

CHAPTER 8

Safety and Noise Element



Safety and Noise Element

Natural and human-made hazards and nuisances like hazardous materials and excessive noise exist in Truckee. This element seeks to protect the community to the extent possible against risks to life and property from local environmental hazards, to empower local residents to be ready and responsive in the event of a natural disaster, and to define strategies for reducing the negative impact of noise to the community.

The element identifies and evaluates the complete range of natural and human-made hazards and noise impacts present in Truckee and establishes goals, policies, and actions to reduce those hazards and impacts to an acceptable level. Topics include the following:

- ▶ Climate adaptation
- ▶ Wildfire hazards
- ▶ Flooding hazards, including dam inundation
- ▶ Snow avalanche
- ▶ Geologic hazards, including seismically induced surface rupture, ground shaking, ground failure and subsidence, and slope instability
- ▶ Hazardous materials
- ▶ Airport safety
- ▶ Noise

More general issues of public education and emergency preparedness are also addressed, emphasizing proactive measures that can be taken to minimize exposure to hazards and to ensure effective response and recovery.

Guiding Principles

- ▶ Minimize the potential risk to life and property from natural and human-made hazards in Truckee.
- ▶ Ensure the ongoing safety of operations at Truckee Tahoe Airport.
- ▶ Ensure that Truckee's residents and emergency service providers are adequately prepared to respond to emergency situations.
- ▶ Preserve Truckee's peaceful mountain environment by minimizing community exposure to noise.

This element addresses two of the required General Plan elements: Safety and Noise. The Existing Conditions Report, included as Appendix A, contains detailed information regarding the existing conditions of safety, climate change adaptation, and noise in the town. This element, along with the Existing Conditions Report, meets the requirements of Government Code Section 65302(g). The Town adopted the Annex to the Nevada County Local Hazard Mitigation Plan (LHMP) addressing hazard mitigation planning elements specific to Truckee in 2018. The LHMP identifies mitigation measures to reduce the risks posed by potential hazards and to strengthen community resilience. The LHMP is incorporated by reference into the General Plan Safety and Noise Element and forms the basis of several of the policies in this element, ensuring a coordinated approach to public safety and qualifying the Town for additional funding opportunities (consistent with California Government Code Section 65302.6).

Climate Change Adaptation and Resilience

Climate change may be a global phenomenon, but its impacts are felt at the local level all around the world. The Climate Action Plan Element sets targets and actions to reduce greenhouse gas emissions to limit the amount of warming and the resulting effects of climate change. However, climate change is already occurring, and the Town must plan to address its impacts.

Climate change does not affect all people evenly, and some people experience more severe impacts than others. Climate change will continue to affect the Sierra Nevada region, including Truckee, resulting in changes to precipitation patterns, snowpack, and seasonal runoff. Climate change hazards in Truckee include declining snowpack, wildfire and smoke, loss of nature (i.e., degradation of natural habitat), rain-on-snow, pests and disease, larger storms, severe heat, and drought. Truckee has warmed an average of 2.0 degrees Fahrenheit over the last 80 years when compared to the historical 30-year period of 1937–1966 and the recent 30-year period of 1978–2016. There are now eight fewer days per

year below freezing, and the number of days above 90 degrees Fahrenheit has increased by 10 days per year. Average snowfall has declined by 15 percent. Truckee’s climate is expected to continue to change. By the middle of this century, the town can expect to experience:

- ▶ 55 to 68 less days per year below freezing,
- ▶ up to 31 more days above 90 degrees Fahrenheit,
- ▶ reduction of April snowbank by 68 to 71 percent,
- ▶ 32 to 51 percent high drought stress, and
- ▶ up to 61 percent more acres burned per year in wildfire.

These impacts will result in direct and indirect climate change impacts on Truckee and the surrounding community that must be considered when planning for public safety.

 *The Climate Action Plan Element includes policies and actions to reduce greenhouse gas emissions and limit the impacts of climate change.*



Wildfire

Issues related to wildfire risk include wildfire fuel conditions in and surrounding Truckee, fire hazard management, and emergency planning and response. The California Department of Forestry and Fire Protection (CAL FIRE) calculates wildfire hazard based on a number of combining factors, including fuel loading (vegetation), topography, and climatic conditions such as winds, humidity, temperature, and occurrence of lightning. As shown in Figure SN-1, as of 2022, 80 percent (12,256 acres) of the town is in a Very High Fire Hazard Severity Zone (FHSZ), 18 percent (3,571 acres) is in a High FHSZ, and 2 percent (495 acres) is in a Moderate FHSZ. In addition, areas directly adjacent to the town boundary that are under state or federal responsibility are also within a Very High FHSZ. CAL FIRE's Fire and Resource Assessment Program (FRAP) will continue to provide updated FHSZ maps and the most current maps should be referenced. Risks are particularly pronounced in certain parts of the community, particularly where homes are located in areas of dense vegetation and forestland, and where steep slopes and other similar conditions exist. Areas with steep slopes, such as those around Donner Lake, in the Tahoe Donner area, and in the open space areas north of Interstate 80, have an increased risk of wildfire impacts. Between 1940 and 2015, Truckee experienced several fires entirely or partially within the town boundaries (Figure SN-2).

The Town of Truckee is part of the California Master Mutual Aid Agreement program along with being a part of the California Standardized Emergency Management System (SEMS). The Town has agreements with the Nevada County Sheriff's Department for law enforcement mutual aid. The Town, working with Truckee Fire Protection District, has entered into a wildfire fire response agreement with CalFire that provides for wildland response and coverage for the Local Responsibility Area.

In 2016, the Truckee Fire Protection District adopted its Community Wildfire Protection Plan (CWPP), which includes an extensive series of recommendations aimed at reducing wildland fire risk in the region. An

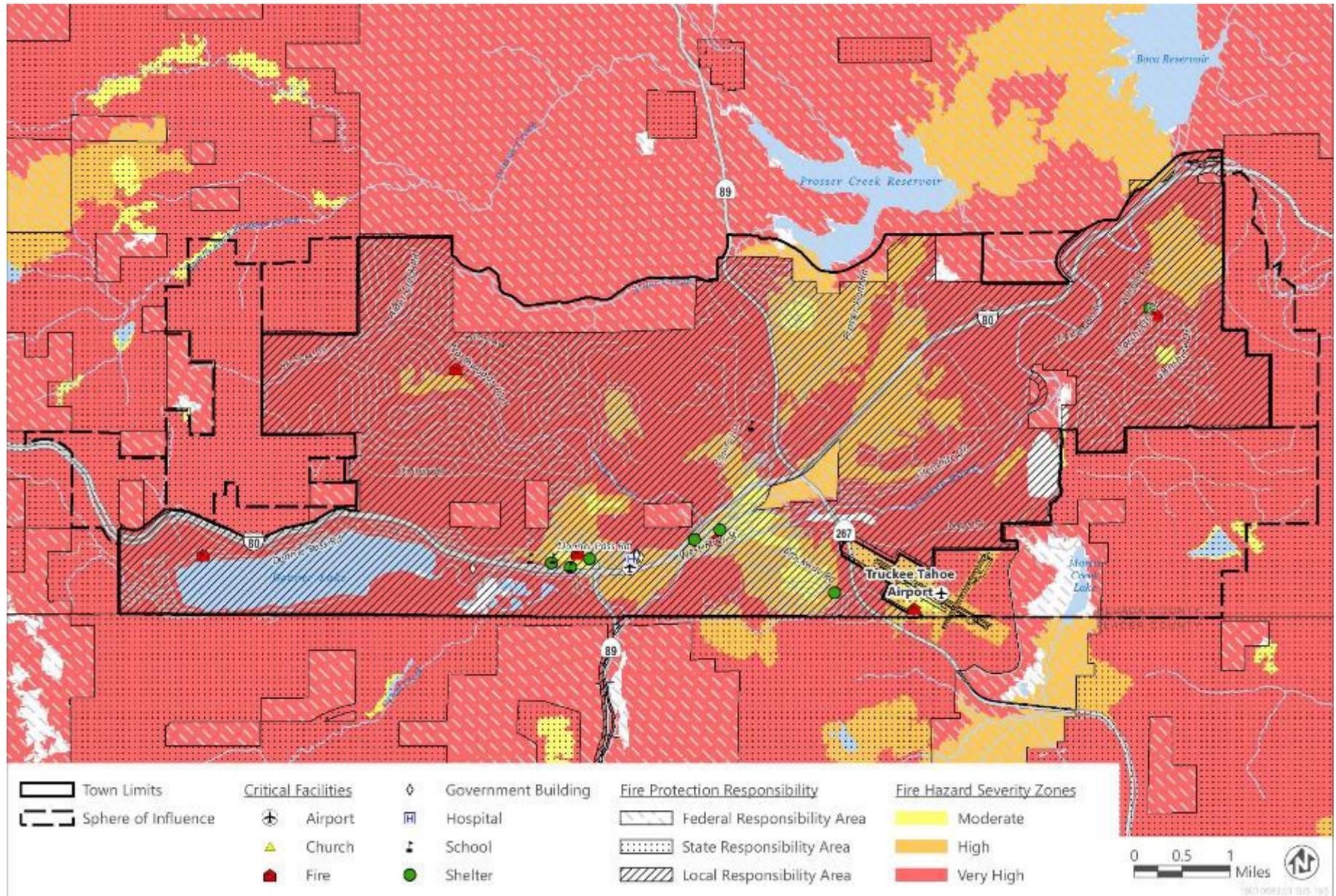
update to the CWPP is anticipated for completion in 2022. The CWPP update will enhance the district's wildfire reduction measures and will identify priority fuel reduction projects. In 2018, the Town and the Truckee Fire Protection District published an updated evacuation guide for residents, including evacuation routes and important contact information for staying informed during emergency events, such as the Nevada County Office of Emergency Services CodeRED system for residents to receive emergency information through their smartphones. In addition, the CAL FIRE Nevada-Yuba-Placer Unit (NEU) Strategic Fire Plan is updated annually to provide the latest information on fuels and fire data, proposed projects, and reports outlining mitigating activities.

Reduced Development Footprint in VHFHSZ

The 2040 General Plan reduces the development footprint on the edge of Town by designating a 280-acre area as Resource Conservation, of which 198 acres was previously designated for rural residential development. This land use change is in response to community actions taken to preserve open space in this area of Truckee. This action also reduces the development footprint within the Very High Fire Hazard Severity Zone.

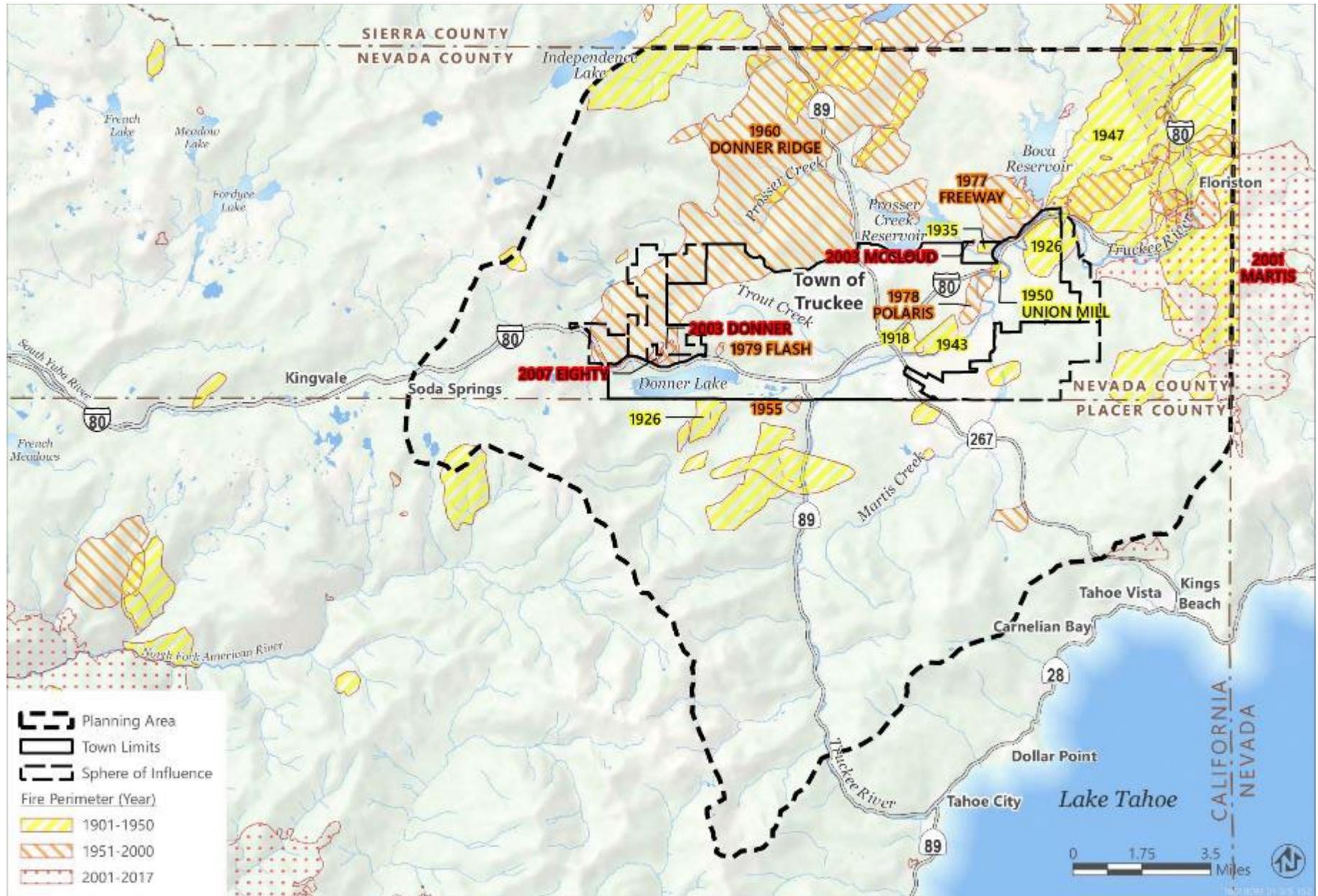
Postfire Debris Failure

Wildfires could create additional issues related to postfire debris failure in areas in and around Truckee. Wildfires reduce or destroy vegetation coverage, which can reduce infiltration and increase runoff, cause changes in hill slope conditions, and cause changes in channel conditions, such as erosion. When winter rains begin and high-precipitation events occur, debris flow (also referred to as mudflow) may occur. Areas in the town with steep slopes are at increased risk of wildfires and postfire debris flow, including the ridges and hillsides north and west of Downtown, the ridges north of the Gateway District, the areas north of Interstate 80 and west of the town boundary, and the areas around Alder Hill. The threat of landslides and debris flows in Truckee is minor and a nuisance rather than a major event. However, the increased risk of wildfire and flooding events because of climate change is expected to increase the likelihood of debris flow events in the future.



Source: Data downloaded from CAL FIRE in 2018 and the Town of Truckee in 2018. Note: SRA data published September 2007. Recommended LRA data published in December 2008. SRA and LRA data current as of 2022. Please refer to CAL FIRE FRAP website for most current FHSZ maps.

Figure SN-1: Fire Hazard Severity Zones



Source: Data downloaded from CAL FIRE in 2018.

Figure SN-2: Fire Perimeter Map

Flooding Hazards

Existing and potential problems related to flooding hazards include annual flooding, dam failure, levee failure, and seismic-induced flooding.

General Flooding

Truckee is susceptible to various types of flood events including riverine flooding, flash flooding, and localized/stormwater flooding. Flooding is a serious concern in several parts of town, particularly in areas identified by the Federal Emergency Management Agency (FEMA) as 100-year flood zones—around the Donner Lake shore, along Donner Creek, lower Trout Creek, Cold Creek, and along the Truckee River (Figure SN-3). According to the LHMP, 165 parcels in Truckee are located in the FEMA 100-year floodplain and 70 parcels are in the FEMA 500-year floodplain, with a total of 549 residents in homes in these floodplains.

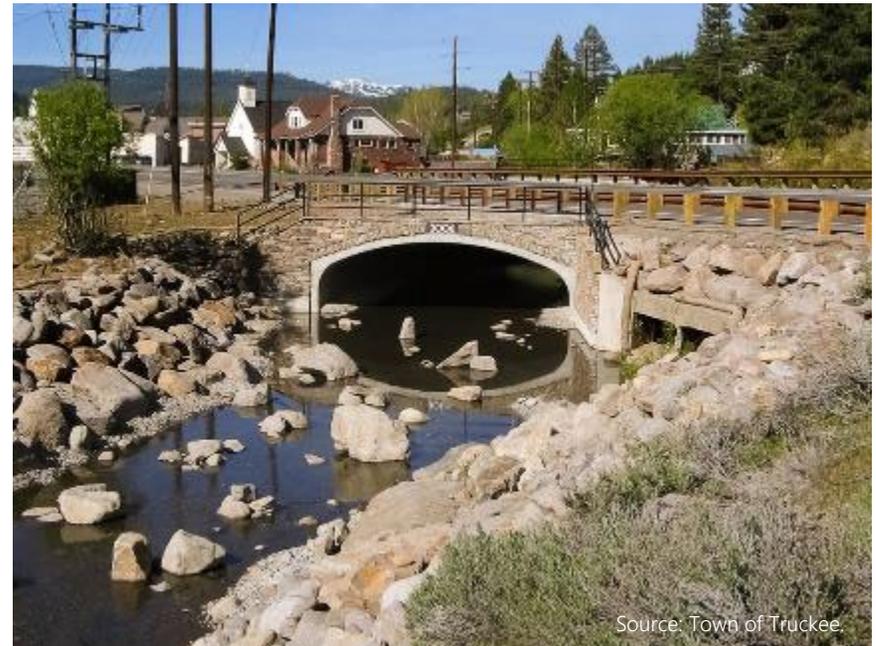
In addition, smaller creeks, specifically Donner Creek, Alder Creek, Trout Creek, and Gregory Creek, are not located in the FEMA floodplains but are included in the California Department of Water Resources (DWR) Awareness Zones. These creeks are particularly prone to flash flooding events due to steep terrain and shallow soils.

Dam Failure Inundation

Three dams are located just north of Truckee at Prosser Reservoir, Boca Reservoir, and Stampede Reservoir. Each of these dams has the potential to fail and to release a volume of water that could result in severe short-term flooding and impacts to Interstate 80 along the Truckee River corridor. Although the town would not be directly affected by potential inundation, failure of Interstate 80 would limit travel to the east, causing impacts to commerce, supplies, and access.

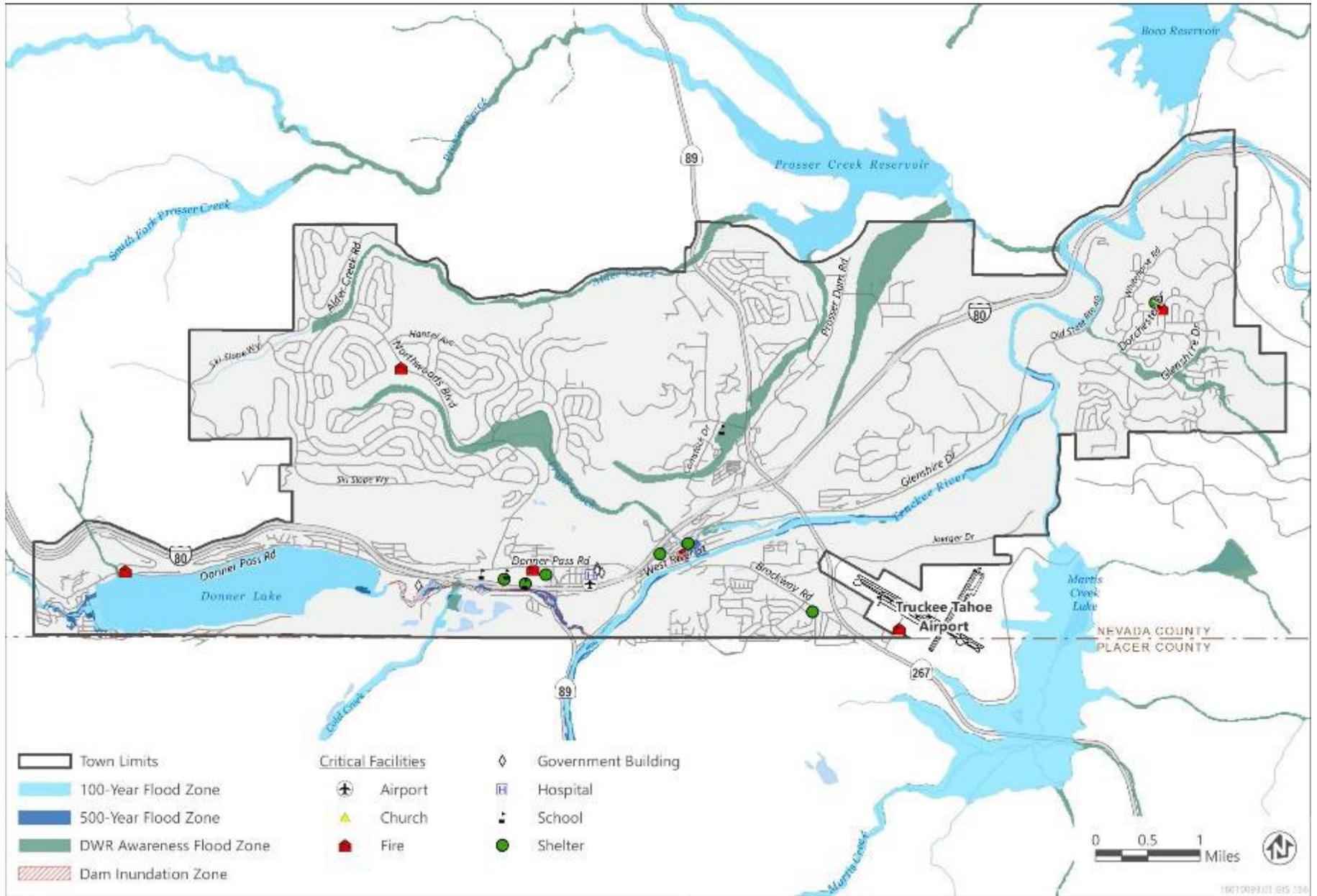
Inundation from dam failure at Donner Lake is not considered to pose a serious threat to Truckee, given the relatively small volume of water contained in Donner Lake. However, the dam at Martis Creek Lake is

the US Army Corps of Engineers (USACE) because of structural issues and ranked as one of the top six at-risk dams in the United States owned by the large population in the dam's flood inundation zone (including the Truckee Meadows community and the cities of Reno and Sparks). A failure of the dam would likely cut off the town's Glenshire neighborhood, and at just about any level of water being held, dam failure would inundate the town's sewage wastewater treatment plant. For these reasons, USACE keeps the water volume in Martis Creek Lake at low levels. USACE has already taken actions to reduce the risk of dam failure and has stated that there is a low probability of a large flood event leading to failure of the dam.



Source: Town of Truckee.

Improvements along Trout Creek help to reduce flooding risk.



Source: Data downloaded from Town of Truckee in 2018, FEMA in 2018, DWR in 2018.

Figure SN-3: Flood Hazards

Snow Avalanche

Snow avalanche events occur in steep mountainous areas that receive significant amounts of snow. The degree of potential hazard from snow avalanche is related to a number of localized conditions, including steepness of slope, exposure, snowpack composition, recent weather factors such as wind, temperature, and rate of snowfall, and other interacting factors. The area at the west end of Donner Lake, another area south of the lake just west of Donner Memorial State Park, a smaller area at the southeast edge of Tahoe Donner, and a portion of the Truckee Springs property in the southwest portion of Downtown are identified as avalanche hazard areas. However, the presence of vegetation and trees in these areas decreases the overall risk of snow avalanche events. In addition, these locations are also incorporated into the Snow Avalanche Overlay District established in the Town's Development Code, which includes specific development standards for parcels in the overlay area. The LHMP identified the probability of future avalanche events as occasional and the magnitude of these events to be negligible in Truckee.

Geologic Hazards

Geologic hazards present in Truckee are primarily associated with seismic activity and with steep slope areas that may be subject to landslides in conjunction with seismic activity and/or weak soils.

Seismic Hazards

The town has a relatively low risk of seismic hazards. However, Truckee is located in a seismically active region that has experienced seismic activity in the recent past. As a result, the town is subject to several earthquake-related seismic hazards, including ground rupture, liquefaction, and ground shaking.

Faults located near Truckee include the Mohawk Valley Fault, the southern section of which lies approximately 20 miles northwest of

Truckee in Sierra County, and the Dog Valley Fault, which extends from Dog Valley (approximately 20 miles northeast of Truckee) southwest toward Donner Lake. Several small trace faults are also located in the town. None of these faults are designated as Alquist-Priolo Earthquake Fault Zones, which identify fault areas considered to be of greatest risk in the state. A 1986 study by the US Bureau of Reclamation concluded that the Dog Valley Fault and Mohawk Valley Fault could result in a maximum credible earthquake of 6.75 and 7.0 magnitude, respectively.

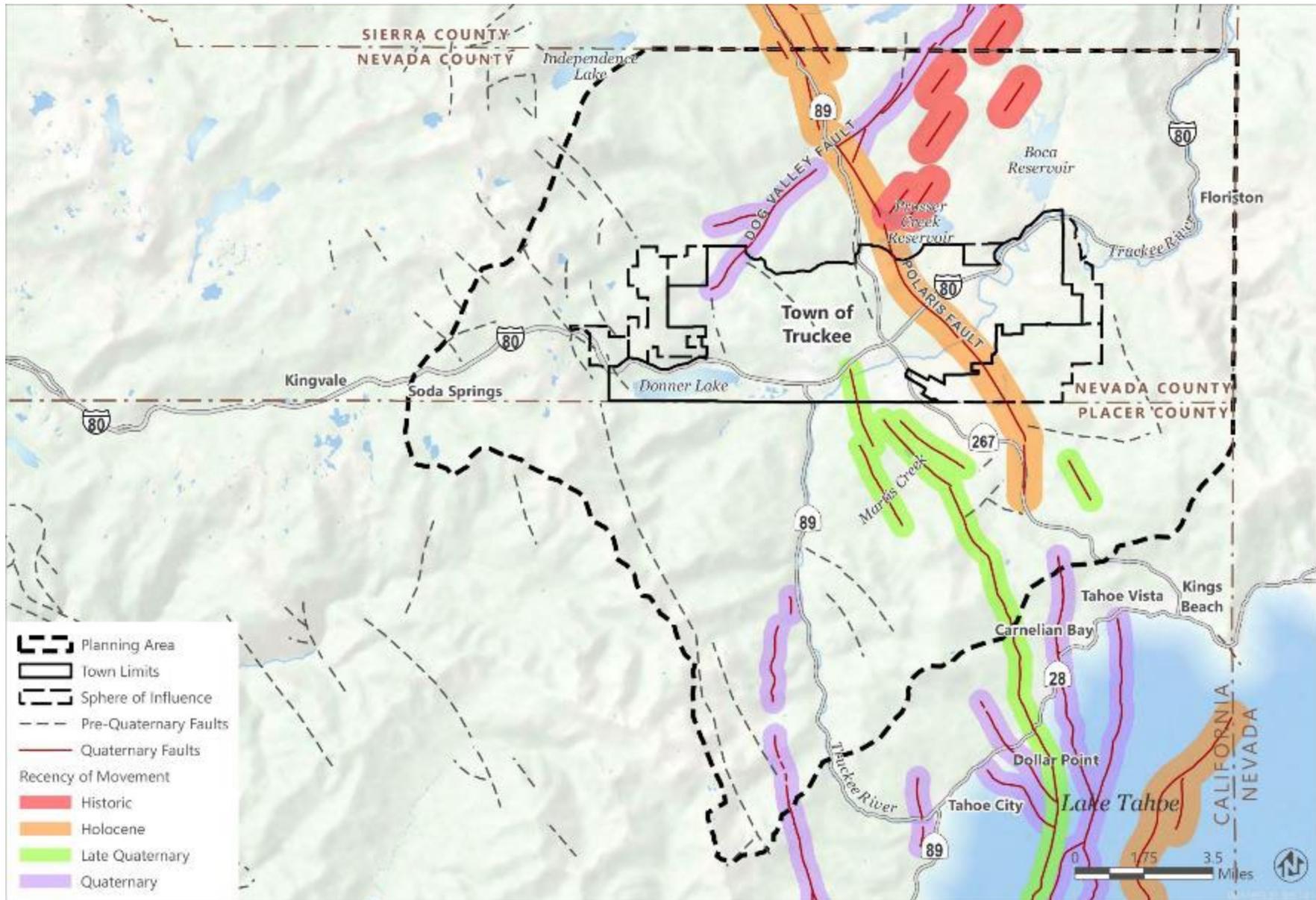
Seismic activity has been felt in Truckee in recent years. In 2021, the town was shaken by two quakes of magnitude 4.0 or above, nine quakes of magnitudes between magnitude 3.0 and 4.0, and 77 quakes between magnitude 2.0 and 3.0. In addition, an earthquake swarm occurred in 2017 with tremors measuring up to a magnitude of 3.9. Previous seismic activity in the town included a magnitude 4.5 earthquake, centered 6 miles south of Truckee, in June 2004, a magnitude 3.6 earthquake in 1998, and a magnitude 6+ earthquake in 1966. Figure SN-5 shows the location of known earthquake faults and epicenters in Nevada County.

Seismic activity in the Truckee region could cause ground shaking to occur within the town and could be the source of structural damage or ground rupture. Approximately 30 buildings in the historic Downtown area have unreinforced masonry and are at increased risk from seismic activity.

Based on the California Geological Survey seismic hazard maps, Truckee is not located in any of the zones of required investigation and thus is not considered susceptible to liquefaction.

Steep Slopes

Steep slopes of 30 percent or greater limit development in several areas of town, including some places along the Truckee River, the ridges and hillsides north and west of Downtown, the ridges north of the Gateway District and north and west of Donner Lake, and areas around Alder Hill. These steep slope areas, particularly where they occur in conjunction with weak soils, may present a significant hazard in Truckee.



Source: Data downloaded from California Geological Survey in 2013.

Figure SN-5: Fault Lines

Hazardous Materials

Hazardous materials include any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include a wide variety of substances commonly used in households and businesses. Used motor oil, paint, solvents, lawn care and gardening products, household cleaners, gasoline, and refrigerants are among the diverse range of substances classified as hazardous materials. Nearly all businesses and residences generate some amount of hazardous waste. Certain businesses and industries, including gas stations, automotive service and repair shops, printers, dry cleaners, and photo processors, generate larger amounts of these substances. Hospitals, clinics, and laboratories generate medical waste, which is also potentially hazardous.

Hazardous materials are transported through Truckee on three major transportation routes: Interstate 80, the Union Pacific Railroad (UPRR) line, and the Kinder Morgan petroleum pipeline. Since 1973, there have been 186 hazardous material spills in Truckee, but there have been no federal or state disaster declarations for hazardous materials in the town. Several sites in Truckee are identified as hazardous sites at various stages of mitigation or monitoring.



Source: Transportation Safety Board of Canada.

Hazardous material explosion caused by train derailment.

Use, storage, and transportation of hazardous wastes is heavily regulated by federal, state, and local agencies, including the California Department of Toxic Substances Control, which is authorized to implement the regulations of the US Environmental Protection Agency. The Nevada County Environmental Health Department monitors commercial storage and use of hazardous materials, including issuing permits for use and storage of significant quantities of hazardous materials or substances.

Airport Safety

Truckee Tahoe Airport, which is owned and operated by the Truckee Tahoe Airport District, is located outside of the Truckee town limits, straddling the boundary between Nevada and Placer Counties. The airport provides general aviation services for the town, communities in the northern Lake Tahoe region, and communities in the central Sierra Nevada. As with all airports built in proximity to urbanized areas, maintaining land uses compatible with safe airport operations is an important consideration.

The Truckee Tahoe Airport Land Use Commission adopted the most recent version of the Truckee Tahoe Airport Land Use Compatibility Plan (ALUCP) in October 2016. The ALUCP establishes a series of Compatibility Zones to regulate uses surrounding the airport to reduce overall risk exposure to surrounding land uses (Figure SN-7).



Source: Kinder Morgan.

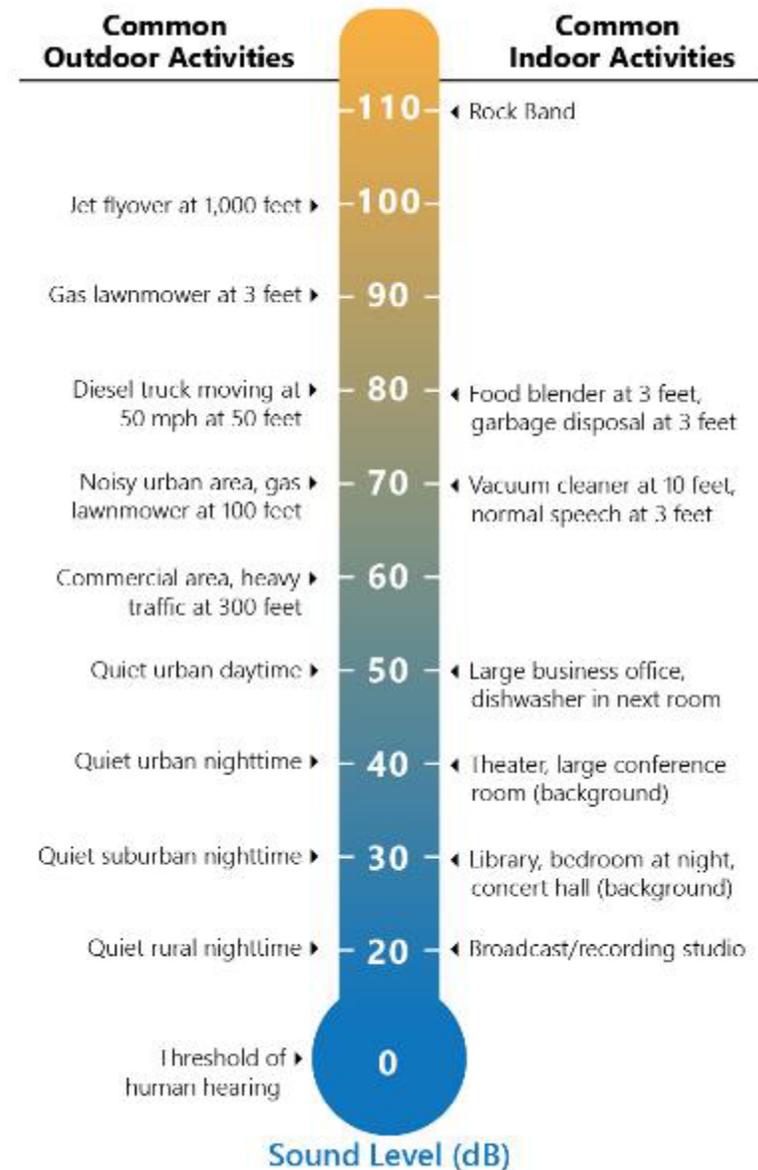
Pipeline expansion under construction.

The Truckee Development Code includes the Airport Operations Overlay District, which regulates land uses in the vicinity of Truckee Tahoe Airport, recognizing that certain land uses and site development characteristics may conflict with the safe and efficient operation of airports and aircraft.

Noise

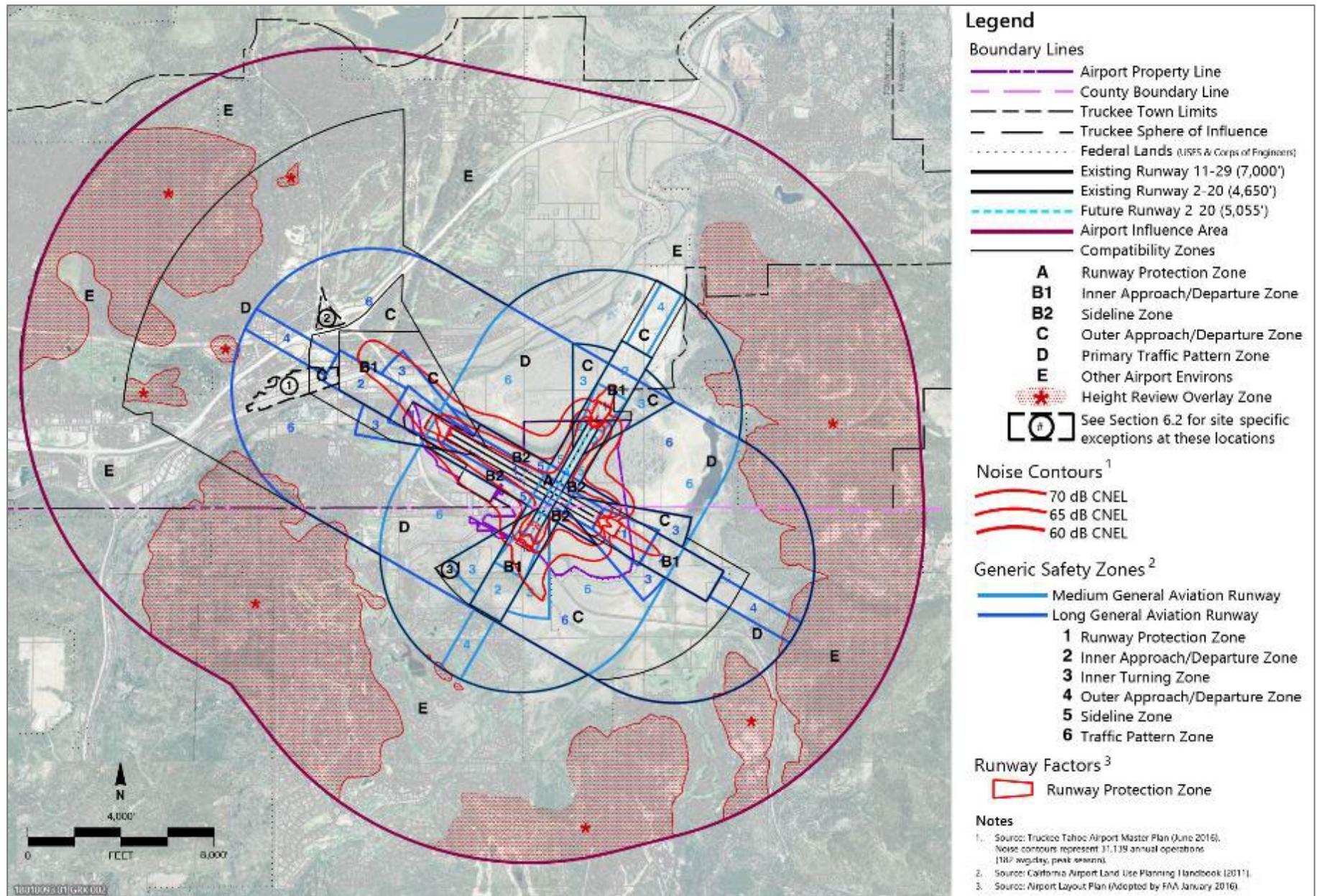
Excess noise can threaten quality of life and human health by causing annoyance or disrupting sleep and everyday activities. Reducing the negative impact of unwanted and excessive noise is an important aspect of maintaining Truckee’s valuable quality of life and community character, including a peaceful mountain environment.

Figure SN-6 shows the noise levels of common outdoor and indoor activities. Predominant noise sources in Truckee include traffic noise on local roadways, major roadways (i.e., Interstate 80, State Route [SR] 89, and SR 267), freight and passenger train movement on the UPRR line, and aircraft operations. The projected noise contours from traffic and railway noise are shown in Figure SN-8 and Figure SN-9. The contours are based on modeled traffic volumes projected under full buildout of the General Plan. These contours do not factor in topography, other buildings, or noise attenuation. However, the noise contours can be used as a guide to ensure noise is considered for new projects. Stationary noise sources include those in a fixed location, such as mining or industrial uses. These noise sources tend to be less predominant.



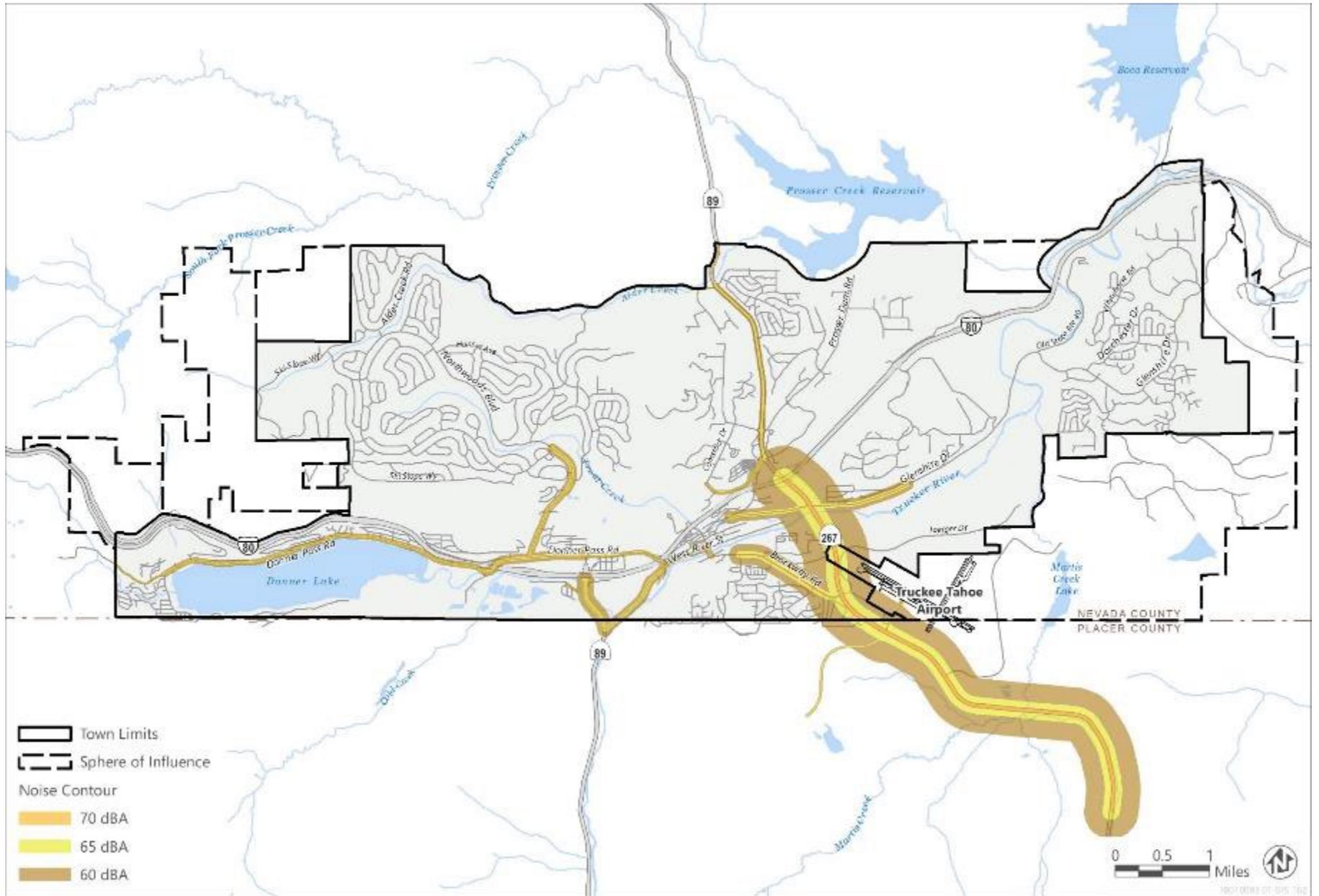
Source: California Department of Transportation 2009, adapted by Ascent, 2022.

Figure SN-6: Typical Sound Levels



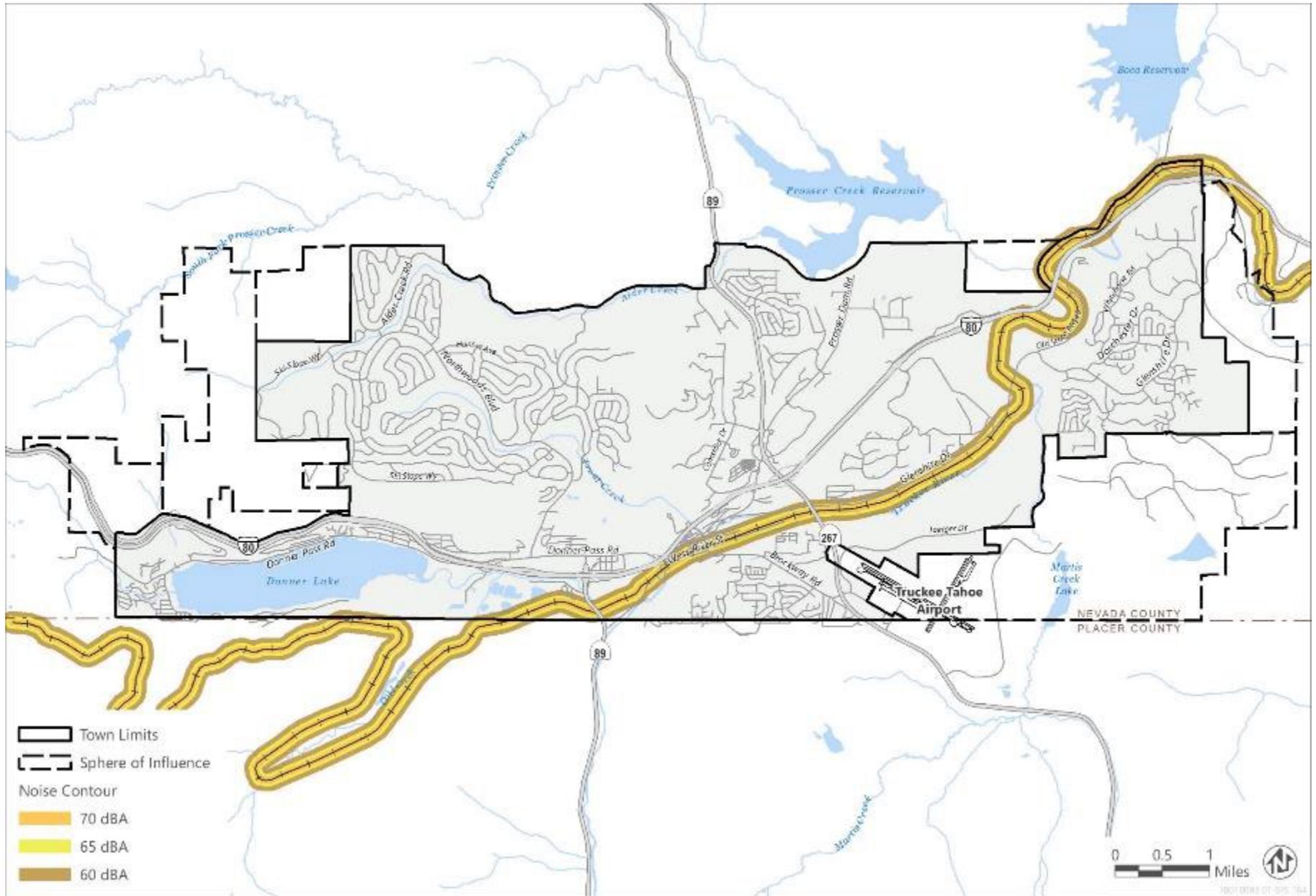
Source: Image provided by the Town of Truckee in 2018.

Figure SN-7: Truckee Tahoe Airport Land Use Compatibility and Noise Factors



Source: Data received from Town of Truckee in 2021; adapted by Ascent in 2022.

Figure SN-8: Roadway Noise Contours



Source: Data received from Town of Truckee in 2021; adapted by Ascent in 2022.

Figure SN-9: Railway Noise Contours

Goal SN-1: Climate Adaptation

Reduce climate-related risk to people and nature, including those most vulnerable, while building resilience for all people, businesses, and natural resources throughout Truckee. *[Source: Climate Ready Truckee: A Climate Change Adaptation Plan, page 22]*

The policies in this goal section provide overarching direction on addressing climate adaptation and resiliency. Additional policies addressing climate adaptation are woven throughout this element, as they relate to individual hazards including wildfire, flooding, snow avalanche, and geologic hazards.

Policies

SN-1.1

Government Decisions

Incorporate climate change considerations (scientific projections and consideration of ongoing change) into decisions made at all levels of Town government. *[Source: New policy, Climate Adaptation Plan, Town of Truckee Government, Strategy]*

SN-1.2

Equitable Infrastructure Improvements

Prioritize programs and investments aimed at addressing climate change impacts and supporting community resilience for vulnerable populations, such as seniors, children, individuals with existing health conditions, individuals who live or work outdoors, and lower-income residents. *[Source: New policy]*

SN-1.3

Strengthened Partnerships

Build and strengthen partnerships across jurisdictions to plan for regional impacts, such as wildfire smoke and extreme heat, and advocate for state and federal policies as needed. *[Source: New policy, Climate Adaptation Plan, Town of Truckee Government, Strategy]*

SN-1.4

Flexible Work Schedules

Offer alternative and/or flexible schedules for outdoor workers and encourage private businesses to do the same to reduce impacts of wildfire smoke and extreme heat. *[Source: New policy, Climate Adaptation Plan, Town of Truckee Government, Strategy 2.2]*



The Climate Action Plan Element includes policies and actions to reduce greenhouse gas emissions and limit climate change impacts.

The Conservation and Open Space Element includes policies and actions addressing the loss of nature as a result of climate change.

Actions

SN-1.A

Climate Change Education

Educate all Town staff, departments, and decision makers on climate change science, projections, adaptation and mitigation actions, and priorities. *[Source: New action, Climate Adaptation Plan, Town of Truckee Government, Strategy]*

| **Responsibility:** Assistant to the Town Manager

| **Time Frame:** Ongoing



Source: Town of Truckee.

Smoke from wildfires in the region impacts air quality in Truckee.

Goal SN-2: Wildfire Hazards

Protect lives and property from risks associated with wildfire.

[Source: 2025 General Plan, Safety Element, Goal SAF-4]

Policies

SN-2.1

Defensible Space Implementation

Assist the Truckee Fire Protection District with implementation of defensible space requirements, including supporting inspections and enforcement to achieve defensible space and promote vegetation management to reduce fuel loads and ignition sources near existing development. *[Source: 2025 General Plan, Safety Element, Policy P4.2, modified]*

SN-2.2

Fire Safe Regulations for New Development

Require new development in State Responsibility Areas and/or Very High Fire Hazard Severity Zones to comply with Fire Safe Regulations (14 CCR § 1270.00); demonstrate adequate ingress and egress for circulation and evacuation; ensure adequate signing and building numbering, building siting, setbacks, and fuel modification including vegetation clearance maintenance on public and private roads; identify the location of anticipated water supply; and demonstrate adequate water flow for fire suppression needs. Adequate compliance with these requirements shall be determined by either the Truckee Fire Protection District or the County Fire Marshall (i.e., CAL FIRE), as appropriate. *[Source: 2025 General Plan, Safety Element, Policy P4.4, modified to address state law]*



The California Department of Forestry and Fire Protection identifies Fire Hazard Severity Zones in both *State Responsibility Areas* and *Local Responsibility Areas*. These zones are identified based on fire likelihood and fire behavior. Figure SN-1 shows the Fire Hazard Severity Zones in Truckee.

SN-2.3

Development Review

Ensure that the development review process considers wildland fire risk, including assessment of both construction- and operation-related fire risks, particularly in Very High Fire Hazard Severity Zones. Collaborate with the Truckee Fire Protection District in reviewing fire protection plans and provisions in new development, including aspects such as emergency access, site design, and use of noncombustible building materials. *[Source: 2025 General Plan, Safety Element, Policy P4.7]*

SN-2.4

Water Supply for Fire Safety

Coordinate with the Truckee Donner Public Utility District to ensure and maintain the long-term sustainability of water supplies to meet current and anticipated future firefighting needs. *[Source: New policy added during CalFire review]*

SN-2.5

Fire-Resistant Landscaping

Consider the feasibility of fire-resistant species in landscaping with new land use applications. *[Source: New policy, Climate Adaptation Plan, Goal 5, Strategy 5.2]*

SN-2.6**Removal of Flammable Invasive Species on Public Lands**

Work with the Nevada County Department of Agriculture, the Nevada County Resource Conservation District, and other stewardship groups and public land managers to remove invasive and fire-spreading species (e.g., cheat grass) on public lands. *[Source: New policy, Climate Adaptation Plan, Goal 5, Strategy 5.2, modified by PC/TC]*



Source: Town of Truckee

Wildfire smoke plumes can be seen from a distance.

SN-2.7**Cooperative Fuel Management**

Promote short- and long-term maintenance of fire fuel reduction projects through cooperative fuel management activities in association with the Truckee Fire Protection District, the California Department of Forestry and Fire Protection (CAL FIRE), the US Forest Service, and other partners. Strategies may include reducing fuels on public lands, identifying, implementing, and conducting regular maintenance of opportunities for fuel breaks between developed areas and wildlands, forest mastication or mulching the forest floor to improve forest health, and biomass removal. Evaluate the use of biomass from fuel reduction efforts to produce heat, power, landscape materials, or other forest products. *[Source: 2025 General Plan, Safety Element, Policy P4.3, modified]*

SN-2.8**Controlled Burns**

Continue to work with the US Forest Service, the Truckee Fire Protection District, and CAL FIRE on fuel clearing priorities such as controlled or prescribed burns and other measures. Shift the social perception on prescribed burns through social media, art, and school outreach and by keeping people informed in real time. *[Source: New policy, Climate Adaptation Plan, Goal 5, Strategy 5.4 and 5.7]*

SN-2.9**Reduction in Ignition Sources**

Assist with efforts by the Truckee Fire Protection District to reduce ignition sources and ignition potential (e.g., campfires, barbecues, chainsaws, smoking, electrical and power equipment). *[Source: New policy, Climate Adaptation Plan, Goal 5, Strategy 5.6]*

SN-2.10**Wildfire Mitigation Fee**

Work with Truckee Fire Protection District to pursue the development of a mitigation impact fee for future development that would fund additional fire protection operations within the town beyond what is provided by the Truckee Fire Protection District. *[Source: New policy]*

SN-2.11**Siting New Essential Facilities Relative to Fire Hazard Zones**

Avoid siting new essential public facilities (including, but not limited to, hospitals and health-care facilities, emergency shelters, emergency command centers, and emergency communications facilities) in Very High Fire Hazard Severity Zones, unless all feasible risk reduction measures have been incorporated into project designs or conditions of approval. Temporary facilities may be sited in Very High Fire Hazard Severity Zones when necessary to achieve public safety objectives. *[Source: New policy, OPR Fire Hazard Planning Technical Advisory]*

SN-2.12**Wildfire Hazard Awareness**

Support efforts to raise community awareness about wildfire hazards, risk reduction activities, and steps community members can take to improve wildfire safety, with an emphasis on reaching vulnerable populations. *[Source: New policy]*

SN-2.13**Wildfire Smoke Education**

Educate residents about the health impacts of poor air quality from wildfire smoke through education and outreach, focusing on protection of vulnerable populations including youth and seniors. *[Source: New policy]*

Actions**SN-2.A****Adopt Fire Safe Regulations**

Update the Development Code to incorporate fire safe regulations that meet or exceed the minimum requirements of Fire Safe Regulations (14 CCR § 1270.00) for all projects in Very High Fire Hazard Severity Zones. *[Source: New action for alignment with state law]*

Responsibility: Community Development Department

Time Frame: Short term

SN-2.14**Coordination with Utility Companies**

Coordinate with utility companies to develop strategies to avoid the ignition of fires from utility equipment and ensure companies are complying with regulations to minimize risk of wildfires. *[Source: New policy]*

SN-2.15**Post-Fire Flood Hazard**

Reduce potential for future flood hazard through removal of dead, woody vegetation along watercourses following a catastrophic fire. *[Source: New policy]*

SN-2.16**Inter-Agency Preparedness and Mutual Aid Agreement**

Continue to participate in the California Master Mutual Aid Agreement program and conduct emergency hazard drills with key stakeholder organizations, community groups and organizations, outside agencies, and local and County officials across the community to improve preparedness for known threats and hazards. *[Source: New policy added during CalFire review]*

SN-2.B**Reduction of Fuels on Public Land**

Work with the US Forest Service, CAL FIRE, the California Department of Parks and Recreation, and local public agencies, including the Truckee Donner Recreation and Park District, Truckee Sanitary District, Tahoe-Truckee Sanitation Agency, Truckee Tahoe Airport District, and other land managers to reduce fire fuels on their lands and to create and maintain fuel breaks to protect developed areas. *[Source: New action, Climate Adaptation Plan, Goal 5, Strategy 5.9]*

Responsibility: Truckee Fire Protection District

Time Frame: Ongoing



Source: Town of Truckee.

Forest management reduces wildfire risk.

SN-2.C

Reduction of Ignition Sources

Work with the US Forest Service, CAL FIRE, the California Department of Parks and Recreation, and local public agencies, including the Truckee Donner Recreation and Park District, to explore closure of certain public lands during high-risk conditions. Work with Truckee Fire Protection District to implement campfire and barbecue restrictions during fire season. [Source: *New action, Climate Adaptation Plan, Goal 5, Strategy 5.6*]

Responsibility: Office of Emergency Services

Time Frame: Ongoing

SN-2.D

Funding to Support Wildfire Risk Reduction

Work with the Truckee Fire Protection District to pursue state and federal grant funds and/or develop a sustainable funding source to provide financial incentives or assistance for residential defensible space, home hardening, and fuels reduction work, particularly for lower- and moderate-income households and mobile home/mobile home park

owners. [Source: *New action, Climate Adaptation Plan, Goal 5, Strategy 5.10, modified by PC/TC*]

Responsibility: Office of Emergency Services

Time Frame: Ongoing

SN-2.E

Fire-Adapted Landscaping and Revegetation Standards

Update landscaping and revegetation standards to be fire-adapted, in coordination with the Truckee Fire Protection District, including requiring use of fire-resistant planting and prohibiting flammable landscaping plantings or materials storage in the structure ignition zone (e.g., within 0–5 feet of the structure). Amend Development Code landscaping standards to address vegetation maturity in the required number of initial plantings and vegetation location/spacing requirements. Include additional amendments to address long-term defensible space and wildfire protection for the life of the landscaping. [Source: *New action, OPR Fire Hazard Planning Technical Advisory, modified by PC/TC*]

Responsibility: Community Development Department

Time Frame: Short term

SN-2.F

Forest Thinning Events

Work with the US Forest Service, the Truckee Fire Protection District, and CAL FIRE to organize forest thinning events, such as cut-a-tree day, Christmas tree harvesting, and other community activities. Support efforts to develop local markets or applications for thinned materials (e.g., art, biomass, mulch). [Source: *New action, Climate Adaptation Plan, Goal 5, Strategy 5.5 and 5.8*]

Responsibility: Office of Emergency Services

Time Frame: Ongoing

SN-2.G

Fire Insurance

Work with fire insurance providers to create incentives for property owners who have fire-proofed or flood-proofed their homes or

businesses to ensure all residents and businesses have fire insurance. *[Source: New action, Climate Adaptation Plan, Goal 12, Strategy 12.1]*

| **Responsibility:** Office of Emergency Services

| **Time Frame:** Ongoing

SN-2.H

Fire Prevention Education Programs

Continue to cooperate with the Truckee Fire Protection District, CAL FIRE, and the US Forest Service in creating and promoting fire prevention education programs, such as Firewise USA, to provide resources to residents and property owners on home hardening and vegetation management to reduce fuel loads and ignition sources near homes. *[Source: 2025 General Plan, Safety Element, Policy P4.1, modified to include Climate Adaptation Plan, Goal 5, Strategy 5.1 and 5.3]*

| **Responsibility:** Community Development Department

| **Time Frame:** Ongoing

SN-2.I

Fire Protection Plans

Update the Development Code to require preparation of a project-specific fire protection plan that addresses risk analysis, fire response capabilities, fire safety requirements (i.e., defensible space, infrastructure, and building ignition resistance), mitigation measures and design considerations for non-conforming fuel modification, wildfire education maintenance and limitations. *[Source: New policy to address CalFire/Board of Forestry comments]*

| **Responsibility:** Community Development Department

| **Time Frame:** Short term

SN-2.J

Map Developments Lacking Two Evacuation Routes

Identify residential developments in Very High Fire Hazard Severity Zones that do not have at least two emergency evacuation routes. Develop feasible mitigation strategies, which may include alternative methods of evacuation (e.g., transit, carpooling, shelter in place). *[Source: New policy added during CalFire review]*

| **Responsibility:** Public Works Department

| **Time Frame:** Short term

SN-2.K

Identify and Analyze Evacuation Routes

Identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios. Identify existing roadways used as evacuation routes that are not compliant with current Fire Safe Regulations (14 CCR § 1270.00) for roadway standards and develop a plan to bring those roadways into conformance. *[Source: New policy added during CalFire review]*

| **Responsibility:** Public Works Department

| **Time Frame:** Short term

Goal SN-3: Flooding

Reduce hazards associated with flooding.

[Source: 2025 General Plan, Safety Element, Goal SAF-2]

Policies

SN-3.1

Flood Hazard and Floodplain Information

Continue to work with appropriate local, state, and federal agencies (particularly the Federal Emergency Management Agency [FEMA]) to maintain the most current flood hazard and floodplain information based on historical flood behavior and future climate change projections. Use that information as a basis for project review and to guide development in accordance with federal, state, and local standards. *[Source: 2025 General Plan, Safety Element, Policy P2.1, modified]*

SN-3.2

National Flood Insurance Program

Continue to participate in the National Flood Insurance Program (NFIP) to ensure qualification for flood insurance and disaster assistance. *[Source: 2025 General Plan, Safety Element, Policy P2.2, modified]*

SN-3.3

Agency Coordination

Coordinate with local, regional, state, and federal agencies with responsibility for flood management to minimize flood hazards and improve safety. *[Source: New policy]*

SN-3.4

Development within the Floodplain

Require that new development or substantial improvements of existing structures within the 100-year floodplain meet federal and state standards. *[Source: 2025 General Plan, Safety Element, Policy P2.4, modified]*



Source: Tahoe Daily Tribune.

Local flooding as the result of a rain and snow event.

SN-3.5

Location of New Critical Facilities

Require that new critical facilities (e.g., hospitals, emergency command centers, communication facilities, fire stations, police stations) are located outside of 100-year floodplains. Where such location is not feasible, design the facilities to mitigate potential flood risk to ensure functional operation during a flood event. *[Source: New policy]*

SN-3.6**Stormwater Drainage Systems**

Incorporate stormwater drainage systems in new development projects to effectively control the rate and amount of runoff so as to prevent increases in downstream flooding potential. *[Source: 2025 General Plan, Safety Element, Policy P2.3]*

SN-3.7**Revegetation of Wildfire-Burned Areas**

Encourage treatment of wildfire-burned areas by the Truckee Fire Protection District to control stormwater runoff prior to winter rains, particularly in areas prone to landslides. Promote planting and rapid regrowth of fire-resistant vegetation cover using best practices as soon as possible to prevent erosion, protect bare soils, and aid in control of stormwater runoff. *[Source: New policy, OPR Fire Hazard Planning Technical Advisory]*

SN-3.8**Climate-Informed Stormwater Management**

Continue to require stormwater management plans to be climate-informed to respond to large storm and rain-on-snow events and to promote on-site water retention. Promote nature-based methods and best management practices (e.g., bioswales, natural ground cover) to increase permeable surfaces to reduce runoff. *[Source: New policy, Climate Adaptation Plan, Strategy 7.1 and Strategy 10.7]*



The Conservation and Open Space Element includes additional policies and actions addressing stormwater management.

Goal SN-4: Snow Avalanche Hazards

Reduce risks associated with avalanche hazards.

[Source: 2025 General Plan, Safety Element, Goal SAF-3]

Policies

SN-4.1

Avoid Development in Avalanche Hazard Areas

Avoid siting new development in avalanche hazard areas. *[Source: 2025 General Plan, Safety Element, Policy P3.1, modified]*

SN-4.2

Avalanche Hazard Areas

Continue to identify avalanche hazard areas and to enforce special standards for construction in avalanche hazard areas. *[Source: 2025 General Plan, Safety Element, Policy P3.2]*

SN-4.3

Climate-Related Avalanche Risk

Encourage and support scientific studies to determine the impact of changing climate conditions on avalanche hazards. *[Source: New policy]*

SN-4.4

Avalanche Hazard Education

Collaborate with the Sierra Avalanche Center to educate the community on avalanche hazards, including potential climate change effects, such as rain-on-snow events and warm spells. *[Source: New policy]*

Actions

SN-4.A

Snow Avalanche Overlay District Standards

Conduct a study to review and modify, as appropriate, the Development Code standards for the Snow Avalanche Overlay District to respond to updated avalanche information. *[Source: 2025 General Plan, Safety Element, Action Item A3.1, modified]*

Responsibility: Community Development Department

Time Frame: Long term



Source: Sierra Avalanche Center.

Snow instability and avalanches can threaten public safety.

Goal SN-5: Geologic Hazards

Reduce the risk of injury, loss of life, and property damage from earthquakes, landslides, and other geologic hazards. *[Source: 2025 General Plan, Safety Element, Goal SAF-1]*

Policies

SN-5.1

Avoidance of Steep Slopes and Unstable Soils

Require new development be located in such a way as to avoid hazardous areas, including steep slopes and areas of unstable soils.

[Source: 2025 General Plan, Safety Element, Policy P1.1]

SN-5.2

Building Retrofit for Earthquake and Landslide Protection

Encourage retrofitting of structures, particularly older buildings, to withstand earthquake shaking and landslides. Ensure that new development incorporates design and engineering that minimizes the risk of damage from seismic events and landslides. *[Source: 2025 General Plan, Safety Element, Policy P1.2]*

SN-5.3

Soils Reports

Require soils reports for new development in areas where geologic risks are known to exist, as required by the Town Building Code. Such reports should be prepared by a qualified geologist or engineer and include recommendations for appropriate engineering and other measures to address identified risks. *[Source: 2025 General Plan, Safety Element, Policy P1.3]*

Actions

SN-5.A

Standards for Steep Slopes

Amend the Development Code to include reference to cliff edges and escarpments in standards and guidelines concerning steep slopes, ridges, and hillsides. *[Source: 2025 General Plan, Safety Element, Action Item A1.1]*

Responsibility: Community Development Department

Time Frame: Midterm

SN-5.B

Building Retrofits for Earthquake and Landslide Protection

Encourage owners of historic properties to enter into a Mills Act contract with the Town and create additional incentives to encourage property owners to retrofit buildings in the Downtown to comply with building standards to reduce earthquake and landslide damage. *[Source: New action]*

Responsibility: Community Development Department

Time Frame: Midterm

Goal SN-6: Emergency Response and Disaster Recovery

Expand community preparedness and resilience to support effective response to emergencies, provide aid during a crisis, and repair and rebuild. *[Source: Climate Adaptation Plan, Goal 16, modified]*

Policies

SN-6.1

Town Leadership on Preparedness

Ensure Town staff and departments demonstrate a readiness to respond to emergency incidents and events. *[Source: New policy]*

SN-6.2

At-Risk, Vulnerable, and Disadvantaged Populations

Prioritize the needs of at-risk, vulnerable, and disadvantaged populations during emergency response and disaster recovery efforts, including increasing awareness of defensible space requirements and promoting understanding of evacuation routes. *[Source: New policy, OPR Fire Hazard Planning Technical Advisory]*

SN-6.3

Inclusive Emergency Planning

Ensure emergency planning is representative of the diversity of Truckee and provides members of disadvantaged populations meaningful opportunities to engage in emergency planning efforts. *[Source: New policy, Climate Adaptation Plan, Goal 17, Strategy 17.1, modified]*

SN-6.4

Evacuation Road Standards

Require any roads used for evacuation purposes to meet current Fire Safe Regulations (14 CCR § 1270.00) in terms of roadway standards and vegetative hazards. Reduce wildfire risks through regular clearance and maintenance of vegetation adjacent to public roadways *[Source: New policy, modified during CalFire review]*

SN-6.5

Alternative Routes during Interstate 80 Closures

Work with Caltrans to develop a comprehensive plan to address Interstate 80 winter weather gridlock and ensure appropriate emergency access routes. Coordinate with online mapping apps to ensure public safety and that drivers are not directed to follow unpassable routes. *[Source: 2025 General Plan, Safety Element, Policy P7.1]*

SN-6.6

Communication Technology

Improve communication technology for streamlining transportation and emergency response. Collaborate with a diverse range of users to ensure communication is user-friendly and well understood. *[Source: New policy, Climate Adaptation Plan, Goal 16, Strategy 16.2 and 16.3, modified]*

SN-6.7

Maintenance of Emergency Plans

Maintain and regularly update the Town's emergency plans to respond to the changing needs and characteristics of the community and maintain eligibility for grant funding. *[Source: New policy]*



Source: San Francisco Chronicle.

Interstate 80 closure due to a mudslide on Donner Summit.

Actions

SN-6.A

Emergency Operations Plan

Coordinate with other emergency response agencies to update the Emergency Operations Plan for Truckee by 2022 and every five years thereafter. Coordinate with agencies to implement measures, including response to fire, earthquake, blizzard, hazardous materials spills, and other disasters. [Source: 2025 General Plan, Safety Element, Action A7.1, modified]

Responsibility: Office of Emergency Services

Time Frame: Short term

SN-6.B

Local Hazard Mitigation Plan

Coordinate with Nevada County to update the Local Hazard Mitigation Plan (LHMP) in 2023 and every five years and incorporate the LHMP by reference into the Safety and Noise Element. [Source: New action, modified during review by CalFire]

Responsibility: Office of Emergency Services.

SN-6.8

Education on Emergency Response and Evacuation

Increase outreach to visitors, residents, and vulnerable populations on emergency response and evacuation processes, with a particular focus on low-income and non-English speakers to promote a culture of preparedness that empowers increased resilience to hazard-related events and a changing climate. [Source: New policy, Climate Adaptation Plan, Goal 15, Strategy 15.8, modified]

SN-6.9

Regional Transportation Evacuation Planning

Work with transit providers to integrate regional transportation evacuation plans into regional transit plans. [Source: New policy, Climate Adaptation Plan, Goal 16, Strategy 16.4]

Time Frame: Short term

SN-6.C

Community Wildfire Protection Plan

Coordinate with the Truckee Fire Protection District to update the Community Wildfire Protection Plan in 2023 and every five years thereafter. [Source: New action]

Responsibility: Office of Emergency Services

Time Frame: Short term

SN-6.D

Emergency Response Training

Coordinate with the Truckee Fire Protection District, CAL FIRE, USFS, Truckee Police Department, and other entities providing emergency response to conduct regular emergency response training. [Source: New action added during CalFire review]

Responsibility: Office of Emergency Services

Time Frame: Ongoing



Source: Town of Truckee.

Emergency access and evacuation routes are essential to disaster response.

SN-6.E

Emergency Planning

Work with community stakeholders and the Town’s Office of Emergency Services to create a plan for extreme congestion and evacuation situations, using emerging technologies to improve traffic flow during extreme events. [Source: New action, Climate Adaptation Plan, Goal 16, Strategy 16.1]

Responsibility: Office of Emergency Services

Time Frame: Short term

SN-6.F

Emergency Preparedness Website

Maintain a web page on the Town website that includes a list of agencies and contacts for emergency situations, information about emergency preparedness, and links to useful resources. [Source: 2025 General Plan, Safety Element, Action A7.2, modified]

Responsibility: Truckee Police Department

Time Frame: Ongoing



Source: Ready.gov.

Emergency kits include items for first aid, hygiene, communication, and food.

SN-6.G

Public Education on Emergency Preparedness and Response

Support the efforts of the Department of Homeland Security, Truckee Fire Protection District, Truckee Police Department, Nevada County Office of Emergency Services, and other agencies to educate the public about emergency preparedness and response. [Source: 2025 General Plan, Safety Element, Policy P7.2, modified]

Responsibility: Office of Emergency Services

Time Frame: Ongoing

SN-6.H

Post-Disaster Rebuilding Ordinance

Research and develop general rules and procedures and amend the Development Code to streamline the planning and permitting requirements for construction of temporary housing, the clearing and disposition of burnt trees/vegetation, or permanent rebuilding activities following a major disaster, such as model emergency or urgency ordinances. [Source: New action, OPR Fire Hazard Planning Technical Advisory]

| **Responsibility:** Community Development Department

| **Time Frame:** Short term

SN-6.I

Emergency Displacement Contingency Plans

Coordinate with local, regional, or state agencies to develop contingency plans for meeting the short-term, temporary housing needs of those

displaced during a catastrophic event, as well as clearing and disposition of burnt trees/vegetation and other related recovery work. *[Source: New action, OPR Fire Hazard Planning Technical Advisory]*

| **Responsibility:** Office of Emergency Services

| **Time Frame:** Ongoing

Goal SN-7: Human-Caused Hazards

Protect the community from hazards such as the harmful effects of hazardous materials and risks associated with operations at Truckee Tahoe Airport. *[Source: 2025 General Plan, Safety Element, Goal SAF-5 and Goal SAF-6, modified]*

Policies

SN-7.1

Hazardous Materials and Waste Use, Storage, and Transport

Continue to coordinate with the Nevada County Environmental Health Department in the review of all projects that require the use, storage, or transport of hazardous materials and waste to ensure necessary measures are taken to protect public health and safety. *[Source: 2025 General Plan, Safety Element, Policy P5.1]*

sources contributing to such contamination. *[Source: 2025 General Plan, Safety Element, Policy P5.3]*

SN-7.2

Household Hazardous Waste Disposal

Continue to cooperate with Tahoe Truckee Sierra Disposal to facilitate opportunities for safe disposal of household hazardous waste and development of public education programs to help residents understand the importance of proper disposal of hazardous waste as climate conditions change. *[Source: 2025 General Plan, Safety Element, Policy P5.2, modified]*

SN-7.4

Workplace Safety

Encourage the effective implementation of workplace safety regulations and ensure that hazardous material information is available to users and employees. *[Source: New policy]*

SN-7.3

Soils and Groundwater Remediation

Support efforts to identify and remediate soils and groundwater contaminated with hazardous materials and to identify and eliminate

SN-7.5

Airport Land Use Compatibility

Maintain land use and development patterns in the vicinity of Truckee Tahoe Airport that are consistent with the adopted Comprehensive Airport Land Use Plan, including setbacks and height requirements. *[Source: 2025 General Plan, Safety Element, Policy P6.1]*

SN-7.6

Airport Incident Reporting

Monitor aviation-related incidents that impact the town and consult with the Truckee Fire Protection District and the Truckee Tahoe Airport District on potential safety and emergency response impacts resulting from increased airport operations. *[Source: New policy]*

SN-7.7

Developer Cooperation with Airport District

Require development applicants to work with the Truckee Tahoe Airport District and the Truckee Tahoe Airport Land Use Commission to ensure

compliance with the Truckee Tahoe Airport Land Use Compatibility Plan.

[Source: New policy]

Goal SN-8: Noise

Minimize community exposure to excessive noise and maintain Truckee’s peaceful mountain environment by ensuring that land uses are compatible with surrounding noise sources and levels. *[Source: 2025 General Plan, Noise Element, Goal N-1, modified]*

Noise is unwanted sound.

Ambient noise is a relatively steady background noise that is an accumulation of different noise sources near and far. Most ambient noise in Truckee is related to transportation. Other ambient noise sources are wind and chirping birds.

Noise sources include traffic; construction work; athletic, musical, or other group events; heating, ventilation, and air conditioning equipment, and generators.

Noise-sensitive uses include residences, schools, senior living facilities, parks, lodging, places of worship, libraries, sensitive habitats, and recreation areas.

Vibration-sensitive uses include all noise-sensitive uses, structures, and vibration-sensitive equipment, as described in the *Transportation and Construction Vibration Guidance Manual* published by Caltrans in 2020.

Table SN-1: Land Use Compatibility Standards for Community Noise Environment

Land Use Category	Community Noise Exposure - L _{dn} or CNEL (db)					
	55	60	65	70	75	80
Residential – Low-Density Single Family, Duplex, Mobile Homes	Blue	Blue	Green	Green	Yellow	Orange
Residential - Multi-Family (including mixed-use development)	Blue	Blue	Green	Green	Yellow	Orange
Transient Lodging – Motels, Hotels	Blue	Blue	Green	Green	Yellow	Orange
Schools, Libraries, Churches, Hospitals, Nursing Homes	Blue	Blue	Green	Green	Yellow	Orange
Auditoriums, Concert Halls	Blue	Blue	Green	Green	Yellow	Orange
Sports Arenas, Outdoor Spectator Sports	Blue	Blue	Green	Green	Yellow	Orange
Playgrounds, Neighborhood Parks	Blue	Blue	Green	Green	Yellow	Orange
Community and Regional Parks, Golf Courses, Riding Stables, Water Recreation, Other Recreation, Cemeteries	Blue	Blue	Green	Green	Yellow	Orange
Offices, Industrial, Manufacturing, Utilities, Agriculture	Blue	Blue	Green	Green	Yellow	Orange

- █ **Normally Acceptable:** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
- █ **Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.
- █ **Normally Unacceptable:** New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- █ **Clearly Unacceptable:** New construction or development generally should not be undertaken.

Source: Data from Office of Planning and Research, adapted by Ascent, 2022.

Policies

SN-8.1

Noise Compatibility Standards

Require new development to ensure the noise compatibility standards shown in Table SN-1 are met, using existing noise data (e.g., roadway noise contour map, available documentation) or a project-specific noise analysis/acoustical study. Require all feasible noise reduction measures identified by the study to be incorporated into the project. *[Source: 2025 General Plan, Noise Element, Policy P2.2 and P2.3, modified]*

SN-8.2

Normally Unacceptable Noise Exposure

Permit new development resulting in “normally unacceptable” noise level exposure only when the allowed new use can be shown to serve the greater public interests of the citizens of Truckee and all noise reduction measures identified by a noise analysis/acoustical study are incorporated into the project. *[Source: 2025 General Plan, Noise Element, Policy P1.5, modified]*

SN-8.3

Location of Noise-Sensitive Receptors

Discourage location of noise-sensitive uses (such as senior living, hospitals, churches, daycare centers, residences) in locations with noise exposure exceeding “normally acceptable” levels. If relocation is infeasible, require all feasible noise reduction measures identified by a noise analysis/acoustical study. *[Source: New policy, General Plan Advisory Commission, modified]*

SN-8.4

Noise Reduction Techniques

Prohibit the construction of sound walls and require new development projects to evaluate site design techniques, building setbacks, earthen berms, alternative architectural layouts, and other means to meet noise reduction requirements. *[Source: 2025 General Plan, Noise Element, Policy P2.4, modified]*

SN-8.5

Insulation Standards for Interior Noise

Enforce the California Title 24 Noise Insulation Standards for interior noise levels attributable to exterior sources for all new residential uses to ensure interior noise levels for residential uses do not exceed a community noise equivalent level of 45 decibels. *[Source: 2025 General Plan, Noise Element, Policy P1.3, modified]*

SN-8.6

Retrofitting of Buildings with Unacceptable Interior Noise Exposure

Encourage retrofitting of noise-sensitive uses exposed to existing unacceptable interior noise levels, and those that become exposed to unacceptable interior noise in the future, with sound-insulating features. *[Source: 2025 General Plan, Noise Element, Policy P1.4, modified]*

SN-8.7

Groundborne Vibration

Require preparation of a vibration assessment for new development of vibration-sensitive uses or buildings within 200 feet from the centerline of the railroad tracks. Require that the assessment be conducted consistent with Federal Transit Administration vibration standards and include all feasible measures to reduce potential impacts from groundborne vibration. *[Source: 2025 General Plan, Noise Element, Policy P1.7, modified]*

SN-8.8

Transportation Noise Sources

Consider potential noise impacts when evaluating new developments for transportation noise sources, including roadway or transit projects. Require noise reduction measures to be incorporated to reduce noise exposure consistent with “normally acceptable” noise standards identified in Table SN-1 or incremental traffic noise standards according to the Federal Transit Administration guidelines. *[Source: New policy]*

SN-8.9**Vehicle and Diesel Equipment Noise**

Investigate new alternative methods for reducing noise associated with vehicles and diesel equipment, and support efforts to reduce vehicle and equipment noise. Methods may include alternative road surfacing materials, fleet and equipment modernization or retrofits, use of alternative-fuel vehicles, and installation of mufflers or other noise-reducing equipment. *[Source: 2025 General Plan, Noise Element, Policy P3.5 and P3.6, modified]*

SN-8.10**Highway Noise Reduction**

Encourage Caltrans to incorporate noise-reducing features during highway improvement projects and implement methods other than sound walls to attenuate traffic noise along highways in Truckee. *[Source: 2025 General Plan, Noise Element, Action A2.4, modified]*

SN-8.11**Legislation for Motor Vehicle Noise**

Support federal and state legislation to attain lower operating noise levels on motor vehicles. *[Source: 2025 General Plan, Noise Element, Policy P3.8]*



Source: Tahoe Quarterly.

Roadway traffic can generate noise.

SN-8.12**Rail Operation Noise**

Encourage the Union Pacific Railroad to reduce noise from its rail operations, particularly use of warning whistles, and support efforts to eliminate the need for these audible warnings, including upgrades to at-grade crossings. *[Source: 2025 General Plan, Noise Element, Policy P3.11]*

SN-8.13**Construction Hours**

Continue to restrict construction hours in Truckee to reduce impacts to adjacent existing noise-sensitive uses. *[Source: New policy]*

SN-8.14**Construction Noise Control Measures**

Require the following standard construction noise control measures to be included as requirements at construction sites in order to minimize construction noise impacts:

- ▶ equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment;
- ▶ locate stationary noise generating equipment as far as possible from noise-sensitive uses when noise-sensitive uses adjoin or are near a construction project area;
- ▶ use “quiet” air compressors and other stationary noise-generating equipment where appropriate technology exists; and
- ▶ require the project sponsor to designate a “disturbance coordinator” who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler) and will require that reasonable measures warranted to correct the problem be implemented. The project sponsor shall also post a telephone number for excessive noise complaints in conspicuous locations in the vicinity of the project site and send a notice to neighbors in the project vicinity with information on the construction schedule and the telephone number for noise complaints. *[Source: 2025 General Plan, Noise Element, Policy P3.13, modified]*

SN-8.15**Temporary and Ongoing Outdoor Events and Activities**

Limit noise impacts from temporary outdoor events (e.g., neighborhood parties, outdoor music) and on-going outdoor activities associated with a land use permit (e.g., weddings, concerts, fundraisers) on nearby noise-sensitive uses. *[Source: New policy, General Plan Advisory Committee]*

SN-8.16**Airport Land Use Compatibility**

When considering new development proposals in the vicinity of Truckee Tahoe Airport, enforce the noise compatibility criteria and policies set forth in the adopted Truckee Tahoe Airport Land Use Compatibility Plan. *[Source: 2025 General Plan, Noise Element, Policy P1.6]*

SN-8.17**Flyover Noise**

Support the efforts of the Truckee Tahoe Airport District to educate pilots about appropriate flight paths and to hold them accountable for using appropriate flight paths to minimize flyovers of residential neighborhoods, and other District efforts to monitor, minimize, reduce, and mitigate airport noise. *[Source: 2025 General Plan, Noise Element, Policy P3.9]*

SN-8.18**Future Airport Noise Exposure**

Ensure Truckee Tahoe Airport District action, including pursuit of land use entitlements and modifications to long-range plans, minimize community noise exposure associated with airport operations. *[Source: 2025 General Plan, Noise Element, Policy P3.10]*



Source: Truckee Donner Parks and Recreation District.

Amplified music can result in noise impacts to nearby residents.

SN-8.19**Additional Construction Noise Control Measures**

Require the following additional construction noise control measures at construction sites where construction activity, excluding single-family construction, would take place outside of the timeframes exempt from the noise standards established in the Town Development Code and is anticipated to generate exterior noise levels at sensitive receptors that exceed the applicable nighttime noise standards of 50 L_{eq} or 70 L_{max} .

- ▶ Temporary noise barriers, such as curtains, piled snow, or hay bales.
- ▶ Noise-reducing enclosures and techniques around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors) to break the line of sight between the noise source and receiver.
- ▶ Operation of heavy-duty construction equipment at the lowest operating power possible. *[Source: New policy]*

SN-8.20**Construction Vibration**

Require construction projects involving pile driving, within 920 feet of vibration sensitive uses when considering vibration decibels (VdB) for human annoyance and 100 feet of vibration sensitive buildings when considering peak particle velocity (PPV) for structural damage, and construction projects not involving pile driving, within 45 feet of vibration sensitive uses and 15 feet of vibration sensitive buildings when considering VdB and PPV, respectively, to evaluate all potential vibration-inducing activities with the potential to result in structural damage or exposure of sensitive receptors to excessive groundborne vibration. Include various measures such as setback distances, phasing ground-impacting operations, monitoring programs, and alternative methods to traditional construction activities (i.e., predrilling holes and other alternatives to traditional pile driving) to reduce potential effects. *[Source: New policy]*



New developments can generate noise during construction and grading.

Actions**SN-8.A****Amendment of Development Code Requirements for Vibration-Sensitive Uses**

Amend the Development Code to ensure all vibration-sensitive uses and buildings are sited at least 200 feet from the centerline of the railroad tracks. *[Source: 2025 General Plan, Noise Element, Policy 1.7, modified]*

Responsibility: Community Development Department

Time Frame: Midterm

SN-8.B**Amendment of Development Code Sound Wall Requirements**

Amend the Development Code to prohibit installation of sound walls. *[Source: 2025 General Plan, Noise Element, Action A2.3, modified]*

Responsibility: Community Development Department

Time Frame: Midterm

SN-8.C**Amendment of Development Code Requirements for New Noise Sources**

Amend the Development Code to require operational limitations and implementation of noise-buffering reduction measures for new uses with the potential to generate significant noise (including, but not limited to, industrial uses, auditoriums, concert halls, amphitheaters, sports arenas, outdoor spectator sports fields, outdoor spectator sports, and outdoor temporary events) beyond the “normally acceptable” level near existing noise-sensitive uses as identified. *[Source: New action]*

Responsibility: Community Development Department

Time Frame: Midterm

SN-8.D**Amendment of Development Code Amplified Sound Requirements**

Amend the Development Code to restrict outdoor amplified sound/music to the hours of 10 a.m. to 10 p.m., unless otherwise approved by the Community Development Department. *[Source: New action]*

Responsibility: Community Development Department

Time Frame: Midterm

SN-8.E**Amendment of Development Code for Airport Land Use Compatibility**

Review and amend the Development Code and the Town Building Code as necessary to be consistent with the noise policies and criteria of the Truckee Tahoe Airport Land Use Compatibility Plan. *[Source: 2025 General Plan, Noise Element, Action A1.1, modified]*

Responsibility: Community Development Department

Time Frame: Midterm

SN-8.F**Funding and Assistance to Address Existing Interior Noise**

Conduct a study to identify homes that may become exposed to unacceptable interior noise levels. On the basis of these studies, initiate a program to seek funding and assist homeowners with sound insulation retrofits of existing homes that are exposed to unacceptable interior noise. *[Source: 2025 General Plan, Noise Element, Action A1.2, modified]*

Responsibility: Community Development Department

Time Frame: Short term

SN-8.G**Communication with Union Pacific Railroad**

Initiate communication with the Union Pacific Railroad (UPRR) to:

- ▶ request that UPRR make exceptions to its warning whistle policy for the two at-grade crossings in Truckee (at Bridge Street and near Olympic Heights); and
- ▶ request that UPRR enforce its existing policies regarding noise from rail operations and use of warning whistles. *[Source: 2025 General Plan, Noise Element, Action A3.3, modified]*

Responsibility: Community Development Department

Time Frame: Short term



Train whistles at railroad crossings can cause noise disturbances.