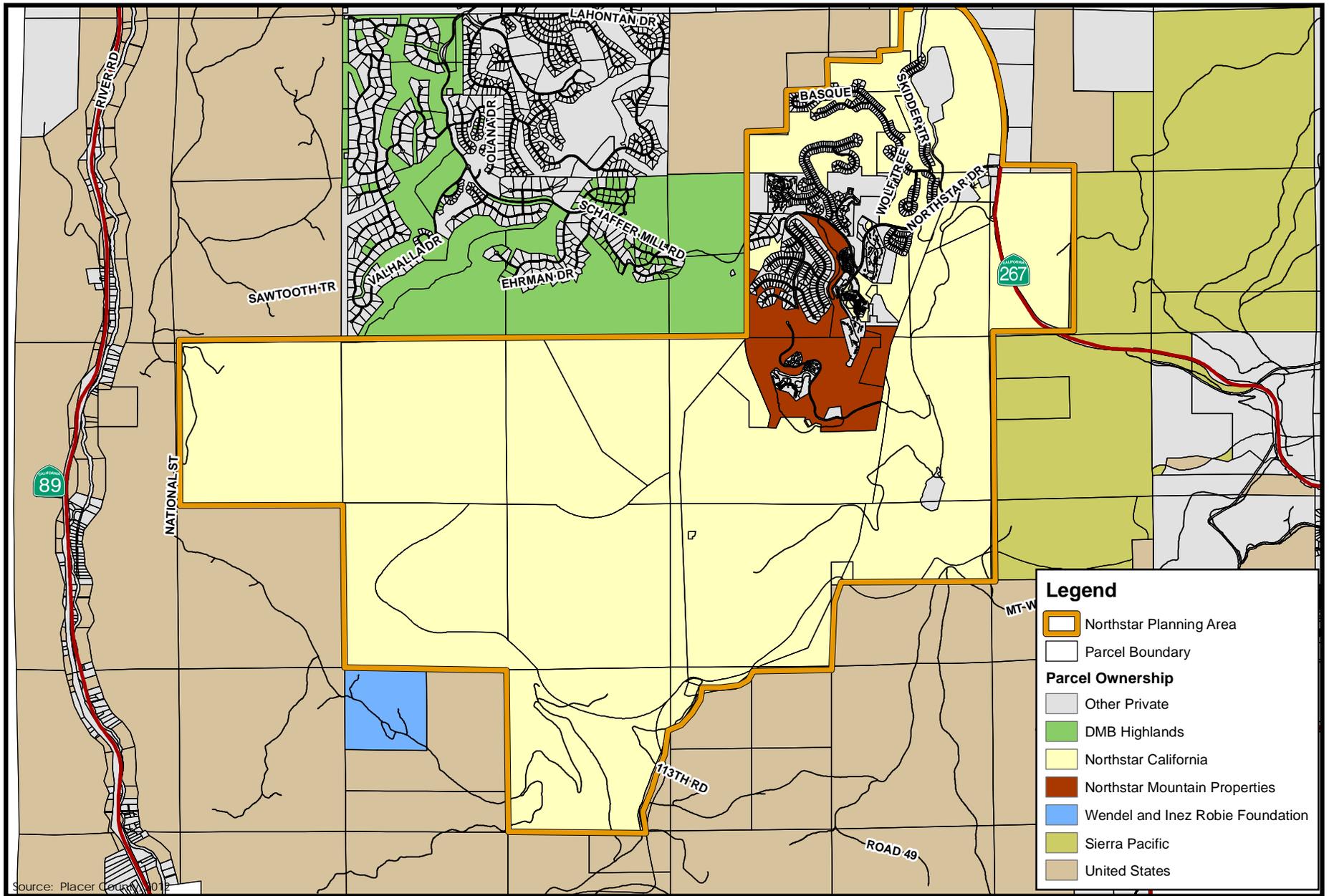
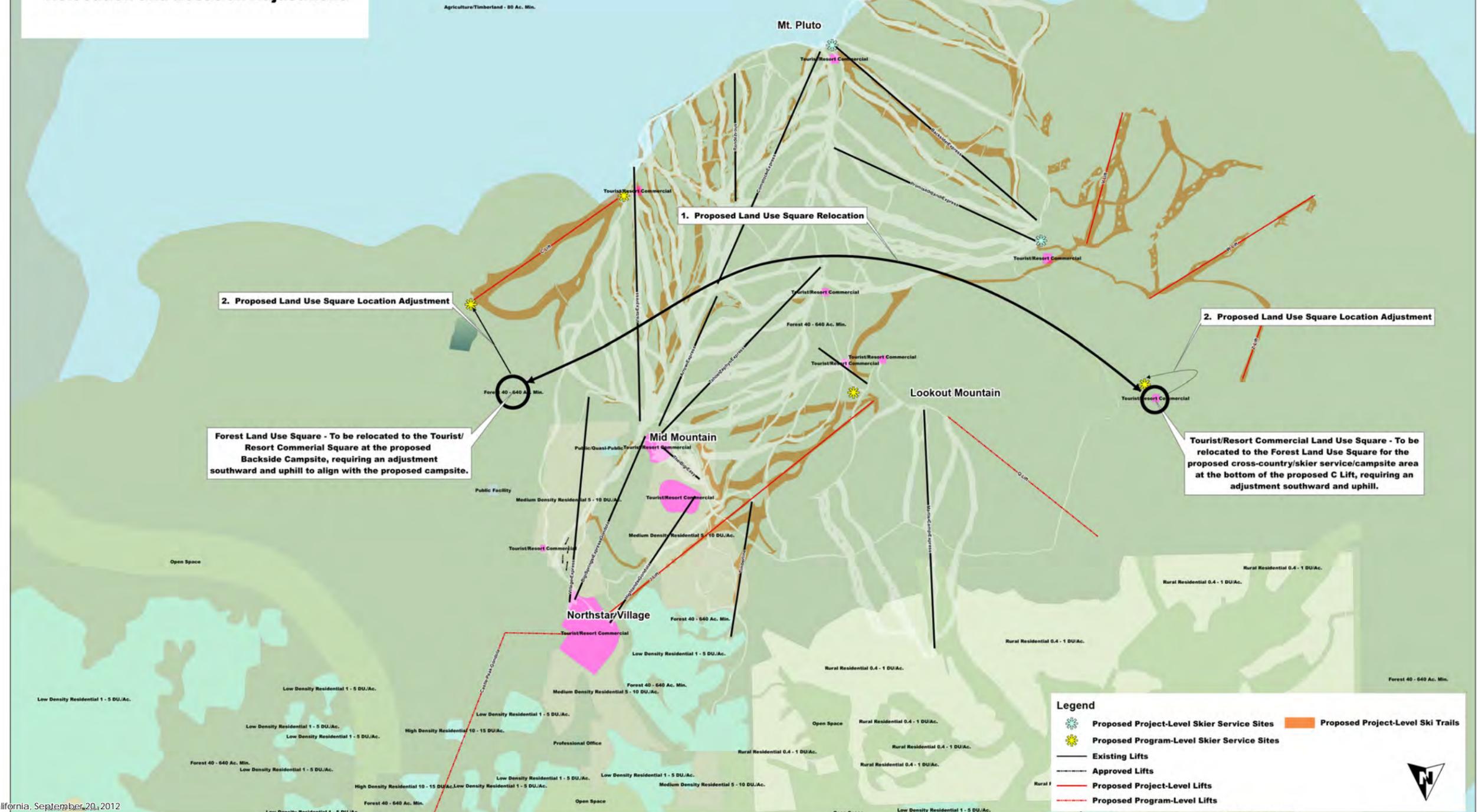


Figure 3-4  
Existing Parcels and Ownership



### Proposed NMMP Land Use Designation Relocation and Location Adjustment



Source: Northstar California, September 20, 2012

Not to Scale

Figure 3-5 Existing Martis Valley Community Plan Designations and Proposed Amendment



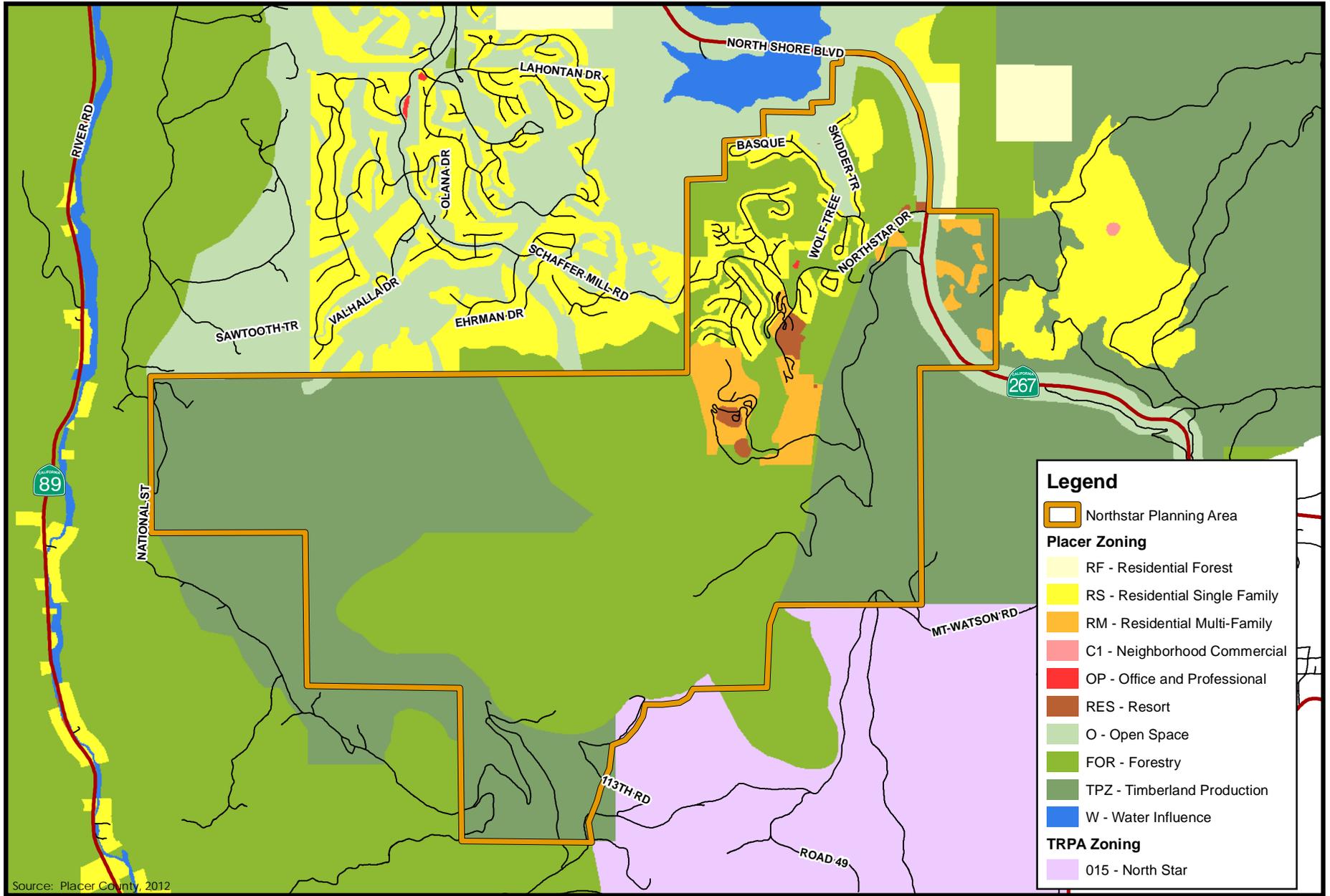


Figure 3-6  
Existing Placer County Zoning

**3.4 PROJECT CHARACTERISTICS**

Consideration and planning for the proposed expansion of recreational opportunities have been in process since 1999, with a previous form of the NMMP (i.e., “Completing the Vision at Northstar”) that was discussed with the public during the Martis Valley Community Plan development process. Since this time, the NMMP has been refined to protect and enhance natural resources of Northstar through the Northstar Habitat Management Plan (HMP) (discussed under Section 3.6).

The NMMP identifies planned on-mountain improvements, including upgrading and widening of existing ski trails, new ski lifts, and new/replaced ski trails, as well as infrastructure to accommodate these features, including on-mountain skier service facilities and upgrades, snowmaking facilities, utilities, and seasonal spur roads that are anticipated to be built over the next 20 years (Figure 3-7). In addition, the NMMP includes other recreation components such as camping and relocation of the existing cross-country ski center facilities. The NMMP has been designed utilizing guidelines and management measures established in the HMP.

The proposed project includes improvements at various stages of design that would occur over a period of time. Improvements anticipated to be constructed in the near term are identified as “project-level” components and have been designed to a level of detail that can be analyzed by this EIR at a project level of detail under State CEQA Guidelines Section 15161. Other improvements are only conceptually designed at this time and further details would be added in the future, as individual entitlements/improvements are proposed. These improvements are identified as “program-level” components and are analyzed by this EIR at a programmatic level of detail consistent with State CEQA Guidelines Section 15168. Table 3-2 summarizes the project components by project level and program level. A detailed description of these components is provided in Section 3.4.1.

**TABLE 3-2  
SUMMARY OF PROJECT COMPONENTS**

Project-Level Components
<p><b>Additional ski trails</b> and the modernization of ski trails and snowmaking through widening of runs adjacent to the Vista, Rendezvous, Arrow, Comstock, and Backside lifts. Upgrades and replacement of existing lifts.</p> <p><b>Additional ski lifts designated as C, J, V, W, and Z lifts</b> and associated terrain, snowmaking, fuel tanks and standby engines, and necessary utilities and seasonal spur roads to operate and maintain the lifts. The relocation of cross-country ski trails would be necessary with the construction of the C lift and trails.</p> <p><b>Skier service site improvements</b> – The skier service sites would provide for improved food service, restroom facilities, and seating areas offered on-mountain. The project-level sites include improvements to the existing Summit Deck and Grille facility located on the top of Mt. Pluto and a new warming hut with deck located on the Backside (the portion of the project site generally west of the Mt. Pluto summit, east of Sawtooth Ridge, and south of the Lookout Mountain summit), directly adjacent to the Promised Land Express bottom terminal.</p> <p><b>General Plan/Martis Valley Community Plan Amendment</b> to relocate an existing Tourist/Commercial land use designation located at the Backside campsite area to the proposed cross-country center/skier services/campsite area at the bottom of the proposed C lift. In addition to exchanging the land use designations, Each of the small land use squares would be adjusted southward and uphill from their present locations.</p> <p><b>Rezone</b> to align the FOR (Forestry) zone district with the relocated MVCP land use designation squares mentioned above.</p>

## Project-Level Components

**Zoning Text Amendment** to allow for the development of ski lift facilities and ski runs in the Timberland Production Zone (TPZ) district, except where TPZ land exists within the Tahoe Basin.

**The Q lift** and associated terrain, snowmaking, fuel tank and standby engine, and necessary utilities and seasonal spur roads to operate and maintain the lift.

**The Castle Peak Parking Area Gondola** alignment, fuel tank and standby engine, and necessary utilities and seasonal spur roads to operate and maintain the lift.

**Skier access** from the top of Lookout Mountain to the W lift bottom terminal.

### **Three program-level skier service sites:**

Two of the skier service sites would provide restrooms and food service facilities. The first program-level skier service site would be located at the top of the C lift, while the second program-level skier service site would be located near the top of the existing Lookout Link and Martis Camp Express lifts.

The third skier service site consists of relocating the existing cross-country ski center at mid-mountain near the base of the Vista Express chair to the south side of Sawmill Reservoir. A proposed campsite in the same area would offer a variety of camping and educational opportunities. The existing Reservoir maintenance road would be improved, a limited new roadway would be constructed, a small 20-space parking lot would be implemented, and relocated cross-country ski trails would be necessary to provide connectivity with existing ski trails to the relocated cross-country center lodge.

**Remote campsite** located in the Backside area to the west of Lookout Mountain that would offer a variety of summer and winter camping opportunities. Access to this site would be by van via the existing 900 road to the 705 road in the summer and by snowcat in the winter.

**Additional non-skiing recreation activities** that are centered in the mid-mountain area.

### **3.4.1 DESCRIPTION OF PROJECT-LEVEL COMPONENTS**

The following is a description of the project-level components associated with the proposed project. Phasing of these improvements is unknown at this time; however, construction is proposed to occur in 5.5-month segments starting on May 1 of each year and ending on October 15. Section 3.10 (Project Construction) provides details regarding construction activities, including anticipated construction equipment to be used, tree removal, grading, and drainage improvements. Proposed grading plans for these improvements are provided in **Appendix 3.1**.

#### **Additional Ski Trails, Ski Trail Widening, Snowmaking Lines, and Existing Lift Upgrades**

Ski trail construction, consisting mostly of widening of existing ski trails, would occur adjacent to the Vista, Rendezvous, Arrow, Comstock, and Backside lifts. Ski trail construction and widening would consist of tree removal (with the exception of isolated tree stands, which would be left within the trail corridor for aesthetics), stump removal, smoothing, and revegetation. Additional snowmaking lines and hydrant relocation would be included with some of these widened trails. Existing lifts would be replaced and/or upgraded for efficiency as necessary over time.

A snowmaking line is also proposed along the existing Challenger run adjacent to the ski area boundary on the Backside. A portion of this snowmaking line, near the top of the run and adjacent to the existing Summit Deck and Grille, is located within the Lake Tahoe Basin that is under the jurisdiction of the Tahoe Regional Planning Agency (TRPA) and would be subject to compliance with TRPA Code of Ordinances Chapters 33 (Grading and Construction), 60 (Water Quality), and 65 (Air Quality/Transportation) (**Figure 3-8**).

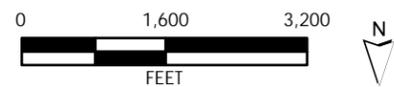
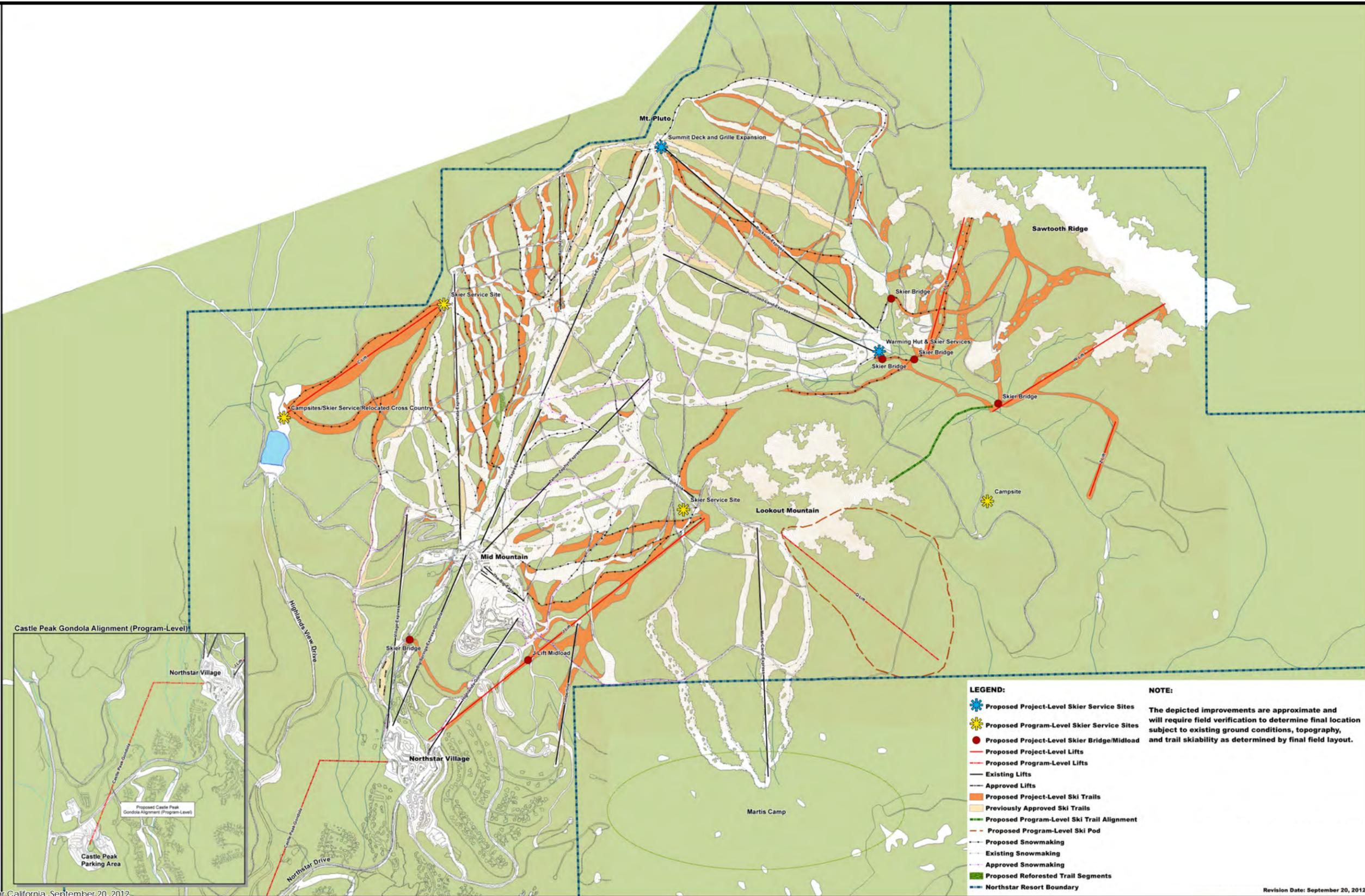
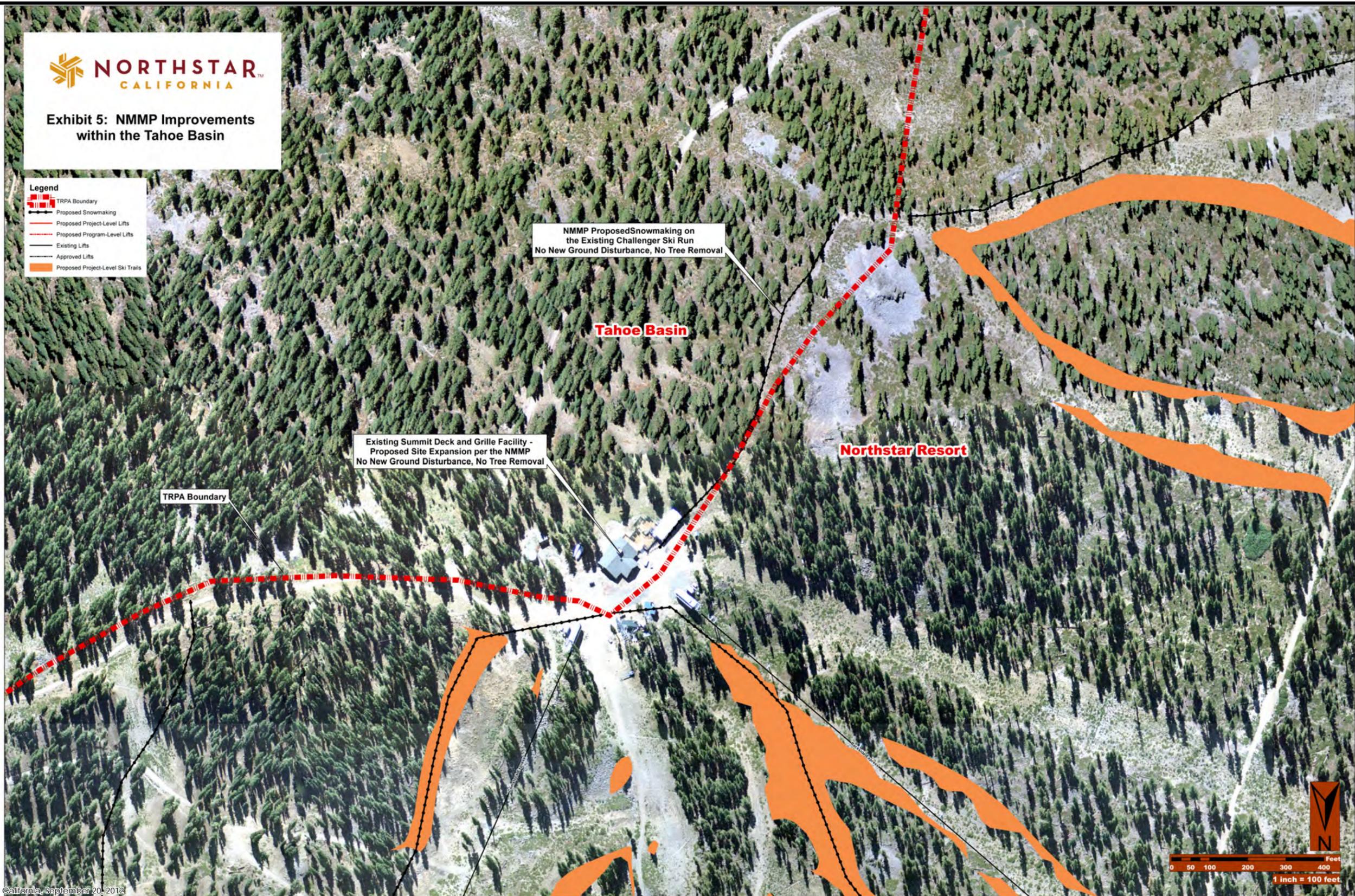


Figure 3-7  
Northstar Mountain Master Plan



### Exhibit 5: NMMP Improvements within the Tahoe Basin

- Legend**
- TRPA Boundary
  - Proposed Snowmaking
  - Proposed Project-Level Lifts
  - Proposed Program-Level Lifts
  - Existing Lifts
  - Approved Lifts
  - Proposed Project-Level Ski Trails



Source: Northstar California, September 20, 2012

Figure 3-8  
Planned Improvements within Tahoe Basin



The proposed additional ski trails and the modernization of ski trails through widening have been designed to consider trail widths more conducive for the larger turning radius of modern ski and snowboard equipment. The design of the trails would provide for a varied ski experience through the retention of tree islands, respecting the fall line, optimal trail widths, minimized cross traffic, and tree feathering along the trail edges, while promoting an environment that more comfortably holds traversing skiers and snowboarders.

The additional ski trail acreage is not expected to increase skier capacity at Northstar; rather, the applicant intends to more fully utilize the existing terrain to meet the demands of modern equipment and the advancements being made in ski and snowboard technique.

### ***C Lift and Associated Ski Trails***

The C lift would be a top-drive high-speed detachable chairlift or fixed-grip chairlift, with the bottom terminal located just south of Sawmill Lake and the top terminal located approximately 700 feet downhill of the existing Vista lift top terminal. A high-speed detachable chairlift is defined as a chairlift that switches from the main cable to a slower, secondary cable for loading and unloading of skiers and snowboarders. As the chair makes its way out of the loading or unloading terminal, it switches back to the main cable, which runs at a much higher speed than a standard fixed-grip chairlift. Due to their higher operating speeds, high-speed detachable chairlifts can move more people uphill per hour when compared to an equivalent fixed-grip chairlift. A fixed-grip chairlift is defined as a chairlift that is permanently affixed to the overhead cable and therefore moves at a slower pace than a high-speed detachable chairlift. The slower pace is required for safety, because skiers and snowboarders must load and unload the chairlift at the same speed it is traveling up and down the hill.

The new ski trails proposed in connection with the C lift would include traditional ski trail construction underneath and to the west of the lift. Snowmaking lines would be installed on all of the proposed ski trails. Approximately 2 to 3 miles of 20-foot-wide cross-country ski trails would be constructed to provide trail connectivity as a result of C lift and ski trail improvements.

The C lift and associated ski trails would provide a new pod of skiing on the eastern slopes at Northstar, helping to reduce traffic on Logger's Loop, the easternmost ski run at the resort. The addition of this pod would help to distribute skiers across the mountain and reduce congestion in the higher-use areas, as well as provide for varied terrain to facilitate a broader guest experience. The C lift would provide for round-trip skiing from the relocated cross-country center/skier service site/campsite area. (Round-trip skiing is a term used to explain how a skier uses a particular lift system. A skier is round tripping when he or she rides up a lift and skis only those trails that lead the individual back to the base of the same lift for another trip.) The proposed "tree skiing" terrain would expand on the type of skiing opportunities offered at Northstar, providing for a more natural skiing experience for different ability and experience levels.

## ***J Lift and Associated Ski Trails***

The J lift would be a top-drive high-speed detachable chairlift, with the bottom terminal located approximately 100 feet uphill of the J1 lift terminal (Highland Gondola) in the Village and the top terminal located at the top of Lookout Mountain, approximately 1,100 feet east of the Lookout Express top terminal.

The J lift is designed to be an additional out-of-Village access lift during peak capacity times from the west end of the Village for those guests seeking the Backside, Lookout Mountain, and the Sawtooth Range. The lift base terminal would be accessed via a pedestrian/skier walkway from the Village under Northstar Drive. This skier underpass was evaluated in the Northstar Village EIR and is described as being approximately 16 feet in height by 50 wide at the bottom of the underpass, and 35 feet long. The underpass would allow for safe skier transit and vertical clearance for snow-grooming equipment. The J lift would include a mid-load terminal approximately one-third of the way up the mountain. The proposed mid-load terminal would accommodate round-trip skiing on the lift's upper reaches.

The new ski trails proposed in connection with the J lift would include traditional ski trail construction mostly on the east-facing slope of Lookout Mountain. The new ski trails would also provide ski-in/ski-out access from the existing Ritz-Carlton at mid-mountain and the Highlands condominiums and townhomes. In addition, a new egress ski trail from the existing Home Run ski trail to the lower segment of the existing Village Run ski trail, and ultimately the Village, would be constructed to help end of day Village access. Snowmaking lines would be installed in some of the proposed ski trails.

## ***V Lift and Associated Ski Trails***

The V lift would be a bottom-drive fixed-grip lift, with the bottom terminal located approximately 1,100 feet west of the existing Backside Express lift bottom terminal, to the south of Schaffer Creek, and the top terminal located near the top of Sawtooth Ridge, toward the east end of the range. Given the remote location of the V lift, the lift operator building may include a composting toilet system, as approved by Placer County Environmental Health consistent with Placer County Code Section 8.24.080.

The new ski trails proposed in connection with the V lift would include limited traditional ski trail construction underneath the lift itself, narrow graded ski trails to facilitate interconnection between the existing Backside ski pod and the proposed W and Z ski pods, and tree island trails. Snowmaking equipment would be installed on the lift line and connector ski trails to ensure the lift could be operated in low snow years.

The V lift and associated ski trails would provide a new pod of skiing at Northstar, helping to distribute skiers across the mountain and reduce congestion in the higher-use areas, as well as provide for varied terrain (i.e., tree islands trails, tree skiing) to facilitate a broader guest experience.

### ***W Lift and Associated Tree Skiing***

The W lift would be a bottom-drive fixed-grip lift, with the bottom terminal located approximately 3,000 feet northwest of the existing Backside Express lift bottom terminal, on the north side of Schaffer Creek, and the top terminal located near the top of Sawtooth Ridge toward the middle of the range. Given the remote location of the W lift, the lift operator building may include a composting toilet system, as approved by Placer County Environmental Health consistent with Placer County Code Section 8.24.080.

Tree clearing associated with W lift construction would be designed with tree islands to reduce visual impacts of the lift line and to provide a skiable path for skiers returning to the base of the lift. Tree skiing terrain, fairly removed from the existing Backside ski trails, would be the main draw of the terrain. Snowmaking would not be installed in this ski pod.

The W lift and associated terrain would provide a new pod of skiing at Northstar, offering a new ski experience of diverse tree skiing removed from the resort core, a destination within the resort itself.

### ***Z Surface Tow Lift and Associated Tree Skiing***

The Z lift would be a surface tow lift located approximately 5,550 feet northwest of the existing Backside Express lift bottom terminal, on the south side of Schaffer Creek, with the top terminal located toward the western edge of the Sawtooth Range. A surface tow lift is defined as a type of cable transportation system used to transport skiers and snowboarders where riders remain on the ground as they are pulled uphill. The Z lift would be installed to follow the terrain to minimize earth disturbance. Snowmaking would not be installed in this ski pod.

No conventional ski trails would be proposed in connection with the Z lift, except for the narrow graded connector trail located on the existing 710 maintenance access road back to the W lift. Tree skiing would occur adjacent to the Z lift, providing a very “backcountry,” wilderness-type ski experience for the more advanced skier.

The Z lift would operate only as snow permits, primarily during and after snow storm events. Access from the lift and the lift line itself would be groomed; however, the remainder of the ski pod would be ungroomed tree skiing terrain. The Z lift would operate under shortened operating hours due to its remote location. The Z lift and associated ski trails would provide access to secluded terrain for a quiet, in-nature experience. This terrain would be used by fewer skiers given the difficulty in gaining access, as well as the limited terrain available.

### ***Fuel Tanks and Standby Engines***

A 1,000-gallon aboveground fuel tank would be installed at the J lift high-speed detachable chairlift and a 500-gallon tank at all the fixed-grip lifts (C, V, and W). No fuel tanks are necessary for the Z lift, as it is a surface tow lift. The fuel tanks would be located at the top of each lift just behind the lift operator enclosure, opposite the lift terminal. The approximate

dimensions of the 1,000-gallon tanks would be 5.67 feet wide by 11.0 feet long and 4.33 feet tall. The 500-gallon tanks would be 4.5 feet wide by 11.0 feet long and 3.33 feet tall. These tanks would be completely sealed concrete tanks that meet all environmental criteria for fuel storage. They would be set on a concrete pad, anchored with earthquake-proof strapping. There is no external containment necessary for these tanks. A standby engine and an evacuation engine would also be located at either the top or bottom terminal of all proposed ski lifts (C, J, V, and W), except the Z lift where it would not be necessary.

### ***Five Skier Bridges***

The project proposes to construct five new skier bridges on the mountain. Four skier bridges would be constructed for ingress and egress to/from the V, W, and Z lifts and associated terrain. The two skier bridges adjacent to the V and W bottom terminals would be constructed across Schaffer Creek to provide skier access to the V and W bottom terminals and associated ski lift access. The two skier bridges over the drainages leading into Schaffer Creek would be constructed to allow skier access from the Backside to the V, and ultimately to the W and Z lifts. The fifth skier bridge would be constructed over the west fork of West Martis Creek to allow skier access from the existing Home Run ski trail to the lower segment of the existing Village run and ultimately to the Village.

Bridges 1 through 4 would be designed as precast span or full span, while bridge 5 would be designed as either a box culvert or bottomless arch pipe. Bridges 2, 3, and 5 would avoid disturbance to the 100-year floodplain and wetlands. Bridge 1 would result in 240 to 1,500 square feet of floodplain and wetland impact, while bridge 4 would result in 750 to 1,200 square feet of wetland impact. The extent of floodplain and wetland impacts vary based on whether the design of these bridges is precast span or full span.

### **Skier Service Site Improvements**

#### ***Existing Summit Deck and Grille Improvements***

The proposed improvements to the existing Summit Deck and Grille located at the top of Mt. Pluto would provide additional food service with seating and restrooms. The improvements would include an addition of approximately 6,000 square feet to the existing structure. Portions of the existing Summit Deck and Grille site and future proposed improvements are located within the Lake Tahoe Basin that is under TRPA jurisdiction and would be subject to compliance with TRPA Code of Ordinances Chapters 30 (Land Coverage), 33 (Grading and Construction), 36 (Design Standards), 37 (Height), 60 (Water Quality), and 65 (Air Quality/Transportation) (**Figure 3-8**).

#### ***Backside Warming Hut***

The proposed new warming hut would be an approximately 5,000-square-foot building located adjacent to the Promised Land Express bottom terminal on the Backside. The warming hut would provide food service, beverages, limited restroom facilities (i.e., a septic system or a composting toilet system, as approved by Placer County Environmental Health consistent with Placer County

Code Section 8.24.080), and picnic area seating at the base of the Backside. Water would be provided from a small well with a water holding tank.

The proposed Summit Deck and Grille expansion would modernize and expand upon the skier services located at the top of Mt. Pluto, a key location that serves much of the Northstar terrain. The proposed Backside warming hut would provide a new facility to accommodate the existing Backside skiers and proposed Sawtooth Ridge skiers, alleviating the need to ski back to the top of the mountain or mid-mountain, while assisting in reducing wait times and congestion at the Summit Deck and Grille, Big Springs Day Lodge, and Zephyr Lodge.

### ***Seasonal Spur Roads***

Seasonal spur roads would be extended from the existing 507 road to the J lift top terminal, from the existing 302 road to the C lift bottom terminal, from the existing 503 road to the C lift top terminal, from the existing 703 road and the 704 road to the V lift bottom terminal, from the existing 703A road to the V lift top terminal, and from the existing 705 road to the W lift bottom terminal (**Figure 3-9**). These seasonal spur roads would be approximately 12 feet wide with a native earth surface and would not exceed a grade of 15 percent, except that pitches of up to 20 percent would be allowed for less than 500 continuous feet and would implement appropriate best management practices (BMPs) before, during, and after construction activities. All seasonal spur roads would be graded to reflect the natural terrain, and all cut and fill slopes would have a maximum slope of 2:1, unless favorable geotechnical conditions would allow for an alternative slope configuration. Seasonal spur roads would be sloped (2 percent) to allow for stormwater flow and infiltration into adjacent natural terrain. Outsloping waterbreaks/rolling dips would be installed to allow water to be discharged into vegetative cover, duff, slash, rocks, or less erodible material sufficient to dissipate the water's energy and infiltrate or disperse runoff in a manner that does not cause erosion. Water breaks/rolling dips would meet all the requirements of Sections 934.6(a) and (b) of the Forest Practices Act regarding construction and spacing requirements. Culverts could be installed at low points in the seasonal spur roads, if necessary, to direct overland flow.

The roadway to the relocated cross-country center/skier service site /campsite area (program-level components described in subsection 3.4.2 below) would extend from the existing Highlands View Drive/300 road intersection to the 500 road intersection with some new roadway extending from the 500 road to the south and would be paved approximately 22 feet wide with 2-foot shoulders. The roadway would be graded to reflect the natural terrain and would incorporate snow storage areas. This access from Highlands View Drive would be mostly provided through roadway improvements necessary for the relocated mid-mountain maintenance facility, as evaluated in the Northstar Highlands EIR.

## **3.4.2 DESCRIPTION OF PROGRAM-LEVEL COMPONENTS**

The following is a description of the program-level components associated with the proposed project. The applicant has proposed these improvements at a conceptual design level at this time. Further details would be required for additional environmental analysis as part of project-specific entitlements.

### **Q Lift Ski Pod**

The Q lift ski pod would be infill resort development on Lookout Mountain. The Q lift is anticipated to be a top-drive fixed-grip chairlift, with the bottom terminal located approximately 3,700 feet to the west of the Martis Camp Express lift, prior to the extension of this chairlift into the Martis Camp Subdivision. The top terminal would be located approximately 450 feet to the west of the Martis Camp Express lift top terminal.

The Q lift and associated ski trails would provide a new pod of skiing at Northstar, assisting with distribution of skiers across the mountain and reducing congestion in the higher-use areas. It would also provide for varied terrain to facilitate a broader guest experience.

### **Castle Peak Parking Lot Transport Gondola**

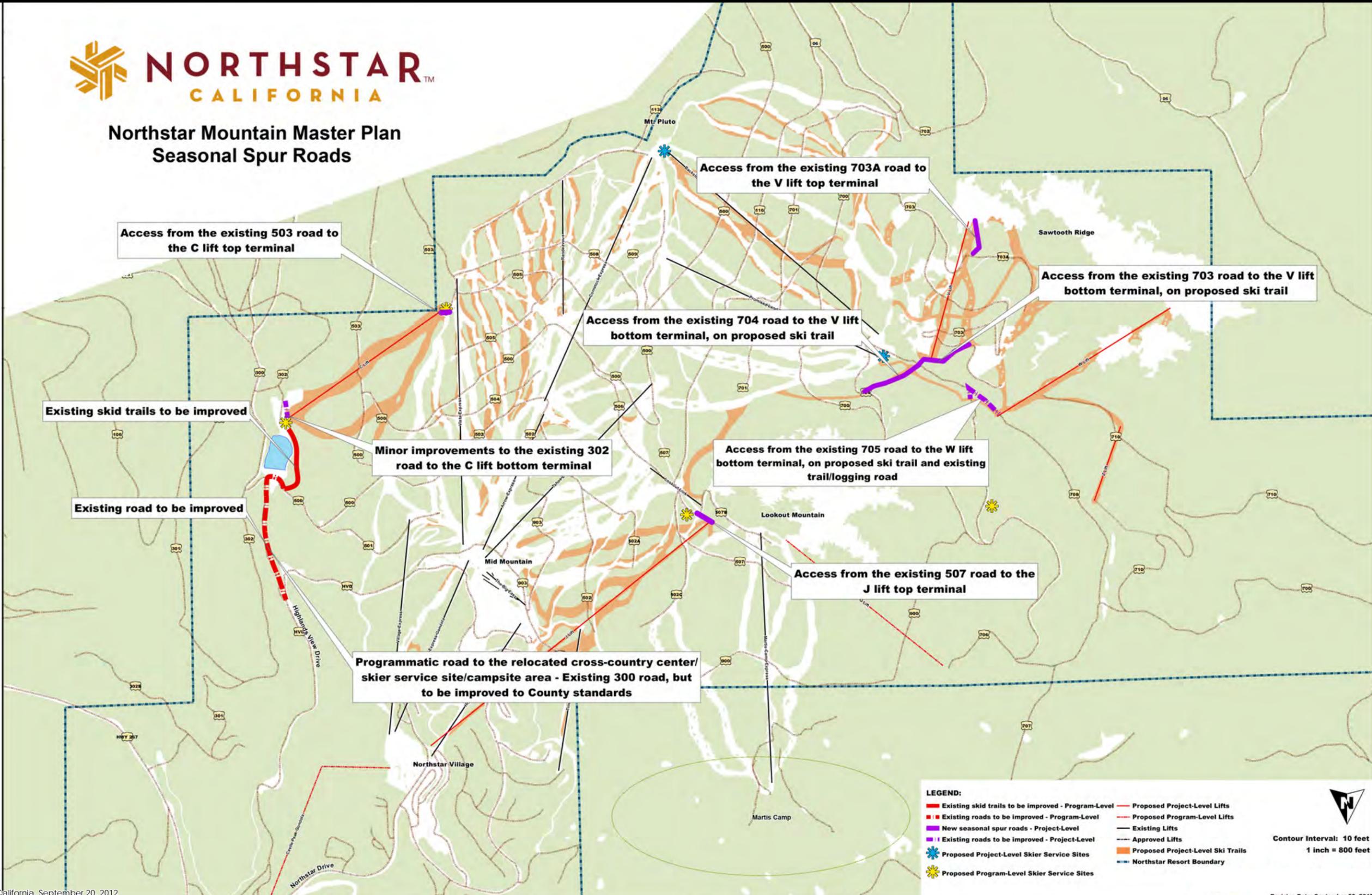
The Castle Peak Parking Lot Transport Gondola is anticipated to be a six-passenger gondola and would provide skier transport from the Castle Peak parking area to the Village, assisting with a reduction in vehicle trips on Northstar Drive and providing a convenient and redundant Village access. Skiers who park at the Castle Peak parking area would be transported by the proposed transport gondola. A seasonal spur road would be necessary at points along the gondola alignment for maintenance.

### **Skier Access from Lookout Mountain to the W Lift Bottom Terminal**

There is currently limited skier access during high snow conditions from the top of Lookout Mountain to the Backside, called the White Rabbit terrain. Additional tree clearing in this open, rocky terrain would occur as necessary to allow access to the W lift bottom terminal and associated Sawtooth terrain when snow conditions allow. Snowmaking would not be installed with this clearing.



# Northstar Mountain Master Plan Seasonal Spur Roads



Source: Northstar California, September 20, 2012

Revision Date: September 20, 2012

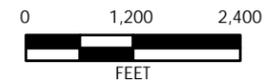


Figure 3-9  
Existing and Proposed Spur Roads  
PMC

### **Three Skier Service Sites**

Three skier service sites would be constructed to provide additional food service, restroom facilities, and on-mountain seating areas. One of the proposed skier service sites would include an approximately 8,000-square-foot building located at the top of the C lift. A small well with a water holding tank would provide water service, and a septic or composting toilet system would be provided for sewer service at the site.

The second proposed skier service site would include an approximately 8,000-square-foot building located near the top of Lookout Mountain. Domestic water and sewer service would be extended from the existing Zephyr Lodge system or provided by a small well with a water holding tank and a septic or composting toilet system at the site.

The third skier service site includes relocation of the existing cross-country ski center, located east of the Vista Express chairlift bottom terminal, to the area south of Sawmill Lake. The relocated cross-country center/skier service site would include an approximately 7,500-square-foot lodge offering limited food service with seating, restroom facilities, and a 20-space parking lot. Utilities to the site would be extended from existing utilities located within Highlands View Drive and the mid-mountain area. In addition to the lodge, approximately 2 to 3 miles of 20-foot-wide cross-country ski trails would be constructed in the area adjacent to Sawmill Lake as described for the C lift in the project-level components above. A campsite area is proposed to be located adjacent to the relocated cross-country center/skier service site and would offer a variety of camping and educational opportunities designed to promote environmental stewardship by providing recreational learning experiences in nature. It is anticipated that the cross-country center lodge facilities (food service with seating and restroom facilities) would accommodate campers during the summer months. The campsite would include group tents to accommodate up to 50 people and one fire pit for interpretive evening discussions.

The roadway to the relocated cross-country center/skier service site /campsite area would extend from the existing Highlands View Drive/300 roadway intersection to the 500 road intersection with some new roadway extending from the 500 road to the south and would be paved approximately 22 feet wide with 2-foot shoulders. The roadway would be graded to reflect the natural terrain and would incorporate snow storage areas.

### **Backside Campsite Area**

A remote campsite area is proposed to be located on the Backside and would offer a variety of camping and educational opportunities designed to promote environmental stewardship by providing recreational learning experiences in nature. Access to this site would be by van via the existing 900 road to the 705 road in the summer and by snowcat in the winter. No private vehicles would be used to access the site. The campsite is anticipated to include group tents to accommodate up to 50 people, one cooking tent, one dining awning, and one fire pit for interpretive evening discussions. Water would be provided from a small well with a water

holding tank, sewer service by a septic system or composting toilet system, and power would either be extended from the W lift bottom terminal or provided by a generator.

### 3.4.3 PROJECT VISITATION AND PARKING ACCOMMODATIONS

The proposed NMMP has been designed to accommodate both a day skier population and the destination-oriented guest. Given the approved bed-base and commercial venues, the proposed project is designed to extend the vacation experience for the destination visitor. The applicant anticipates that although the number of day skier parking spaces would not increase, there would be an increase in overall resort visitation given the new and approved but yet to be developed residential units. **Table 3-3** summarizes approved development projects in Northstar.

**TABLE 3-3  
SUMMARY OF APPROVED LARGE-SCALE DEVELOPMENT PROJECTS IN  
NORTHSTAR**

Project Name	Approved Residential Development
Northstar Village Expansion	213 dwelling units
Northstar Highlands	1,546 dwelling units
Northside	137 dwelling units
The Retreat Subdivision	18 dwelling units
Martis Camp <sup>1</sup>	726 dwelling units

*1. While Martis Camp is not located within Northstar, it has access to the resort through the Martis Camp Express lift terminal within Martis Camp.*

The environmental effects of these development projects were addressed in the following EIRs:

- Northstar Village EIR (State Clearinghouse No. 2001012081)
- Northstar Highlands EIR (State Clearinghouse No. 2003012086)
- Northside EIR (State Clearinghouse No. 2004112009)
- Retreat Subdivision (State Clearinghouse No. 2003032042)
- Siller Ranch (now known as Martis Camp) EIR (State Clearinghouse No. 2003022122)

These EIRs contemplated that on-site day skier parking would not be added and that increased utilization at Northstar would come about primarily via an increased bed-base. Associated traffic and parking impacts were evaluated as a result of these projects. The proposed NMMP would assist in accommodating skiers.

The major factors constraining mountain recreational capacity at Northstar are parking and transportation, rather than ski lift or ski terrain capacity. Access to Northstar is limited by the number of existing on-site parking spaces. Typically when these spaces are filled, the resort notifies customers through various means that parking is unavailable.

Northstar does not propose to expand parking facilities with the NMMP, except for 20 parking spaces to accommodate the future program-level proposed relocated cross-country center/skier service site and campsite as previously stated. The Northstar Traffic and Parking Management Plan (2013) has been developed to refine current traffic and parking management activities during the wintertime at Northstar under the following skier attendance levels and would be utilized with the proposed project (**Appendix 3.2**):

- Blue level days (low): 0 to 3,000 total expected skier visits
- Green level days (medium): 3,100 to 4,500 total expected skier visits
- Yellow level days (medium high): 4,501 to 7,000 total expected skier visits
- Red level days (high): 7,001+ total expected skier visits
- The management strategies and facilities (**Figure 3-10**) described below are used.

### **Bus Fleet Composition**

Northstar has a fleet of approximately 40 buses that are used to operate transit services. These buses consist of the following categories:

- Parking shuttles: 18 transit buses with average capacity of 37–55 passengers
- Small shuttles: 16 cutaways or similar with average capacity of 25–45 passengers
- Other shuttles: 5 buses with average capacity of 42 passengers

### **Peak Day Parking Management**

When peak days are experienced and on-site parking spaces reach capacity, Northstar notifies guests through the following means that parking is unavailable:

- Information is provided via low-wattage AM radio, the website, and changeable message signs (CMS) installed within the California Department of Transportation (Caltrans) or Town of Truckee right-of-way notifying customers that Northstar parking is full and to avoid SR 267.

### **Measures Implemented to Assist Entering Traffic Routes**

Information is provided via low-wattage AM radio, the website, and CMS to inform incoming drivers that drop-off activity can be accommodated at the Auto Drop-Off Zone and to direct traffic to the Village View Lots or the Castle Peak Park-and-Ride Lots. These messages focus on communicating the convenience of the transit shuttle service. The following additional measures are performed:

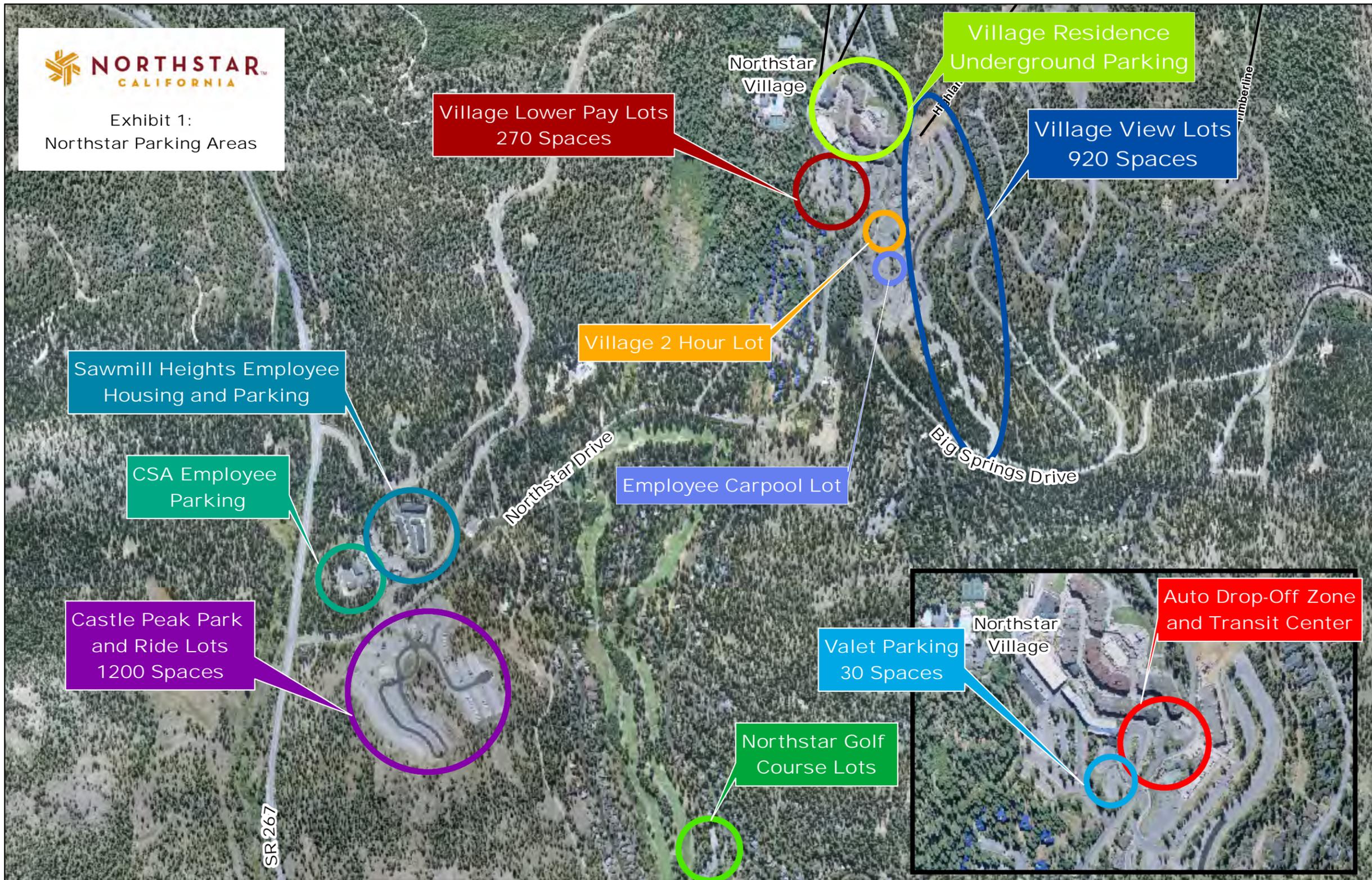
- On peak days, Northstar provides manual traffic control at the Northstar Drive/Big Springs Road intersection.

- Northstar coordinates with Caltrans on traffic light timing on the SR 267 corridor.
- Northstar provides an on-site dial-a-ride service for +/-2,000 homes and condominiums and on-site employee housing to reduce traffic on the Northstar roadway infrastructure and promote efficient ingress/egress for guests.

### **Auto Drop-Off Zone**

Modifications have been completed to improve traffic flow within the Auto Drop-Off Zone and along Northstar Drive from Big Springs Drive to the Auto Drop-Off Zone. This also aids in emergency access. Other measures include:

- A fire lane access point is designated along the curb using signs and painted curb.
- Traffic management training is provided for all Auto Drop-Off Zone staff.
- The Auto Drop-Off Zone is managed with orange cones or directional signage on posts to make one travel lane and two drop-off lanes. Parking control staff actively move cones/signs to aid drivers attempting to enter/exit the Auto Drop-Off Zone.
- All staff have a distinguishable uniform and high-visibility safety vests when directing guests.
- “No Unattended Vehicles” signs are posted in the Auto Drop-Off Zone. Parking control staff actively monitor this area to keep drivers with their vehicles in case they need to be moved in order to provide emergency vehicle access.



Source: SE Group

Figure 3-10  
Northstar Parking and Traffic Management Facilities

### **Village View Lots**

The Village View Lots are parked first and then the Castle Peak Park-and-Ride Lots are parked if needed. The following measures are implemented regarding the parking of the Village View Lots:

- Traffic is directed to enter from Lot K, off of Big Springs Drive and west of Martis Landing. Directional signage is placed on Big Springs Drive between Northstar Drive and the entrance to Lot K indicating “Guest Parking” with a directional arrow.
- Parking shuttles are available from 8:00 AM until 10:00 PM daily during the ski season in the Village View Lots.
- Employee parking is in Village View Lots E–K during the winter season.
- Lots are staffed as needed to efficiently manage inbound and outbound parking activity.
- A CMS is installed on Northstar Drive (approximately 200 feet north of Big Springs Road) to direct arriving guests to the free parking in the Village View Lots or Village Lower Pay Lots north of the Village.

### **Castle Peak Park-and-Ride Lots**

Parking shuttles are available when this lot opens for guests and employees. Parking staff is provided to greet and direct guests in this lot. Staffing levels are adjusted based on business volumes.

- Parking shuttles operate from these lots to the Northstar Transit Center.
- Off-site tour buses that are organized through Northstar Group Sales are parked in Lot 18 on green, yellow, and red level days and park in the Valet Lot (below the Transit Center) on all blue level days (3,000 skier visits or less expected)
- A CMS is installed on Northstar Drive (approximately 200 feet east of the Northstar Drive roundabout) to direct arriving guests to the Village View Lots and Castle Peak Park-and-Ride Lots.

### **Village Lower Pay Lots**

- Staffing starts between 6:30 and 7:00 AM daily.
- A paid parking attendant is stationed at the entrance of the paid lot to collect money and direct guests to a parking space.
- The Valet Lot is located between the Transit Center and Village Lower Pay Lots. The Valet Lot is open on weekends and holidays beginning in mid-December.
- Short-term, two-hour parking is provided in the Village Two-Hour Lot on the left of Currant Drive. The Village Two-Hour Lot provides parking for guests coming to dine and shop in the Village and Ski School drop-off, with two-hour parking limits monitored by Northstar staff.

## 3.5 PROJECT EMPLOYEES

Based on information provided by the applicant, additional employees would be added to Northstar in phases as part of the project, with buildout totals described below.

### 3.5.1 PROJECT-LEVEL COMPONENT EMPLOYMENT

Project-level components would result in the following additional employment at Northstar:

- Additional full-time equivalent employees during the winter season: 65
- Additional year-round full-time equivalent employees: 4

### 3.5.2 PROGRAM-LEVEL COMPONENT EMPLOYMENT

Program-level components would result in the following additional employment at Northstar beyond the project-level component employment noted above:

- Additional full-time equivalent employees during the winter season: 37
- Additional year-round full-time equivalent employees: 1
- Additional full-time equivalent employees during the summer season: 3

## 3.6 NORTHSTAR HABITAT MANAGEMENT PLAN (HMP)

The NMMP has evolved over the last 15 years, most notably in the last four years as a result of the Northstar Habitat Management Plan (HMP) (completed in 2009), to more carefully consider the surrounding environment and associated intensity of skier improvements. The first NMMP drafts developed in the late 1990s and early to mid 2000s included additional ski lifts, increased ski trails in areas outside of the resort core, and additional skier service sites. Northstar has taken over a decade to develop and design the NMMP in response to the demands of the changing ski industry and the growing bed-base (i.e., Village, Highlands, Northside), while being sensitive to the surrounding landscape as considered in the HMP. The Northstar HMP has been considered in the context of existing and planned future land uses at Northstar, aiming to balance future projects at the resort with maintenance of important natural resource values on Northstar lands.

The purpose of the Northstar HMP (**Appendix 3.3**) is to maintain and enhance the natural resource values of Northstar, while allowing for current and planned future land uses (including the proposed NMMP) in a manner that is compatible with those values. The HMP provides a programmatic framework for the long-term management, conservation, and monitoring of biological resources at Northstar. The HMP is intended to be refined and updated every five years. Implementation of the HMP is intended to minimize the biological and water quality impacts of development activities (including the proposed NMMP) through the following key features.

### 3.6.1 DESIGN AND MANAGEMENT PRACTICES

HMP Chapter 4 (Land Use and Habitat Management Strategy – **Appendix 3.3**) sets forth design and management practices that would be applied to all project components to support attainment of resource management targets and regulatory requirements. These include designing project improvements to limit the extent of overall land disturbance and tree removal, protection of sensitive habitats (e.g., riparian, aquatic, and meadow habitats), and construction impact minimization measures including measures to avoid effects to the following sensitive wildlife species (see HMP pages 4-5 through -19, **Appendix 3.3**):

- Northern goshawk
- California spotted owl
- Willow flycatcher
- Mule deer
- American marten

In addition, the HMP establishes natural resource targets and identifies design and management practices for five land use and resource management zones encompassing the entire Northstar property (**Figure 3-11**). Each zone incorporates a land use and habitat management strategy from intensive use to habitat transition to conservation that guides and has become the basis for project planning at Northstar. Land use and resource management Zones A, B, C, D, and E are described below (Zones C, D, and E are further subdivided into subzones).

- **Zone A: Developed Community (approximately 1,583 acres)**

Zone A is the most developed zone of the resort, and land uses are intensive. Land uses include commercial and residential development, ski operations, other recreational facilities, and open space. The west fork of West Martis Creek flows through this zone.

- **Zone B: Intensive Ski Area Development (approximately 2,430 acres)**

Zone B is an area designated for intensive ski area development. This zone already contains an extensive network of unpaved roads, ski runs, trails, and associated facilities. Schaffer Creek and the west fork of West Martis Creek flow through this zone.

- **Zone C: Intensive Recreation Use Area (approximately 894 acres)**

Zone C contains numerous recreational trails and backcountry roads that are used for a variety of activities, including cross-country skiing, hiking, horseback riding, fishing, mountain biking, and off-road vehicle driving. West Martis Creek flows through the Sawmill Flats reservoir in Zone C.

■ Zone D: Recreation Use/Habitat Transition Area (approximately 902 acres)

Zone D is a recreational use and habitat transition area that provides a transition from the intensive recreational uses of Zones A, B, and C to the Zone E Habitat Conservation Area. Zone D is separated into three subzones that differ in recreational uses and habitats. Subzone D1 is the northern portion of Zone D and contains the western slopes of Lookout Mountain. Subzone D2 is the southwestern portion of Zone D and extends from Sawtooth Ridge to Schaffer Creek. Subzone D3 is the southeastern portion of Zone D, and like Subzone D2, it extends from Sawtooth Ridge to Schaffer Creek.

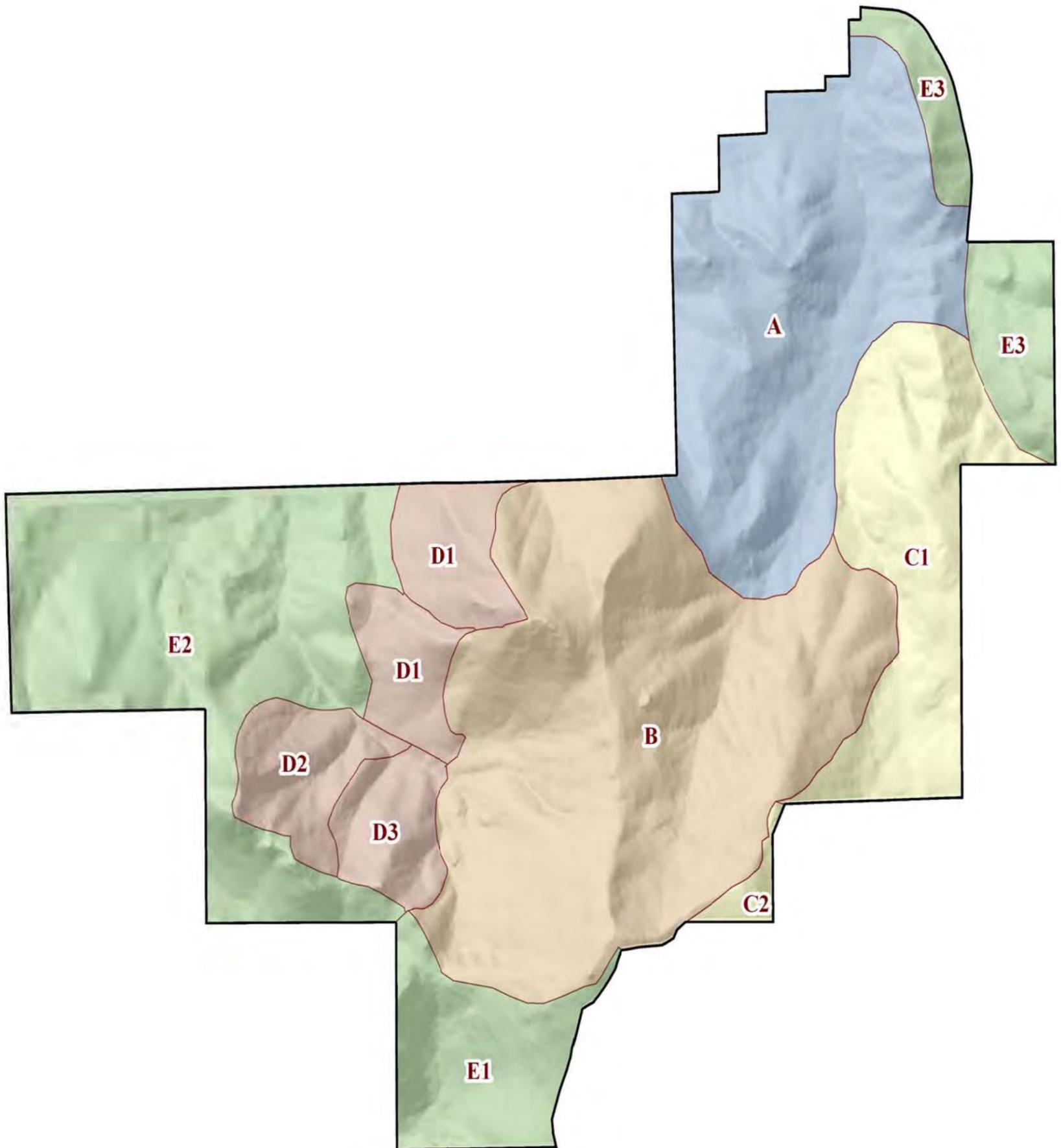
■ Zone E: Habitat Conservation Area (approximately 1,964 acres)

Zone E is designated as a Habitat Conservation Area. However, the Z surface tow lift is planned in Subzone E2. This zone is divided into three subzones that differ in their habitats, land uses, and surrounding land uses. Subzone E1 is located at the southerly portion of the Northstar property and is surrounded by United States Forest Service (USFS) land. It consists primarily of a south-facing slope and includes a portion of a tributary of Martis Creek. Subzone E2 is located in the western portion of the Northstar property. It includes portions of the southern slope of Sawtooth Ridge, the northern portion of Schaffer Creek, and segments of Martis Creek. Most of Subzone E2 is surrounded by USFS land. Subzone E3 is located at the northeasterly portion of the Northstar property. It is bordered on the west and south by State Route 267 and on the north and east by private land. Middle Martis Creek flows along its eastern and northern boundary.

The proposed NMMP has incorporated the HMP land uses, design principles, and management practices into its overall design, with more intensive land uses clustered in Zones A, B, and C, and less intensive uses more predominant in Zones D and E. Elements of the land use and habitat management strategy have been integrated into site-specific design of proposed ski lifts and trails, snowmaking facilities, skier service sites, and campsites, resulting in the NMMP project as proposed.

### **3.6.2 HABITAT ENHANCEMENT**

Chapter 5 (Habitat Enhancement Plan) of the HMP identifies habitat enhancement criteria and techniques to improve the quality and acreage of conifer forest (including late seral forests) and riparian and stream habitats.



**LEGEND**

- Planning Area
- Habitat Management Zones
  - Developed Community (A)
  - Intensive Ski Area Development (B)
  - Intensive Recreation Use Area (C)
  - Recreation Use/Habitat Transition Area (D)
  - Habitat Conservation Area (E)

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Source: Northstar California, September 20, 2012



Figure 3-11  
Northstar Habitat Management Plan Planning Area

### 3.6.3 MONITORING AND ADAPTIVE MANAGEMENT

HMP Chapter 6 (Monitoring and Adaptive Management Framework) sets forth an adaptive management process that includes establishing:

- Indicators of ecosystem functions or habitat values
- Measurable or observable targets for indicators
- Documentation and monitoring
- Revision of management practices as necessary to attain targets

### 3.7 MARTIS VALLEY COMMUNITY PLAN AMENDMENT

The applicant proposes an Amendment to the Martis Valley Community Plan (MVCP) in order to relocate an existing Tourist/Resort Commercial land use area from the west side of the mountain (Backside Campsite) to the cross-country center/skier service site/campsite area at the bottom of the proposed C lift (**Figure 3-5**). The reason for this shift is that the existing Tourist/Resort Commercial land use designation for the Backside Campsite is not necessary for the installation of the campsite, and the campsite would be more consistent with the surrounding Forestry land use designation. Conversely, the bottom of the proposed C lift, which is currently designated Forestry, is planned to be developed at the program level with a commercial use (skier service site) and would require a Tourist/Resort Commercial land use designation. It is important to note that the applicant proposes only the relocation of an existing land use designation and not the creation of new Tourist/Resort Commercial land use area within the MVCP. This would occur as part of NMMP project-level components.

In addition to exchanging the MVCP land use designations as described above, the applicant proposes adjusting each of the land use squares slightly southward and uphill from their present locations (**Figure 3-5**). This adjustment is necessary to allow for the installation of the campsite and the skier service area in the areas for which they are geographically and topographically best suited.

### 3.8 REZONE/RELOCATION OF EXISTING ZONING

A Rezone is requested in order to align the two Forestry zoning squares with the adjusted MVCP land use designation squares mentioned in Section 3.7. The zoning squares, like the land use designation squares, would also be adjusted slightly southward and uphill from their present location (**Figure 3-12**).

### 3.9 ZONING TEXT AMENDMENT

A Placer County Zoning Text Amendment is proposed to allow for the orderly development and implementation of ski lift facilities and ski runs on Timberland Production Zone (TPZ) lands within existing ski resort boundaries (approximately defined by land ownership, trail maps, and ski area boundaries as of March 15, 2012) in Placer County. As proposed by the applicant,

allowing the implementation of ski lift facilities and ski runs would address the identified constraint within the TPZ at Northstar.

Additionally, to address comments submitted during the NOP public scoping period that pertain to potential unforeseen impacts of a countywide Zoning Text Amendment to allow ski lift facilities in the TPZ, the applicant has revised the requested Amendment to exclude TPZ lands that exist within the Tahoe Basin.

Similar to the existing Placer County FOR (Forestry) zoning district, which allows ski lift facilities and ski runs as a conditionally permitted use, the applicant proposed to modify Section 17.16.010(D) (Allowable Land Uses and Permitted Requirements – Timberland Production District) of the Placer County Code to allow the following as a Minor Use Permit under “Recreation, Education, and Public Assembly Uses”:

*Ski lift facilities and ski runs, outside the Lake Tahoe Basin, within land boundaries owned and/or operated by existing ski resorts as of March 15, 2012.*

To implement this proposed Zoning Text Amendment, the applicant is also requesting the following modification (the proposed additional language is underlined) to Section 17.04.030 (Definitions) of the Placer County Code as follows:

*“Ski lift facilities” and “ski runs” (land use) mean the use of ski lifts, ski runs, and trails. Ski lift facilities include powered conveyors for transporting skiers or sightseers up a mountainside, with terminals at each end and supporting towers along the route. Ski lifts can be chair lifts, surface lifts, gondolas, or cable cars. Ski runs include slopes intended for downhill skiing, and paths or trails for cross-country or Nordic skiing, and helicopter skiing runs. Ski facilities also include snow-making, helicopter skiing facilities, and related commercial facilities such as equipment rental and storage lockers, warming huts, restaurants and bars, and overnight lodging accommodations.*

*Within the TPZ, “ski lift facilities” and “ski runs” (land use) mean the use of ski lifts, ski runs, and trails within land boundaries, that, as of March 15, 2012, were owned and/or operated by existing ski resorts and which are not located within the Lake Tahoe Basin boundary. Ski lift facilities include powered conveyors for transporting skiers or sightseers up a mountainside, with terminals at each end and supporting towers along the route. Ski lifts can be chair lifts, surface lifts, gondolas, or cable cars. Ski runs include slopes intended for downhill skiing, and paths or trails for cross-country or Nordic skiing. Ski facilities also include snow-making and related noncommercial support facilities.*

As proposed, the amendment would only apply to existing ski resorts and within existing resort boundaries as of March 15, 2012, and outside the Lake Tahoe Basin boundary. The proposed language effectively limits its applicability to the existing ski resort boundaries within Northstar because Northstar is the only existing ski resort in Placer County that has TPZ lands within its current boundaries (**Figure 3-13**). This would occur as part of NMMP project-level components.



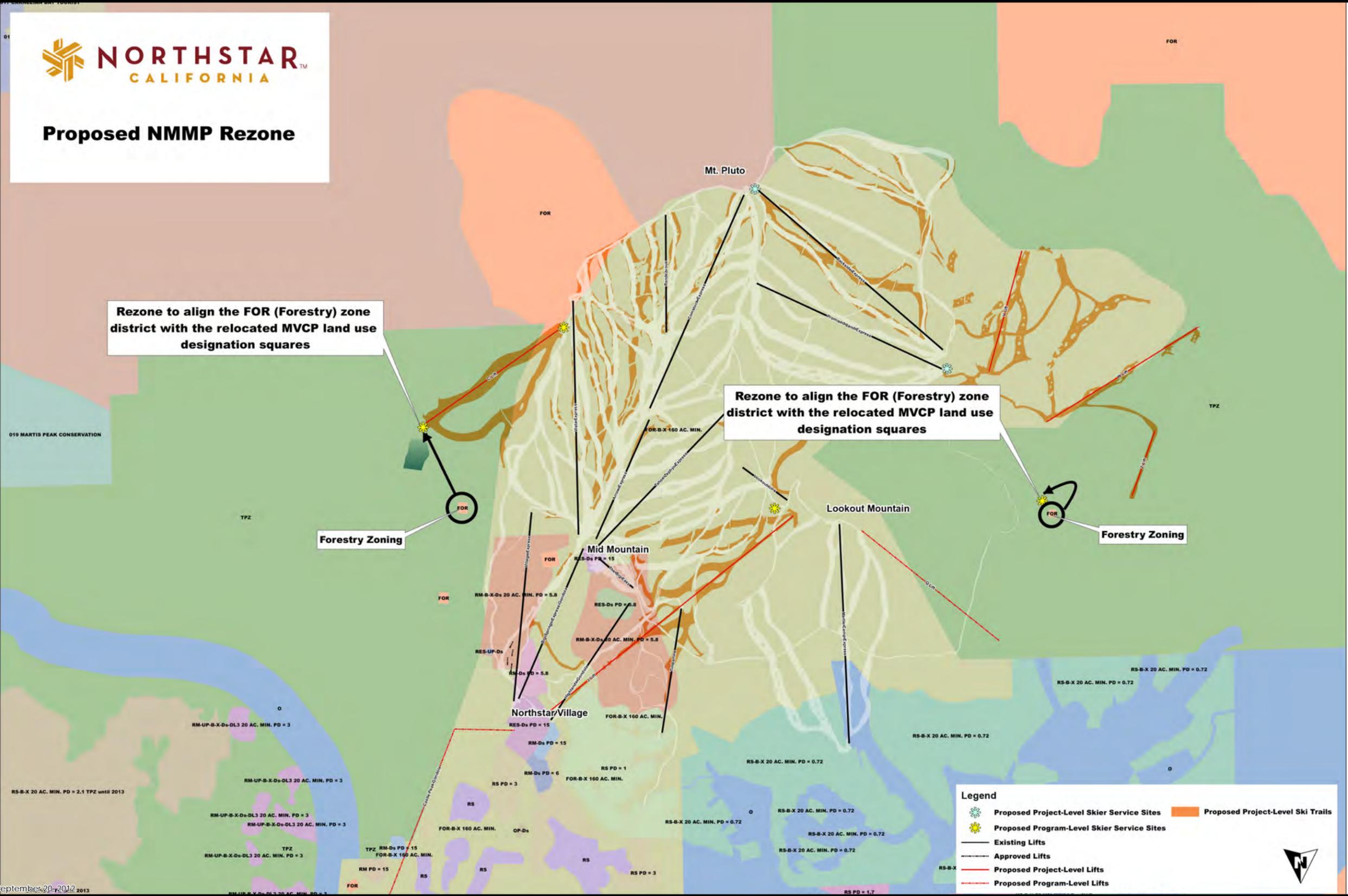
# Proposed NMMP Rezone

Rezone to align the FOR (Forestry) zone district with the relocated MVCP land use designation squares

Rezone to align the FOR (Forestry) zone district with the relocated MVCP land use designation squares

Forestry Zoning

Forestry Zoning



Source: Northstar California, September 20, 2012

Not to Scale

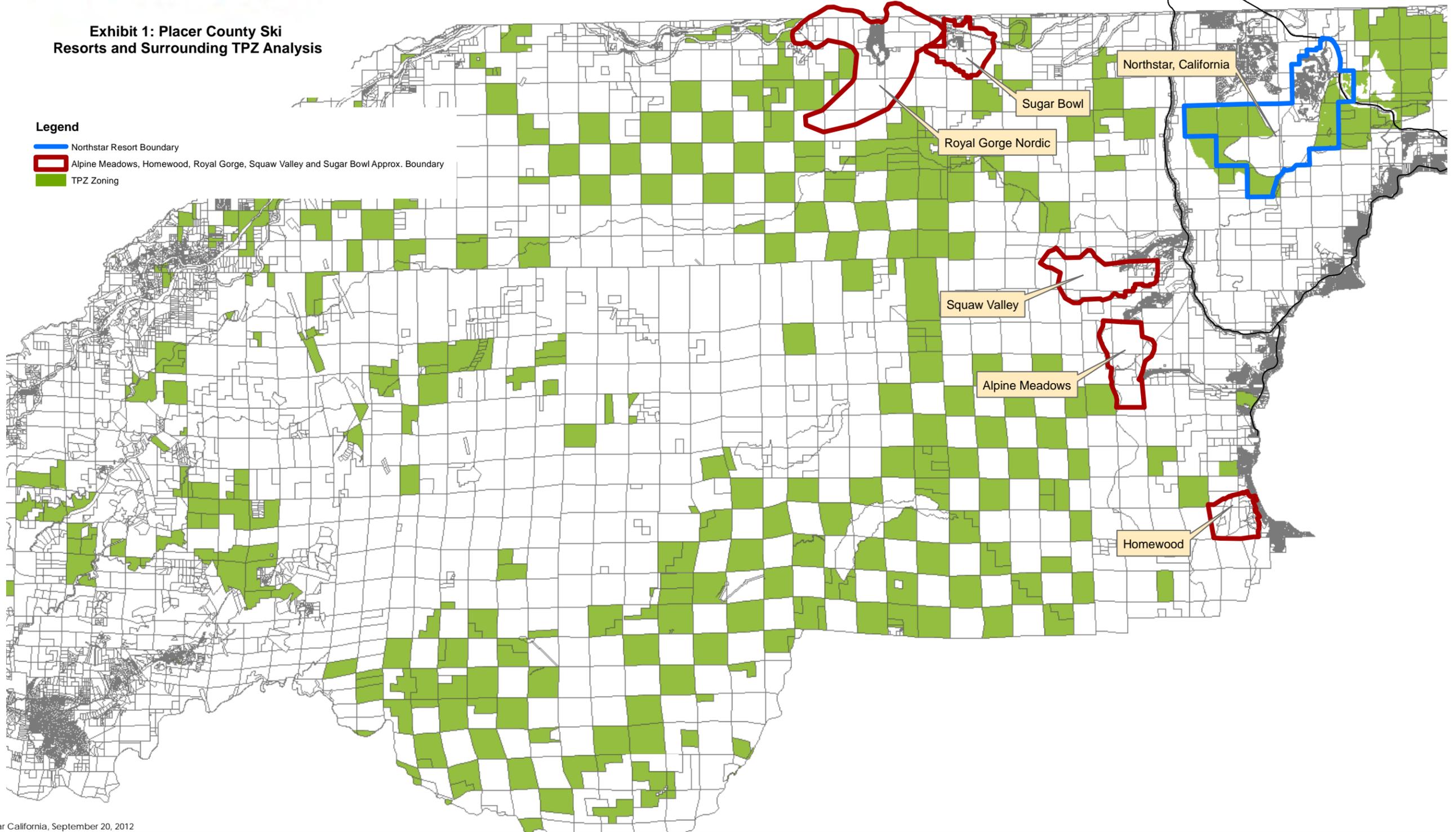
Figure 3-12  
Proposed NMMP Rezone



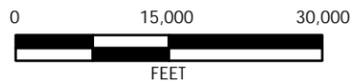
**Exhibit 1: Placer County Ski Resorts and Surrounding TPZ Analysis**

**Legend**

- Northstar Resort Boundary
- Alpine Meadows, Homewood, Royal Gorge, Squaw Valley and Sugar Bowl Approx. Boundary
- TPZ Zoning



Source: Northstar California, September 20, 2012



**Figure 3-13**  
Placer County Ski Resorts and TPZ Lands

### 3.10 PROJECT CONSTRUCTION

It is estimated that the construction period for the proposed project would be phased, with each phase occurring in 5.5-month segments starting on May 1 of each year and ending on October 15. The first phase would be expected to commence in the summer of 2014.

A central staging area, including a temporary office trailer and a parking area for construction workers and equipment, would be needed for the duration of each project phase. Construction staging areas would be used for vehicle, equipment, materials, fuel, lubricant, and solvent storage. Construction access and staging would be sited in existing parking areas and cleared areas on the mountain, to the extent possible, to minimize site disturbance. Construction staging would occur in the Village View (to the west of the Northstar Village) and Castle Peak parking areas, as well as in more project-specific areas on the mountain. The precise staging locations have not been determined, but all would be sited to avoid tree removal and known sensitive resources such as drainages, biological resources, and archeological resources. Upon project completion, the sites would be restored.

The proposed project would involve tree clearing, earthwork activities, and construction activities associated with ski lifts (terminals, towers, lift operator buildings, fuel tanks, and standby engines), ski trails, snowmaking and utilities, skier bridges, skier service sites, the cross-country center relocation and campsite areas including cross-country ski trail relocation, and seasonal spur roads. Construction equipment to be used during project construction is summarized in **Table 3-4**.

**TABLE 3-4  
CONSTRUCTION EQUIPMENT SUMMARY TABLE**

Construction	Equipment
Tree Removal	Rubber Tire Skidder (1) Logging Truck (1) Water Truck (1) Chainsaw (2)
Lift Construction	Excavator (1) Compactor (1) Concrete Truck (1) Water Truck (1) Dump Truck (1) Helicopter (1)
Clearing and Grading	Grader (1) Off Highway Trucks (2) Tractor/Loader/Backhoe (1) Water Truck (1)
Utilities/Joint Trenching	Excavator (2)
Building Construction	Crane (1) Forklift (2) Tractor/Loader/Backhoe (1)

# Northstar Mountain Master Plan EIR

Construction	Equipment
Revegetation Areas	Tractor/Loader/Backhoe (2) Water Truck (1)

### 3.10.1 TREE REMOVAL

Table 3-5 presents a tree removal summary for both the project-level and program-level components of the proposed project.

**TABLE 3-5  
PROJECT TREE REMOVAL SUMMARY**

Project Feature	Approximate Acreage of Tree Removal
<b>Project-Level Components</b>	
Ski Trail, Lift, and Terminal Clearing	293.0
Skier Service Site – Summit Deck and Grille Expansion	0.5
Skier Service Site – Backside Warming Hut	1.0
Cross-Country Ski Trails	2.5
Seasonal Spur Road (V lift top terminal, W lift bottom terminal)*	2.0
Subtotal	299.0
<b>Program-Level Components</b>	
Q Pod	80.0
Castle Peak Transport Gondola	10.0
Ski Trail to W Lift Bottom Terminal	10.0
Two Skier Service Sites	3.0
Existing Cross-Country Center Relocation/Skier Service Site/Campsite Area, and Access Road and Parking	3.0
Cross-Country Ski Trails	2.5
Backside Campsite Area	10.0
Seasonal Spur Roads	3.0
Subtotal	121.5
<b>Grand Total</b>	<b>420.5</b>

*\*All seasonal spur road construction for the project-level components, except for a small segment of the 705 spur road extension to the W lift bottom terminal and the 703A spur road extension to the V lift top terminal, would occur in areas being cleared of trees for ski trails and are included in the ski trail tree clearing acreage calculations.*

Northstar manages its forests pursuant to California Department of Forestry and Fire Protection (Cal Fire) regulation and oversight to ensure maximum forest health, fuels management, and habitat enhancement. Tree removal activities associated with the proposed project would be governed and mitigated per California Timber Harvest Practices (THP) regulations and a Timberland Conversion Application. Prior to tree removal, sensitive resources would be identified and the appropriate setback would be determined for tree removal and construction

avoidance. Areas designated as waters of the United States, including wetlands, streams, and riparian zones (collectively WoUS/wetlands), would be flagged or fenced prior to the commencement of tree removal or construction. Best management practices (BMPs) would be implemented to avoid tree removal or construction impacts to the WoUS/wetlands. WoUS/wetland construction precautions would include establishing and maintaining exclusion zones, conducting construction monitoring, and incorporating BMPs to avoid temporary tree removal/construction-related impacts such as erosion and sedimentation.

Trees would then be logged and hauled, vegetation would be removed, and tree stumps would be cut flush, with slash piled and chipped or masticated. To minimize soil erosion impacts of tree clearing operations, water breaks would be installed on roads and log landings to ensure they are appropriately constructed and located to allow water to be discharged into heavy vegetative cover, duff, slash, rocks, or less erodible material sufficient to dissipate the water's energy and quickly infiltrate or disperse runoff in a manner that does not cause erosion. Water breaks would meet all the requirements of Sections 934.6(a) and (b) of the Forest Practices Act, would be installed along proposed skid trails (ski trails) at approximate 50- to 200-foot spacing (dependent on gradient) in order to prevent transport of eroded earthen materials and other wastes, and would be constructed on conclusion of use of tractor roads, logging roads, and landings that do not have permanent and adequate drainage facilities or drainage structure. Where feasible, woodchips and woody debris would remain on the ski trail to stabilize the soil.

After tree removal on proposed ski trails, including cross-country trails, smoothing of some trails would be performed. Smoothing would occur at selected points along the ski trails that require minimal adjustments to the slope contour and would consist of minor regrading of the trail to achieve a relatively smooth surface. This would allow for operation of the trails in low snow periods. Smoothing, for this project, has been defined as no surface irregularities (protrusions or depressions) with a relative relief of more than 1 foot in a 20-foot area. Smoothing generally consists of the removal of vegetation, selected stumps, rocks, and boulders, and localized earth regrading. Stumps would remain in fill areas greater than 2 feet and smoothing areas not requiring their removal. Upon completion of smoothing operations, mastication or chipping of remaining material would stabilize the slope. This treatment would minimize soil compaction and disturbance of the soil profile while leaving a stabilized woodchip ski slope. Chipping would occur on steeper slopes where mastication is not feasible. Where the soil profile has been disturbed, revegetation would be required. Water breaks would be installed, as necessary, in smoothed areas.

Trimming of riparian vegetation along stream corridors would occur in the fall after the mule deer fawning season and the willow flycatcher nesting season (after July 31). Trimming would facilitate low snow ski operations, while leaving the root system of the vegetation undisturbed.

Open pile burning would be implemented in vegetation removal areas that are inaccessible for chipper use (i.e., on slopes greater than 35 percent). Remaining slash would be hand-piled, covered with plastic, and burned only when the soil surrounding the area is saturated and with Cal Fire, Placer County Air Pollution Control District (PCAPCD), and Truckee Fire Protection

District approvals. In order to address wildfire safety concerns associated with open pile burning, timber harvesting hours of operation would occur when fuel moisture is high and temperatures are cooler; equipment would not be in operation if conditions were not appropriate (i.e., preheated fuels, low fuel moisture content, and up-canyon winds in the afternoon increase the likelihood of fire); and equipment would be fitted with spark arresters to reduce fire potential. Terminal building roofs would also be constructed of noncombustible materials. As required by the PCAPCD, specific provisions would be implemented to mitigate air quality concerns associated with the burning of slash.

Design and management practices for proposed ski lift and trail improvements are described in detail on pages 4-6 through -10 of the Northstar Habitat Management Plan.

**3.10.2 ANTICIPATED GRADING ACTIVITIES**

Table 3-6 identifies anticipated grading for the project components.

**TABLE 3-6  
ANTICIPATED GRADING ACTIVITIES**

Project Component	Cut	Fill	Net <sup>1</sup>	Area Disturbed
	Cubic Yards	Cubic Yards	Cubic Yards	Acres
<b>Project-Level</b>				
C Lift Towers and Terminals	2,696	2,696	0	2.7
J Lift Towers and Terminals <sup>2</sup>	4,766	4,200	566	3.7
V Lift Towers and Terminals	1,767	1,767	0	2.1
W Lift Towers and Terminals	2,007	2,007	0	2.9
Z Lift Surface Tow	772	772	0	1.1
Ski Trails <sup>3</sup>	165,092	165,092	0	50.3
Utility and Snowmaking Trenching (107,133 linear feet) <sup>4</sup>	79,358	79,358	0	70.1
Five Skier Bridges	1,656	552	1,104	2.0
Skier Service Site – Summit Deck and Grille Expansion (6,000 square feet)	2,933	2,933	0	0.5
Skier Service Site – Backside (5,000 square feet)	2,445	2,445	0	1.0
Cross-Country Ski Trails	4,302	4,302	0	1.0
<b>Seasonal Spur Roads</b>				
Top of J Lift Terminal (302 linear feet)	69	69	0	0.3
Top of C Lift Terminal (232 linear feet)	40	40	0	0.2
Bottom of C Lift Terminal (263 linear feet)	46	46	0	0.3
V Lift Bottom Terminal (915 linear feet)	210	210	0	0.9

### 3.0 Project Description

Project Component	Cut	Fill	Net <sup>1</sup>	Area Disturbed
	Cubic Yards	Cubic Yards	Cubic Yards	Acres
V Lift Bottom Terminal From 704 Road (1,444 linear feet)	334	334	0	1.4
V Lift Top Terminal (830 linear feet)	335	335	0	0.8
W Lift Bottom Terminal (1,200 linear feet)	209	209	0	1.2
Subtotal	269,038	267,368	1,670	142.4
<b>Program-Level</b>				
Q Lift Towers, Terminals and Access	2,284	2,284	0	2.9
Castle Peak Parking Lot Gondola Towers, Terminals and Access	3,281	3,281	0	4.2
Ski Trails <sup>4</sup>	42,881	42,881	0	13.1
Skier Service Site – Above C Pod (8,000 square feet )	3,911	3,911	0	1.5
Skier Service Site – Near J Lift (8,000 square feet )	3,911	3,911	0	1.5
Existing Cross-Country Center Relocation (7,500 square feet) and Campsite Area	3,667	3,667	0	1.5
Cross-Country Ski Trails	4,302	4,302	0	1.0
Backside Campsite Area	2,445	2,445	0	1.5
Access Road from Highland View Drive to Future Cross Country Center (5,291 linear feet)	2,214	2,214	0	5.1
Subtotal	68,896	68,896	0	32.4
<b>Grand Total</b>	<b>337,934</b>	<b>336,264</b>	<b>1,670</b>	<b>174.7</b>

Source: Auerbach Engineering Corporation 2013

- 1 A negative net cubic yard number means fill; a positive means cut.
- 2 Earthwork associated with the bottom J lift terminal has previously been considered in the Village EIR for construction of the skier tunnel.
- 3 Excess material generated from on-site projects would be used to grade ski trails. Only unusable material would be disposed of off-site.
- 4 Area disturbed does not include smoothing associated with ski trail construction, but does include ski trail grading where a substantial off slope exists on the proposed trail.
- 5 Snowmaking and utility trenches are approximately 4 feet wide and 5 feet deep, with an approximate 30-foot disturbance width.

All proposed grading would comply with the Placer County Grading Ordinance and the project-specific geotechnical reports. Any excess material would be transported to a legal disposal facility, an alternate site at Northstar in need of fill, or an alternate site in the Truckee-Tahoe area in need of fill. A grading permit from Placer County would be acquired prior to exporting any excess soil material. If soils were imported into the project area for use as fill, the contractor would be solely responsible for securing a source of the fill material, for transporting both excavated and imported materials, and for disposing of excavated materials, with the County providing oversight. BMPs and revegetation would be implemented on all graded sites. The proposed NMMP project would incorporate specific environmental design provisions and BMPs (i.e., revegetation of disturbed areas, sediment protection fencing and/or wattles, tree protection

fencing, waterbars, retaining walls, rock-lined swales, inlet and outlet protection, dripline trenches, sensitive resource protection, WoUS/wetland protection, ephemeral drainage protection, etc.) into project design and construction, including concepts developed in the Northstar HMP document.

Proposed ski lifts, snowmaking and utilities, skier bridges, skier service sites, and seasonal spur road construction would commence upon completion of grading activities. The proposed lift tower locations would be determined during the design phase of the project. To the extent practicable, ground disturbance areas for the lift tower pads would be limited to a 24-foot by 24-foot area and would make every attempt to span WoUS/wetlands to avoid impacts. Disturbance around lift tower pads would be necessary for access roads and equipment operating areas, and would be limited to the minimum area necessary for tower pad construction and to maintain safety. Helicopters could be used for lift construction.

A trench approximately 4 feet wide (with an approximate 30-foot swath of disturbance) with a maximum depth of approximately 5 feet would be excavated for snowmaking and utility trenching. Topsoil salvage would occur, where feasible, to facilitate revegetation. Excavated materials would be placed next to the trench during construction and then reused when the trench is backfilled. Upon backfill operations, wattles and waterbars would be installed along the alignment of the line for stabilization. Wattles would be placed downhill of trenching operations and would be moved down the hill as construction proceeds. Upon forecast of inclement weather, the site would be stabilized with wattles, waterbars, trench breaks, and/or trench backfilling. Soil materials not recompacted into the trenches would be regraded into the area of the trenches and revegetated. Snowmaking guns would be placed along the ski trails at approximately 100-foot intervals for nozzle guns and 300-foot intervals for fan guns. Specific construction provisions for the remaining project components would be detailed on future project improvement plans.

Impacts to WoUS/wetlands and the floodplain would be avoided to the extent practical and possible. BMPs would be installed and maintained in WoUS/wetlands at all times during construction activities to prevent construction-related sediment from reaching drainages, and associated WoUS/wetlands. As previously stated, in the event that construction activities could not avoid WoUS/wetlands and the floodplain, required authorizations for improvements that would affect jurisdictional waters of the United States, waters of the State, or riparian vegetation would be obtained from the appropriate agencies (US Army Corps of Engineers [USACE], Lahontan Regional Water Quality Control Board [RWQCB], California Department of Fish and Wildlife [CDFW]) prior to construction.

### **3.10.3 ENVIRONMENTAL PROVISIONS INCORPORATED INTO PROJECT DESIGN AND CONSTRUCTION METHODOLOGY**

The project applicant has incorporated environmental protection measures into the NMMP to reduce or alleviate potential environmental concerns. These environmental protection measures are discussed in the description and construction of the proposed project, and are further discussed below. The project applicant would be responsible for implementing the environmental

provisions identified in this EIR, and other measures that would be determined by the associated permitting agencies through the CEQA review process (e.g., CDFW, USACE, Cal Fire, Lahontan RWQCB) as a condition of project approval.

### **Project Design Considerations**

NMMP improvements at Northstar would be consistent with the MVCP Design Guidelines (2003) and the Northstar Habitat Management Plan (HMP). Northstar would incorporate practicable elements into the NMMP project not only to reduce appreciable effects on natural resources, but also to support the coexistence of human uses and habitat values. Many of these elements are based on principles of minimizing alterations to the natural features of project sites, and of incorporating natural features into project designs. The design elements incorporated into the proposed NMMP project would include the following:

- Design improvements to limit overall land disturbance.
- Design improvements to minimize the removal of trees greater than 30 inches in diameter at breast height (DBH), particularly in Zones D and E.
- Utilize silvicultural treatments for forest management which are compatible with recreational activities at the resort. Silvicultural methods included in the California Forest Practice Rules to manage forests are also compatible with the resort's goals of offering skiing opportunities in a forested mountain environment. For example, silvicultural prescriptions, such as thinning and selection that reduce overstocked forest conditions, reduce the competition among residual trees for light, moisture, and soil nutrients, increase growth rates, and improve overall tree growth, can also create improved forest stands that are suitable for activities such as tree skiing.
- Implement trail clearing and design strategy to be visually consistent with existing ski trails and/or the planned land uses of the HMP Zones. Outside of HMP Zones A and B, outside of the existing resort core, treatments would be less intensive and would be designed for improved visual quality in Zones C and D. Treatments in Zone E would be solely tree thinning to enhance ski terrain and subsequently benefit forest health, except where the Z lift would be installed and the associated connector trail.
- Preserve isolated tree stands within new trail corridors to reduce the visual contrast between the trails and the surrounding landscape where it would not conflict with operational safety.
- Use barriers, signage, and trail locations to discourage disturbance of adjacent natural vegetation.
- Reduce the visual contrast of ski facilities with the surrounding landscape by using architectural treatments and natural materials or nonreflective paint.
- Design lighting to minimize glare and the escape of light into areas of natural vegetation.
- To the extent feasible, protect riparian, aquatic, and meadow focal species and their habitats by implementing project designs and land uses that would minimize the removal

of riparian habitat, with an emphasis on the Schaffer Creek watershed due to its high resource value. Design trails and structures to avoid and/or minimize disturbance or fragmentation of riparian and meadow habitats.

- Based on wetland delineations verified by the US Army Corps of Engineers (USACE), revise designs to avoid and/or minimize adverse effects on riparian vegetation, jurisdictional waters of the United States (including wetlands), and waters of the State to the extent practicable.
- Protect mule deer access to fawning grounds and minimize loss of fawning habitat by implementing the following measures:
  - Implement recreation and development designs that emphasize protection of occupied and high-potential mule deer fawning habitats. To the extent practicable, design trails and structures to avoid locations mapped as high-potential or occupied mule deer fawning habitat, and minimize impacts on locations mapped as moderate-potential fawning habitat.
  - Within physical design constraints, locate ski lifts, towers, and terminals to avoid or minimize removal of high-potential or occupied fawning habitat, particularly riparian and shrub vegetation.
  - Where moderate-potential, high-potential, or occupied fawning habitat cannot be avoided, design development and trails to retain habitat elements important for mule deer fawning (shrub cover, tree cover, riparian vegetation) to the extent practicable and appropriate.
- For project components located within HMP Management Zone D:
  - Design ski trails with treatments (e.g., feathering, islands, and gladding) to improve visual quality. Design development of ski pods to use and improve existing roads, open areas, or areas of disturbance for circulation of skiers, where feasible.
  - Design the W pod in Zone D2 to predominantly use tree skiing.
  - For construction of trails and lift towers and terminals, use existing roads, or use a helicopter where existing road access is unavailable.
  - Maintain or enhance forest floor complexity by retaining down logs: beginning with the largest down logs, sequentially retain pieces of down wood (>12 inches in diameter at midpoint) until at least the following quantities are retained on average: 10–20 tons per acre in CWHR classes 5M, 5D, or 6; 5–10 tons per acre in 5P and 5S; 4–8 tons per acre in 4P, 4M, and 4D; and 3–7 tons per acre in 4S.
  - Retain 3–6 of the largest snags per acre (with 6 per acre in CWHR classes 5M, 5D, and 6; and with 3 per acre in 4S and 5S), and all snags  $\geq$ 15 inches in DBH, except within 100 feet of roads, or where felling of snags is required for disease or insect control, or there is a threat to human health or safety.

- Although the proposed W lift would be developed in late-seral forest (in Zone D2), minimize tree removal within and additional fragmentation of late-seral forest polygons classified as high or moderate habitat value.
- Protect late-seral forest species and their habitats by implementing the following measures:
  - Implement designs that avoid and/or minimize disturbance to forests with late-seral habitat (CWHR stand structure classes 5M, 5D, 6), with a priority on areas occupied by sensitive species; avoid removal of vegetation that would adversely affect late-seral forest structure.
  - Avoid degradation of occupied breeding habitat (e.g., stands that support active nest or den sites).
  - Design island ski runs to avoid and/or minimize impacts to late-seral forest (which is present in Zone D2).
  - Design trails and structures to avoid and/or minimize bisecting or fragmenting areas identified as high-value or occupied habitat for late-seral forest focal species.
  - Within physical design constraints, locate ski lifts, towers, and terminals to avoid and/or minimize removal of vegetation and other impacts on late-seral forest.
  - If ski runs will be developed adjacent to late-seral forest, implement designs that emphasize tree retention (e.g., tree islands).

For project components located within HMP Management Zone E:

- Develop no new facilities except for Surface Lift Z.
- Design alignment of Surface Lift Z to avoid impacts to late-seral forest and drainages.
- For construction of trails and lift towers and terminals, use existing roads, or use a helicopter where existing road access is unavailable.
- Manage forests to facilitate the maintenance and development of late-seral stands throughout the core area designated for late-seral forest.

### **Ski Runs and Associated Facilities Practices**

Proposed management practices for proposed NMMP ski trails and associated improvements would be based on the approach that maintaining native vegetation cover and minimizing exposed soil and soil compaction would reduce erosion and the concentration of overland flow, and thus prevent ski runs and associated facilities from adversely affecting natural resources. The management practices for ski trails and associated facilities incorporated into the proposed NMMP project would include the following:

- Minimize vegetation removal and soil compaction to the extent practicable.
- After tree removal, chip or masticate slash onto the ski trail to protect the soil surface.
- Revegetate areas where the soil profile has been disturbed by grading or smoothing.
- Install and maintain waterbars on ski trails.
- Prepare a stormwater pollution prevention plan (SWPPP). This plan would include feasible and effective BMPs for temporary erosion control, sediment control, soil stabilization, non-stormwater management, post-construction stormwater management, and BMP maintenance, inspection, and repair. See additional SWPPP description below.
- Following ground-disturbing activities, attain success criteria (for soil attributes and cover of native vegetation and mulch) required by Placer County and the Lahontan RWQCB using approaches recommended by the California Alpine Resort Environmental Cooperative (CAREC) in the current draft of its *Sediment Source Control Handbook* or superseding document.
- Manage ski trails and associated facilities to maintain, or to move towards the appropriate standards recommended by CAREC and/or required by Placer County and the Lahontan RWQCB.
- Annually inspect ski trails for signs of erosion, and implement erosion control treatments as necessary.
- Flag project boundaries as necessary and fence sensitive resources to reduce disturbance.
- Conduct environmental sensitivity training for construction personnel prior to initiating work.

### **Construction Practices**

Northstar would incorporate a set of measures into the NMMP to avoid and/or minimize construction-related effects. Most of these measures would rely on minimizing the area disturbed, controlling the movement of soil and runoff, and timing disturbances to cause less disruption of natural systems. Construction practices incorporated into the proposed NMMP project would include the following:

- Prior to construction, obtain required authorizations for improvements that would affect jurisdictional waters of the United States, waters of the State, or riparian vegetation. These may include authorizations from the USACE (through the Section 404 permitting process), Lahontan RWQCB (through the Section 401 permitting process), and CDFW (through a 1602 Streambed alteration agreement).
- Implement preconstruction surveys to determine if construction activities could affect sensitive species and implement applicable and feasible measures to avoid and/or minimize effects on sensitive species.

- Avoid construction-related ground disturbance between October 15 and May 1 unless it is not practicable and a grading variance is obtained from Lahontan RWQCB and/or Placer County.
- Conduct all ground-disturbing activities in accordance with the *Lahontan Region Project Guidelines for Erosion Control*.
- Implement dust control measures such as road watering during construction projects.
- Wash earthmoving equipment to remove vegetative material before bringing equipment onto Northstar properties.
- For erosion control, use certified weed-free materials or materials produced on-site (e.g., wood chips produced at the resort).

### **Minimize Site Disturbance**

The most basic way to avoid erosion is to minimize site disturbance, where feasible. The project applicant's construction contractor would be directed (during the environmental training program described below) to implement practices that would minimize site disturbance so that impacts could be avoided or reduced to less than significant levels. Site disturbance minimization practices incorporated into the proposed NMMP project would include the following:

- Confine vehicle and equipment use to access roads and construction zones.
- Locate log landings at existing access roads that cross over the proposed ski trails. These locations shall act as staging areas for hauling timber off-site and chipping slash.
- Minimize road construction to the extent feasible. Where a road exists and is required for infrequent access, that area shall be tilled and planted, with the road cuts and fills receiving full vegetative treatment. Additional wood chip mulch shall be placed on the road surface in order to minimize erosion.
- Avoid excessive trips within the construction zones.
- Instruct all personnel in the concepts underlying the SWPPP to create an understanding of how their actions affect the potential for erosion and sedimentation.

### **Biological Considerations**

The project applicant, as part of the HMP and for planning and design of the NMMP project, conducted preliminary biological studies (i.e., wildlife, plants, wetlands, riparian areas, deer migration and fawning areas), to ensure that sensitive resources were adequately identified and avoided, where possible. Qualified biologists and archeologists worked closely with the project applicant, project engineers, and planners to locate project features to the extent possible in areas with no sensitive resources and to design the proposed project in a way that would avoid or reduce impacts on sensitive resources to less than significant levels, where feasible, and to locate proposed improvements and staging areas in areas that do not support sensitive resources.

Biological resource practices incorporated into the proposed NMMP project would include the following:

- Fence and/or flag sensitive resources for avoidance, as necessary and appropriate, before tree removal or construction would begin and identify on the construction drawings.
- Fencing and/or flagging would be in place prior to and during construction activities in order to keep equipment, graded material, construction material, and construction activities central to the tree removal and construction areas site and out of these areas.
- Verify wetland delineation studies completed for the project area with the USACE prior to the commencement of tree removal or project construction.
- Provide on-site supervision to prevent unnecessary disturbance. Trained construction inspectors would monitor construction activities for compliance, with support from qualified biologists and archeologists where necessary or required.
- Establish and implement an environmental training and awareness program before commencement of tree removal and construction activities. All levels of field management and construction personnel would be informed about environmental protection, including water quality protection (as outlined in the SWPPP) and the seriousness of noncompliance. Training would take place at the design level and at the contractor level of the project applicant's project team. Appropriate personnel from the County and other regulatory agencies would be invited to attend.

## **Stormwater Pollution Prevention Plan Implementation**

BMPs would be implemented in accordance with the California Code of Regulations and measures that would be implemented by the project applicant's construction contractor and specified in the SWPPP. A SWPPP would be prepared and submitted to the Lahontan RWQCB in support of National Pollutant Discharge Elimination System (NPDES) regulations, as required. The NMMP stormwater pollution prevention plan would incorporate the following:

- Identify the activities that could cause pollutant discharge (including sediment) during storms, and the BMPs that would be employed to control pollutant discharge.
- Identify construction techniques to reduce the potential for runoff, including minimizing site disturbance, controlling water flow over construction sites, stabilizing bare soil, and ensuring proper site cleanup. Identify the erosion and sedimentation control measures to be implemented, such as revegetation of disturbed areas, sediment protection fencing and/or wattles, tree protection fencing, waterbars, retaining walls, rock-lined swales, inlet and outlet protection, and dripline trenches.
- Specify spill prevention and contingency measures, the types of materials used for equipment operation (mainly vehicle fluids such as fuel and hydraulic fluids), measures to prevent or clean up hazardous material and waste spills, and emergency procedures for responding to spills.

The SWPPP would be included in the contract specifications and all construction workers would receive training in water quality protection. The training program would be included in the SWPPP.

### **Erosion and Sediment Control Measures**

Erosion and sediment control measures would be used to reduce the amount of soil that is carried off a land area and to control the discharge of soil particles that are carried away into nearby surface waters. The following standard erosion and sediment control measures and practices would be used during, as needed, and after construction to minimize the possibility of accelerated soil erosion and sedimentation and to reduce any resulting impacts to less than significant levels. Erosion and sediment control measures incorporated into the proposed NMMP project would include the following:

- Design water quality treatment/erosion control facilities (i.e., BMPs) according to the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction and for New Development/Redevelopment (or other similar source as approved by the Placer County Department of Public Works). BMPs for the project shall include, but not be limited to revegetation of disturbed areas, sediment protection fencing and/or wattles, tree protection fencing, waterbars, retaining walls, rock lined swales, inlet and outlet protection, dripline trenches, sensitive resource protection, WoUS/wetland protection, and ephemeral drainage protection. An erosion control plan shall be included in the project Improvement Plans.
- Avoid placement of surplus or waste material and/or fill of earthen material in drainage ways or within the 100-year floodplain or any surface water of the Truckee River Hydrologic Unit.
- Protect all loose piles of soil, silt, clay, sand, debris, or other earthen materials in a reasonable manner to prevent the discharge of these materials to waters of the State. After completion of a construction project, all surplus or waste earthen materials shall be removed from the site and deposited in an approved disposal location or stabilized on-site.
- Eliminate the discharge of earthen materials from the site through dewatering, if necessary.
- Stabilize drainage swales disturbed by construction activities using appropriate soil stabilization measures to prevent erosion.
- Revegetate and stabilize all disturbed areas. Only native brush and grass species shall be used for revegetation. Maintain revegetated areas in order to assure adequate growth and root development. Develop a detailed revegetation specification with input from the Placer County Department of Public Works and the Lahontan RWQCB.
- Install erosion control facilities with a routine maintenance and inspection program to provide continued integrity of erosion control facilities.

## **Best Management Practices**

**Table 3-7** provides a general summary of BMPs to be employed during NMMP construction. BMPs would be implemented prior to the commencement of construction and could be modified by the project engineer, contractor, or regulatory agency to ensure effectiveness.

**TABLE 3-7  
NMMP BEST MANAGEMENT PRACTICES**

	Chipping or Masticating Slash	Reveg	Sediment Protection Fencing and/or Wattles	Waterbars	Retaining Walls	Rock-Lined Swale	Inlet/Outlet Protection	Dripline Trench	Sensitive Resource Identification	WoUS/ Wetland Protection	Ephemeral Drainage Protection
<i>Ski Trails</i>									Applicable to all construction	Applicable to all construction in the immediate vicinity of wetlands	Applicable to all construction in the immediate vicinity of an ephemeral drainage
<i>Tree removal Only</i>	X	NA	NA	X	NA	NA	NA	NA			
<i>Graded Ski Runs</i>	X	X	X	X	NA	NA	NA	NA			
<i>Smoothed Ski Runs</i>	X	X	NA	X	NA	NA	NA	NA			
<i>Ski Lifts</i>											
<i>Surface Lift Z</i>	X	X	X	NA	NA	NA	NA	X			
<i>Aerial Lifts</i>	X	X	X	NA	X	X	NA	X			
<i>Buildings</i>	X	X	X	NA	X	X	NA	X			
<i>Snowmaking and Utility Trenches</i>	X	X	X	X	NA	NA	NA	NA			
<i>5 Skier Bridges</i>	X	X	X	NA	X	NA	NA	NA			
<i>Skier Service Sites/Campsite Areas</i>	X	X	X	NA	X	X	X	X			
<i>Cross Country Ski Trails</i>	X	X	NA	X	NA	NA	NA	NA			
<i>Seasonal Spur Roads</i>	X	X	X	X	NA	X	NA	NA			

## **Chipping or Masticating of Slash**

Upon completion of tree removal activities, mastication or chipping of remaining woody debris material would be implemented to stabilize the slope or site. This treatment would minimize soil compaction and disturbance of the soil profile, while leaving a stabilized wood chip soil surface. Chipping would occur on steeper slopes where mastication is not feasible.

## **Revegetation**

Revegetation would be performed in all areas disturbed by the NMMP project. Topsoil would be salvaged wherever excavation or grading would take place and would be replaced on disturbed areas as evenly as possible. Soil surfaces would be left uncompacted in order to maximize infiltration and minimize runoff. Where compaction would be required for structure pad or pipeline stability, the top 8 to 12 inches of soil would be left uncompacted. For all other areas where topsoil has been removed, the compacted soil would be loosened. When soil amendments are to be added, they would be placed in the soil surface prior to ripping or bucket mixing so that they get mixed into the soil. The amount and type of soil amendment used would be based on soil tests and all amendments and seed mixes would be approved by the owner prior to application. Mulch would consist of pine needles or wood chips. All mulch and tackifier products, including application methods, would be reviewed and approved by the owner prior to application. A detailed revegetation specification would be developed for each phase of NMMP project construction and detailed on the project Improvement Plans.

## **Sediment Protection Fencing**

Sediment protection fencing would consist of filter fabric fence and would be installed as necessary for NMMP project construction. Sediment protection fencing intercepts and slows the flow of sediment laden sheet flow runoff by reducing the velocity of sheet flows and retaining the sediment behind the barrier.

## **Wattles**

Wattles would be placed at the toe and on the face of slopes to intercept runoff, reduce flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff associated with NMMP construction. Wattles could also be utilized on the downhill side of construction staging areas or stockpile areas. By interrupting the length of a slope, wattles can also reduce erosion, and by dissipating flow velocity, wattles capture sediment, organic matter, and native seeds.

## **Waterbars**

Waterbars would be located to allow water to be discharged into heavy vegetative cover, duff, slash, rocks, or less erodible material sufficient to dissipate the water's energy and quickly infiltrate or disperse runoff in a manner that does not cause erosion. Waterbars would meet all the requirements of Sections 934.6 (a) and 934.6 (b) of the Forest Practices Act, would be installed along proposed skid trails (ski trails), utility trenching, bike trails, and maintenance/access roadways at approximate spacing (dependent on gradient) in order to prevent transport of eroded earthen materials and other wastes, and would be constructed upon conclusion of use of tractor roads, logging roads, and landings that do not have permanent and adequate drainage facilities or drainage structure.

### **Retaining Walls**

Retaining walls would be constructed in some NMMP project areas to reduce the limits of excavation in steeper areas. Retaining walls would be constructed of boulders or another structural material and would use architectural treatments and natural materials to reduce the visual contrast with the natural surrounding.

### **Rock-Lined Swales**

Rock-lined swales would be placed where drainage must be intercepted from uphill sources to protect structures. Rock-lined swale width and depth would vary depending on NMMP project location, but would be sited to contain runoff and promote infiltration.

### **Inlet/Outlet Protection**

A fiber roll or filter berm with a weight (sandbag, rock, etc.) would be placed surrounding all drain inlets downhill and in the immediate vicinity of the NMMP construction areas where potential exists for stormwater to flow into a storm drain from the construction site. The drain inlet protection would function as a filtering device for runoff water as it approaches drains.

### **Dripline Trench**

Dripline trenching would be installed around proposed NMMP structures to detain and transport stormwater runoff, provide opportunities for infiltration into the soil, and transport of water to the treatment area.

### **Sensitive Resource Identification**

Prior to NMMP construction activities, it would be determined if special-status plant or wildlife species had the potential to occur within the project construction area. If it was determined that there was potential for special-status species to occur, the project proponent would retain a qualified biologist to conduct a focused survey for special-status plant and/or wildlife species prior to the onset of construction. If species were located during pre-construction surveys, site-specific mitigation or project reconfiguration would be implemented to ensure no impacts to special-status species.

### **WoUS/Wetland and Ephemeral Drainage Protection**

WoUS/wetland and drainage protection would consist of preventing eroded materials from entering WoUS/wetlands and drainages due to grading through the use of flagging, orange construction fencing, fiber rolls, and/or signage to prevent encroachment by vehicles and equipment into sensitive areas. Environmentally sensitive areas in close proximity to NMMP construction areas would be protected and on-site supervision of construction activities would occur to prevent unnecessary disturbance. Construction practices would include establishing and observing the exclusion zones, conducting construction monitoring, and incorporating BMPs described above.

The use of the above-described BMPs would be developed for each phase of NMMP project construction and detailed on project Improvement Plans.

## **3.11 INFRASTRUCTURE IMPROVEMENTS**

### **3.11.1 CIRCULATION**

Required circulation improvements associated with the proposed NMMP would occur within the project site. The proposed project would not result in a change to the configuration of Northstar Drive from SR 267 leading to the Northstar Village or Highlands View Drive leading to the Mid Mountain area. The existing access road leading to Sawmill Reservoir would be improved from Highlands View Drive to the proposed relocated cross-country center/skier service site/campsite area and 20-space parking area at this location as part of the program-level improvements. Seasonal spur roads would be constructed as necessary to provide access to proposed lift top and bottom terminals.

The proposed Backside campsite area would be accessed by Northstar through the existing 900 road to the existing 705 road. Campers would be transported to the Backside campsite by van in the summer or by snowcat in the winter, as the 900 road would not be open to private vehicles. The proposed roadway improvements are designed to provide adequate emergency access or facilitate access to nearby uses.

Changes to non-vehicular circulation are proposed through the inclusion of five additional skier bridges, including a skier bridge for Village run access. This skier bridge would encourage non-vehicular circulation on the project site by allowing easier skier access from the mid-mountain area down to the Northstar Village.

### **3.11.2 WATER**

The Northstar Community Services District (NCSD) provides domestic water service to the Northstar resort community. Increases in demand in water use and treatment would be associated with the proposed project (primarily snowmaking). The project would also require extension of existing water infrastructure as well as the potential construction of well facilities for the Backside warming hut, program-level skier services, and the Backside campsite area.

### **3.11.3 WASTEWATER**

The NCSD provides sewage collection for Northstar and transports flows to the Truckee Sanitary District (TSD) system located at Airport Road, approximately 4 miles northwest of Northstar Drive and SR 267. From this point, sewage is transported to the Tahoe-Truckee Sanitation Agency (TTSA) treatment plant, located adjacent to the Truckee River. Increases in wastewater generation, conveyance, and treatment would be associated with the proposed project. The project would also require extension of existing wastewater infrastructure as well as installation of septic systems associated with the W lift, the Backside warming hut, program-level skier services, and the Backside campsite area.

### **3.11.4 DRAINAGE**

The Northstar Mountain Master Plan Draft Preliminary Drainage Report (June 2013) and Addendum Memorandum (September 2013) identify that the proposed project would accommodate drainage and water quality through the construction of infiltration trenches for buildings and lift terminals as well as waterbars designed as vegetated swales that would provide detention and infiltration of stormwater in order to prevent any increase in downstream flows. Temporary water quality control measures during construction activities would include gravel construction entrances, erosion control fencing, diversion dikes, and straw bale sumps. Stormwater runoff shall be reduced to pre-project conditions through the installation of retention/detention facilities, or other methods that slow and infiltrate stormwater runoff to levels equal to or less than pre-project conditions.

### **3.11.5 SOLID WASTE**

Tahoe-Truckee Sierra Disposal provides solid waste removal services for the Lake Tahoe area, including Northstar. The company is composed of two separate entities: Tahoe Truckee Disposal and the Eastern Regional Landfill. Collection services are provided by Tahoe Truckee Disposal. Tahoe-Truckee Sierra Disposal would be responsible for hauling increased solid waste generated in association with the proposed project.

### **3.11.6 FIRE PROTECTION**

Fire protection and emergency medical services are provided to Northstar primarily by the Northstar Fire Department (NFD). Additional fire protection and emergency medical services are provided by the Truckee Fire Protection District (TFPD) and the California Department of Forestry and Fire Protection (Cal Fire). The NFD provides response to structural and wildland fires, hazardous materials, vehicle accidents, and medical aid (paramedic) services within Northstar.

### **3.11.7 LAW ENFORCEMENT**

The Placer County Sheriff's Department provides law enforcement services to the Northstar resort community. The California Highway Patrol (CHP) assists the Placer County Sheriff's Department by providing general law enforcement, support, and backup at the request of the Sheriff's Department. These entities would provide law enforcement services to the proposed project.

### **3.11.8 ELECTRICITY**

Liberty Utilities California Pacific Energy Company provides electric service to the Northstar resort community. Liberty serves the Northstar resort from a substation located near the intersection of SR 267 and Northstar Drive, near the Northstar maintenance yard and office buildings. Liberty would provide electrical service to the proposed project.

## **3.11.9 NATURAL GAS SERVICE**

Southwest Gas Corporation provides natural gas service to the Northstar resort community. High-pressure transmission lines are located in Shaffer Road and in the SR 267 right-of-way. In addition, Southwest Gas Corporation currently has an existing distribution system in the Northstar resort community that is fed by a regulator station located just south of the intersection of SR 267 and Northstar Drive. A main is located in Big Springs Drive. Southwest Gas Corporation would provide natural gas service to the proposed project.

## **3.12 INTENDED USES OF THE EIR**

### **3.12.1 REQUIRED PERMITS AND APPROVALS**

Several permits would be required prior to construction of the proposed project. The responsible agencies and types of permits are included in this subsection. All other regulatory guidance is discussed in the applicable resources chapters of this EIR. Anticipated discretionary actions for requiring environmental review include the following:

#### **Placer County**

- Placer County General Plan Amendment to the Martis Valley Community Plan – Placer County approvals for the transfer of land use designations; Tourist/Resort Commercial land use designation located in the Backside area with the Forest land use designation located at the program-level Campsite/Skier Service/Cross Country ski center project area and associated adjustment of the final location of these land use designation squares
- Placer County Rezone to align the FOR (Forestry) zoning with the relocated underlying land use designation squares mentioned above
- Placer County Zoning Text Amendment – A limited countywide Zoning Text Amendment that allows ski lifts, trails, snowmaking, and related facilities in lands currently zoned for TPZ, outside the Lake Tahoe Basin boundary and within land boundaries that are owned and/or operated by existing ski resorts as of March 15, 2012
- Placer County Conditional Use Permit
- Placer County design/site review for all proposed structures with the Design Sierra (Ds) zoning designation

### **3.12.2 OTHER AGENCIES USING THE EIR AND CONSULTATION REQUIREMENTS**

- Section 404 Permit – The US Army Corps of Engineers (USACE) regulates the placement of fill or dredged material that affects waters of the United States, which include streams and wetlands. The USACE regulates these activities under authority granted through Section 404 of the Clean Water Act. Impacts to wetlands on the project site would require the project to obtain a Section 404 permit from the USACE.
- Section 401 Water Quality Certification – In association with the Section 404 permit issued by the USACE, the project must apply for and obtain a state Water Quality

Certification from the Lahontan Regional Water Quality Control Board in compliance with Section 401 of the Clean Water Act.

- NPDES General Construction Permit and SWPPP – Lahontan RWQCB
- Prohibition Exemption related to floodplain impacts associated with skier bridges – Lahontan RWQCB
- Streambed Alteration Agreement – Issued by the California Department of Fish and Wildlife.
- Various permits from California Department of Forestry and Fire Protection – Permits for the Timber Harvest Plans and Timberland Conversions.
- Annexation for sewer service into the Truckee Sanitary District and the Northstar Community Service District – Requires approval by the Placer County Local Agency Formation Commission (LAFCo).
- State of California Division of Occupational Safety and Health, Ride and Tramway Unit – Operating permits for ski lifts.