



CHAPTER 7

**Conservation and
Open Space Element**

Conservation and Open Space Element

Truckee is defined by its natural setting and open spaces. Dramatic mountain peaks and ridges surround the town, and its neighborhoods are knit together through the landscape of the Truckee River valley, meadows, and forestlands. This natural context is the setting for many of the elements that define Truckee's sense of place and is central to its quality of life: abundant outdoor recreational opportunities, a rich diversity of habitats for plants and animals, and uninterrupted vistas and scenic views from almost every part of the town.

The Conservation and Open Space Element is dedicated to preserving and improving the quantity, quality, and character of open space in Truckee and to conserving and enhancing the town's important natural resources. The element also seeks to strengthen the role of the Town and its citizens as environmental stewards, striving to minimize individual and collective impacts on local and global resources.

Since open space and natural resource issues generally transcend the boundaries defined by the town limits, it should be emphasized that, perhaps more than some other elements of the General Plan, the Conservation and Open Space Element provides guidance for a range of issues that affect both the town and the wider Planning Area.



Source: Town of Truckee.

Open space areas enhance the scenic quality of Truckee.

Guiding Principles

- ▶ Preserve and expand the quantity and quality of natural systems in Truckee by promoting aquatic and terrestrial biodiversity and by implementing environmental, ecological, and conservation-minded strategies.
- ▶ Increase the amount of permanently protected, connected, and publicly accessible open space in and around Truckee for the use and enjoyment of all Truckee residents.
- ▶ Preserve the Truckee River corridor, its tributary drainages, and its associated riparian habitat to enhance their role as critical open space and as a biological and scenic resource.
- ▶ Facilitate regional collaboration within the watershed boundary to conserve and manage important natural resources and environmental quality.
- ▶ Ensure the availability of a diverse range of recreational opportunities for Truckee's existing and future population.
- ▶ Maintain and improve air quality in the Truckee region to ensure a healthful environment for all.
- ▶ Implement "low impact development" planning and design practices and technologies to simultaneously reduce infrastructure costs, conserve and protect natural resource systems, and reduce potential environmental impacts.

State Requirements

State law requires that a general plan include both a conservation element and an open space element. The Truckee General Plan combines these two elements into a single Conservation and Open Space Element that addresses their similar and overlapping concerns and satisfies the legal requirements for both.

Government Code Section 65302(d) requires a conservation element to address the conservation, development, and utilization of natural resources, including forests, rivers and other waters, fisheries, plants and wildlife, minerals, and soils. Government Code Section 65560 requires an open space element to address the following four categories: open space for the preservation of natural resources, open space used for managed resource production, open space for outdoor recreation and scenic resources, and open space for public health and safety.

Not all aspects dictated by state law are discussed in this element because they are included elsewhere in the General Plan. For example, areas important for the preservation of historic and cultural resources are identified in the Community Character Element, open space for public health and safety is primarily discussed in the Safety and Noise Element, and sustainability and energy efficiency is discussed in the Climate Action Plan Element. In addition, this Conservation and Open Space Element addresses a topic not specifically required by state law. Issues of air quality are addressed in consideration of the importance of the air as a natural resource, and clean air as a vital contributor to a healthy environment.

Open Space

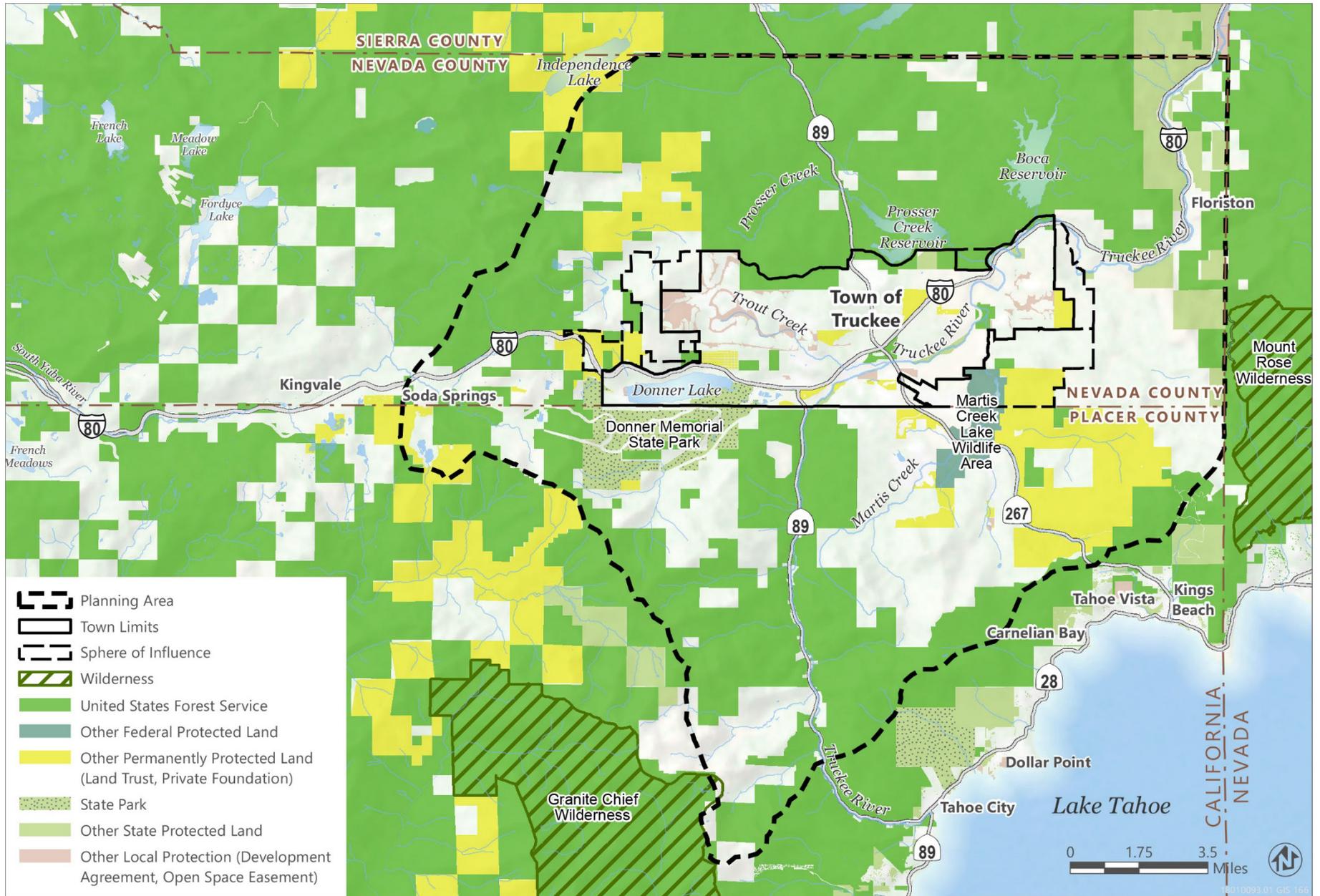
The Land Use Element of the General Plan establishes and applies two open space land use designations, Open Space Recreation and Resource Conservation/Open Space, to preserve large open space areas in Truckee (see Figure LU-2). However, open space can vary widely and is an important consideration in all General Plan land use designations, including those that allow more intensive development. This element establishes goals, policies, and actions to protect a variety of types of open space throughout Truckee, occurring at all scales and across the range of land use designations.

Open space varies in type, function, and quality but is generally defined as any parcel or area of land or water that is essentially unimproved and devoted to open-space use (Government Code Section 65560[b]).

The various types of open space in and around Truckee can be categorized into the following seven basic types of open space based on their different characteristics and functions, and the types of activities and uses that typically occur in such areas. While each open space type described is presented as categorically distinct for the purposes of definition, it is important to note that many open space areas fall under more than one category or will contain uses described under more than one open space type.

Pristine Open Space

Pristine open space generally consists of large tracts of public land where development is highly restricted. Many of Truckee's important scenic and visual resources, such as mountain peaks, ridgelines, and forestlands, are considered pristine open space. US Forest Service wilderness areas, like the Mount Rose and Granite Chief wilderness areas, are among the most strongly protected open space areas around Truckee. There are many other areas in and around Truckee with some form of permanently protected status, including lands in Donner Memorial State Park, designated wildlife areas, and land under the ownership of the Truckee Donner Land Trust. Pristine open space areas in and around Truckee are shown in Figure COS-1.



Source: Data downloaded from GreenInfo Network and US Forest Service in 2021; adapted by Ascent in 2022.

Figure COS-1: Permanently Protected Open Space

Biological Resource Areas

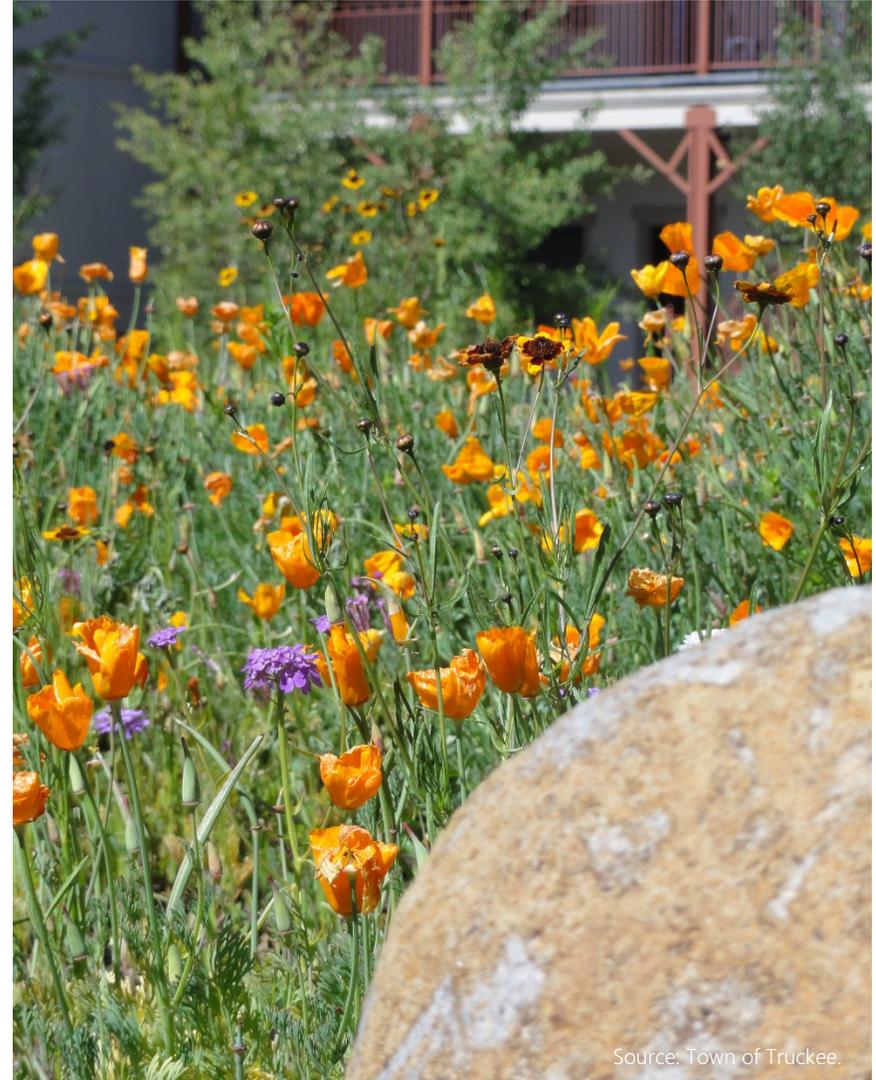
Many open space areas are important because they provide habitat for significant biological resources. While frequently encompassing wide areas and pristine open space, important habitat open space can also take a linear form, such as a river corridor or wildlife migration route, or can exist in smaller pockets in more developed open space areas. Biological resource open space areas also frequently have a high level of scenic value, and they often serve as a venue for low-impact active and passive recreation. The degree of human access can vary depending on the nature and sensitivity of those resources, but development is generally secondary to the goals of habitat preservation and typically limited to facilities for passive recreational use.

The Truckee River Basin and adjacent upland and mountain areas are rich in biological resources, both within the town and in the surrounding region. There are 12 special-status plant species and 11 special-status animal species that are known to occur or have occurred historically within one mile of the town. Truckee's important biological resource areas include both vegetation and habitat areas, as well as wildlife corridors and migration routes that traverse the town.

- ▶ **Vegetation and Habitat Areas.** Several sensitive habitat types located in and around Truckee provide high-quality habitat for special-status and common species. These include aspen stands, wet meadows, Donner Lake, the Truckee River and its tributaries, and montane riparian habitat that is often associated with these waters. Waters in Truckee and the surrounding Planning Area are subject to federal and state regulatory authority. Riparian habitats are often included under the authority of California Fish and Game Code Section 1602.
- ▶ **Wildlife Corridors and Deer Migration Routes.** Wildlife movement corridors are another important component of the natural environment in Truckee. These corridors generally reflect areas of undisturbed, continuous vegetation, such as riparian areas along the Truckee River and streams that provide shelter and food sources for resident and migratory wildlife species.

Truckee's riparian, shrub communities, and forested areas are important habitats for local and migratory deer populations, referred to as the

Loyalton-Truckee Herd. The Verdi sub-unit of the herd migrates from the eastern Sierra Nevada foothills, outside of Reno, Nevada, along the Truckee River southwest into the eastern portions of Sierra, Nevada, and Placer Counties, including through portions of Truckee, during the spring and summer months after breeding. The herd then returns to its winter range in the eastern Sierra Nevada foothills in the late fall.



Source: Town of Truckee.

Wildflowers bloom in a natural vegetation area.

Managed Resource Areas

Managed resource areas include open space lands under public or private ownership that are used for activities focused on resource values, such as cattle grazing, forestry, or mineral extraction. Resource open space often also serves recreational uses, such as hiking, horseback riding, fishing, camping, or off-road vehicle use. Although important scenic resources can be found in these areas, some resource extraction activities, such as timber clearcutting or large-scale aggregate mining, may create an undesirable visual character.

Managed resource open space in Truckee includes that associated with the following resources:

- ▶ **Mineral Resources.** Existing sand, gravel, silt, and clay deposits, classified as Mineral Resource Zone (MRZ) 2b and MRZ-3a deposits under the California Surface Mining and Reclamation Act of 1975 (SMARA), are located in Truckee. Several of these deposits are presently mined for use as construction aggregate. As shown in Figure COS-2, these resources are generally associated with alluvial deposits along the length of the Truckee River Valley, although some mineral resources are associated with volcanic features, such as the Hirschdale cinder cone. State law requires the General Plan to include policies for important mineral resource areas that address the conservation and development of identified mineral deposits, balance the value of these deposits against competing land uses, and minimize the impacts of mining activities.

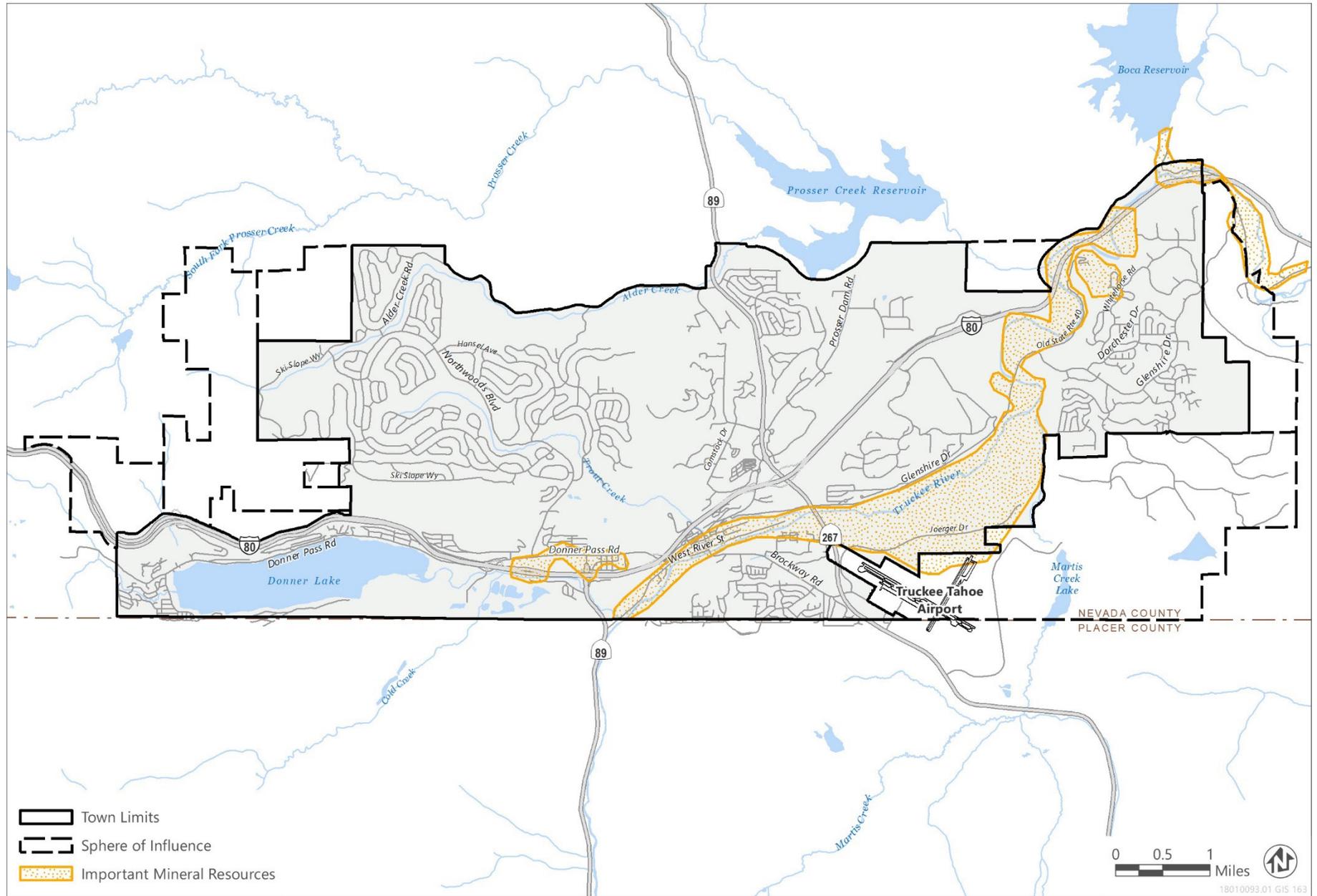
An example of the need to balance the preservation of important mineral resources with other uses can be found in the case of the mineral areas mapped in the Downtown and Gateway District. Since mining operations would be incompatible with existing development in these places, the General Plan does not directly support the protection of mineral resources in these areas and instead focuses on places where mining would be more compatible.

- ▶ **Grazing and Forestry Resources.** Open space areas that could potentially provide grazing and forestry resources generally coincide with rangeland vegetation areas and forestland, respectively. Despite the potential for these uses, there is no active grazing taking place in Truckee today, and no commercial forestry, although some timber harvesting for forest management does occur.



Source: California State University, Sacramento.

Boca volcanics are mined at the Hirschdale cinder cone.



Source: Data downloaded from Town of Truckee in 2022.

Figure COS-2: Important Mineral Resources

Parks and Recreational Areas

Parks and recreational open space areas typically include developed and maintained recreation facilities offering opportunities for active and passive use. Areas in Truckee are maintained and operated both publicly and privately. The California Department of Parks and Recreation operates Donner Memorial State Park, an important recreation resource for the local community. The Truckee Donner Recreation and Park District (TDRPD) operates seven parks and five recreational facilities in Truckee, including the Truckee River Regional Park and the Community Recreation Center. The Town Public Works Facilities Maintenance Division maintains 20.9 miles of trails, including the Legacy Trail, Trout Creek Trail, Mousehole (State Route [SR] 89 south) Trail, and trails along Brockway Road and behind Alder Creek Middle School. Parks and recreational areas in Truckee are shown in Figure COS-3 and inventoried in Table COS-2.

There are several privately owned and operated recreational facilities in Truckee. Although public use, where allowed, is fee-based, these facilities offer additional recreational opportunities for Truckee residents. Private recreational open space facilities in Truckee include five golf courses and private facilities associated with the Tahoe Donner resort area.

Table COS-2: Parks and Recreational Facilities in Truckee

Name	Type	Acres	Features
Parks			
Billy Rose Park	N	0.3	Playground, picnic tables
Donner Memorial State Park	S	1,750*	Museum, beach, campground, trails, fishing
Donner Lake Boat Launch Facility	D	1.5	Boat ramps, floating dock, fish cleaning station
Donner Lake Public Piers	D	2.5	37 public piers
Meadow Park	N, D	6	Ballfields, picnic area, playground
Riverview Sports Park	D	31	Sports fields, baseball diamond, soccer field, BMX track
Shoreline Park	D	1.6	Fishing dock, boat launch
Truckee River Regional Park	R	62	Skate park, ice-skating rink, volleyball, nature and river trails,

Name	Type	Acres	Features
			rodeo arena, amphitheater, ballfields, picnic area
West End Beach	D	10	Pavilion, swim area, fishing area, playground, volleyball court
Other Facilities			
Community Arts Center	O	—	Auditorium, meeting rooms, classrooms
Community Rec Center	O	—	TDRPD office, meeting rooms, auditorium, tots area, gym, indoor track, basketball courts, climbing wall
Community Swimming Pool	O	—	15x25-yard pool, recreation pool, lazy river, slide, party room
Veterans Building	O	—	Meeting rooms, kitchen/dining area, indoor basketball court
Tahoe Truckee Unified School District Facilities			
Truckee High School and Elementary School	NA	—	Athletic fields, track, basketball hoops
Alder Creek Middle School	NA	—	Basketball hoops, soccer field, outdoor amphitheater
Glenshire Elementary School	NA	6	Playground, baseball/softball field, open turf

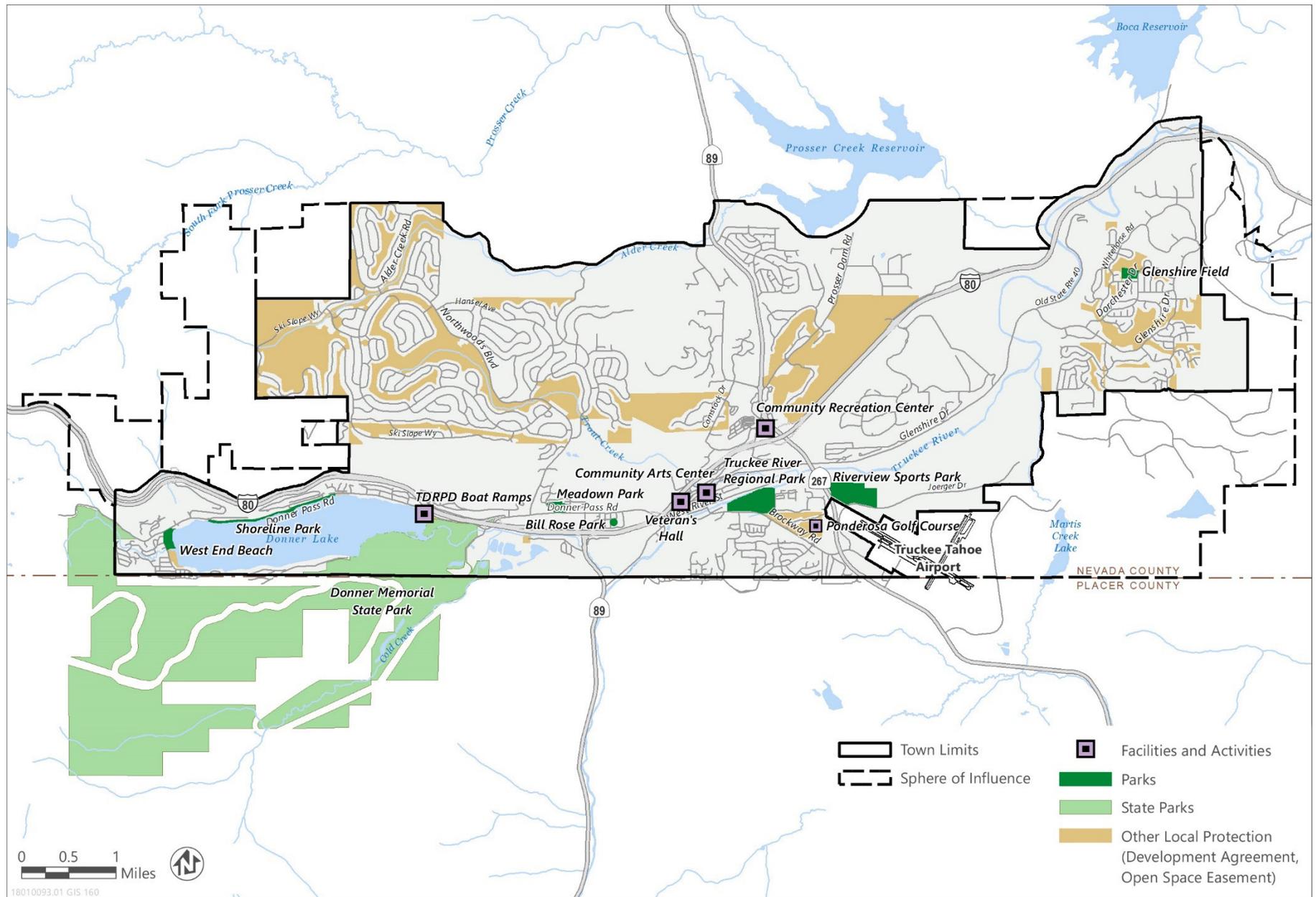
Key: N = neighborhood park, D = district park, R = regional park, S = state park, O = other recreational facility, NA = not applicable

*Includes acreage outside of town limits in Placer County

Source: Town of Truckee 2022.



Riverview Sports Park contains ball fields and other amenities.



Source: Data downloaded from Town of Truckee in 2018 and California Department of Parks and Recreation in 2016.

Figure COS-3: Parks and Recreation Facilities

Open Space Corridors

Open space corridors provide important links and connections between other dispersed open space areas. These corridors link fragmented habitat areas and provide safe corridors for wildlife movement and migration. Riparian habitat along the Truckee River and its tributaries, as well as areas adjacent to the Tahoe Donner and Glenshire neighborhoods, forms natural open space with critical habitat and wildlife movement corridors. In addition, trails, paths, and bikeways in open space corridors facilitate travel between open space areas and create an integrated network.

Scenic Open Space

Most of Truckee's open space areas have scenic value and contribute to the town's sense of place as a mountain community, offering sweeping vistas and largely uninterrupted views of surrounding ridgelines and peaks. Truckee's scenic open space areas are in almost all cases associated with another open space type or function. However, it is primarily those places that are almost entirely undeveloped that are perceived as offering the highest degree of aesthetic value to the community. The Community Character Element includes goals, policies, and actions to ensure the long-term preservation of scenic open space areas.

Open Space for Public Health and Safety

Threats to life and property from natural hazards such as flooding, avalanche, wildland fire, and steep slopes are an important consideration in many parts of Truckee. In many cases, maintaining an area of particular risk in open space serves as a critical safeguard to avoid or buffer development from known hazards. Such safety open space includes floodplain setbacks, airport safety zones, and open space created by requiring development to be clustered away from steep slope areas or areas of avalanche hazard. Each of these safety issues, and related open space for protection from natural and man-made hazards, is discussed in greater detail in the Safety and Noise Element.

Air Quality

Air quality is an important natural resource that influences public health and welfare, the economy, and natural resources and habitats. Air quality is determined by the level of pollutants present in the air. Poor air quality can greatly impact public health, especially for more vulnerable populations—children, seniors, and persons with asthma and other respiratory conditions. Sensitive receptors are uses where vulnerable populations are typically located, such as long-term healthcare facilities, hospitals, rehabilitation centers, retirement homes, convalescent homes, residences, schools, childcare centers, and playgrounds.

Air quality in the Truckee area is typically moderate to good. Particulate matter (i.e., acids, organic chemicals, metals, and soil or dust particles) has reduced substantially in recent years, largely due to reductions in fine particulate matter (PM_{2.5}) emissions from wood-burning appliances. In addition, ozone precursor (reactive organic gases [ROG] and oxides of nitrogen [NO_x]) emissions have been declining in the Truckee area, continuing progress to meeting the California ambient air quality standards (CAAQS) and national ambient air quality standards (NAAQS) for ozone.



Source: Town of Truckee.

Scenic open space offers vistas of the surrounding mountains.

Water Resources

Truckee's network of water resources includes watershed lands, rivers, streams, lakes, reservoirs, and wetlands, as well as underground aquifers and groundwater recharge areas. The overall health and productivity of many of the town's most important habitat areas depends on clean, reliable water resources to support plant and animal communities.

Truckee's human population is no less dependent on an adequate and healthful water supply. Water is a finite resource, and one that should be protected from pollution and conserved to ensure the ongoing availability and integrity of supplies into the future.

Demands on the local water supply are likely to increase as the community continues to grow. In addition to increased demand for water supply, new development and increases in paved (or impervious) areas have the potential to impact water quality through increases in pollutant runoff to local waterways, reduced groundwater recharge rates, and increased erosion.

Water supplied to existing and new development in Truckee comes almost entirely from the Martis Valley Groundwater Basin. Groundwater pumping during periods of high demand and low recharge (summer and

autumn) has the potential to harm beneficial uses provided by groundwater-dependent ecosystems and groundwater-influenced surface waters. Protection of these beneficial uses from groundwater pumping is an objective of the State of California through its Sustainable Groundwater Management Act, signed into law in 2014.

Soil Resources

Soil is a fundamental component of the natural world, sustaining all forms of life and human activity, and serving critical biological functions that affect every aspect of the environment. The quality and character of soil resources determine the type and extent of plant life and agricultural activity that can be supported and play a key role in determining the measures needed to safely construct buildings, roads, and other infrastructure.

Soil erosion is a significant concern in Truckee, in terms of both loss of soil resources and impacts to local water resources. Grading and construction activities greatly increase the potential for soil erosion. The implementation and enforcement of measures to reduce these impacts continue to be a priority for the Town in the development review process.



Source: Town of Truckee.

The Truckee River flows through the town, providing open space, biological resources, scenic resources, and water resources.

Goal COS-1: Open Space Preservation

Preserve existing open space in Truckee and increase the amount of open space under permanent protection.

Policies

COS-1.1

Increase in Amount of Protected Open Space

Support means to protect newly dedicated open space, including public/private partnerships, transfer of development rights, land acquisition, or other means to protect new open space areas, biological resource areas, or other areas found to have significant environmental value.

COS-1.2

Open Space Acquisition and Maintenance Funding

Support efforts to establish and sustain a long-term funding source for public or private open space acquisition and maintenance in Truckee and its vicinity.

COS-1.3

Preservation of Open Space

Encourage development patterns that maximize preservation of land in open space.

COS-1.4

Open Space Preservation Criteria

Adhere to the following criteria for open space preserved through direct actions of the Town, through open space and clustered development requirements and incentives, and through the development review process:

- ▶ preserve open space that, to the greatest possible extent, occurs in large blocks and is contiguous and connected;

- ▶ provide the greatest possible level of public access while respecting private property rights, sensitive habitat values, and safety concerns;
- ▶ provide maximum benefit in terms of habitat preservation; and
- ▶ enhance the overall character of Truckee as a scenic mountain community.
- ▶ maximize carbon sequestration.

COS-1.5

Donner Memorial State Park as Pristine Open Space

Support the preservation of Donner Memorial State Park in its present largely undeveloped state as a pristine open space area, and support expansion of the park to encompass additional undeveloped open space.

COS-1.6

Public Access to Open Space

Support appropriate trail construction and maintenance to provide public access to and throughout open space areas, including wilderness and other pristine open space areas.

COS-1.7

Open Space Corridors

Preserve existing open space corridors, increase connectivity between open space areas within and beyond the town limits, and integrate publicly accessible trails and open space corridors into new development to the extent feasible to create contiguous habitat areas, enhance public access, and promote community health.

Actions

COS-1.A

Partnerships with Open Space Conservation Groups

Create a committee to work with open space conservation groups to support their efforts to acquire and manage open space lands.

Responsibility: Community Development Department

Time Frame: Short term

COS-1.B

Protection of Open Space in the Planning Area

Work with Nevada County, Placer County, and the US Forest Service to coordinate open space protection for the entire Planning Area.

Responsibility: Community Development Department

Time Frame: Ongoing

COS-1.C

Mapping of Open Space, Natural and Wildlife Resources

Continue to update the Town's GIS-based system to catalog, map, and evaluate open space resources in Truckee and its vicinity. The maps and associated database should incorporate all available data, including topography, geology and natural features (including lakes, rivers, tributaries, wetlands, groundwater dependent ecosystems and riparian habitats), biological resources (including migration corridors, wildlife nurseries, and sensitive/critical habitat areas), ecosystem service habitats, current land use, protection status, ownership, and connections such as roads and trails. Update the database regularly to ensure it includes information that is as current as possible.

Responsibility: Community Development Department, Public Works Department

Time Frame: Short term



Source: Truckee Donner Land Trust

Outdoor class in open space preserves.

COS-1.D

Transfer of Development Rights

Evaluate the feasibility of establishing a transfer of development rights (TDR) program and other effective mechanisms for encouraging efficient land use patterns and permanent open space protection. In addition to a TDR program, these mechanisms may include funding support for open space conservation groups, establishment of easements, development incentives, or other means, as appropriate. Long-term management strategies must also be developed.

Responsibility: Community Development Department

Time Frame: Ongoing

Goal COS-2: Truckee River and Donner Lake Protection

Preserve and enhance the Truckee River corridor and Donner Lake and the exceptional natural, scenic, economic, biological, and recreational values they provide.

Policies

COS-2.1

Truckee River and Donner Lake Management

Ensure adequate management of the Truckee River and Donner Lake and their riverbanks or shorelines to restore riparian habitat, improve and maintain water quality, limit flood risks, and offer recreational opportunities.



Source: Truckee Donner Recreation and Park District

Public docks and boat ramp on Donner Lake.

COS-2.2

Limited Development in Setbacks

Prohibit development in the established setback areas from the Truckee River and Donner Lake, consistent with the River Protection Overlay District and the Donner Lake and River/Stream Development Standards of the Development Code. Grading, landscaping, and drainage within the established setback area shall also be subject to strict controls. Improvements for public access and use may be allowed in the established setbacks.

COS-2.3

Enhancement of Degraded Areas

Enhance degraded areas in the Truckee River and Donner Lake 100-year floodplain through habitat restoration, trail construction and/or maintenance, and amenity improvements.

COS-2.4

Support for Local Waterway Organizations

Support the efforts of local community and nonprofit organizations to conduct ecological studies of the Truckee River and Donner Lake and their associated waterways, undertake water quality monitoring, and perform cleanup and restoration activities.

COS-2.5

Public Access to Truckee River and Donner Lake

Improve and protect public access to the Truckee River and Donner Lake.

COS-2.6**Improvements to Downtown Truckee Riverfront**

Work to improve public access and integrate a high-quality urban and natural environment along the Truckee Riverfront in the Downtown.

Actions

COS-2.A**Management Plans for Truckee River and Donner Lake**

Work with the Truckee River Watershed Council, Truckee Donner Recreation and Park District (TDRPD), and other agencies to develop comprehensive, long-term management plans for the Truckee River corridor and Donner Lake. The plans should treat the Truckee River and Donner Lake and their associated riparian, wetland, and meadow habitats as holistic systems and should address the complete range of issues associated with the river and the lake, including scenic and habitat values, opportunities for riparian restoration and enhancement, flood protection, water quality, and access and recreation opportunities.

| **Responsibility:** Community Development Department

| **Time Frame:** Midterm

COS-2.7**Development along Truckee River and Donner Lake**

Regulate development and land uses along the Truckee River corridor and Donner Lake to ensure compatibility with their scenic, recreational, and habitat values.

COS-2.B**Incentivization of Public Access and Restoration Activities**

Amend the Development Code to add incentives for development that would increase and improve public access to the Truckee River and Donner Lake and restore degraded habitats along the riverbanks and the lake.

| **Responsibility:** Community Development Department

| **Time Frame:** Midterm

COS-2.C**Funding for Restoration Activities**

Pursue funding sources and partnerships to create and implement a program to support restoration of the Truckee River and Donner Lake 100-year floodplains.

| **Responsibility:** Community Development Department, Public Works Department

| **Time Frame:** Midterm

Goal COS-3: Biological Resources

Protect sensitive biological resources, specifically special-status wildlife, streams and wetlands, and significant wildlife movement corridors.

Policies

COS-3.1

Biological Resource Open Space

Preserve and improve the integrity and continuity of biological resource open space areas, including sensitive habitat and wildlife movement corridors, through permanent open space protection and restoration.

When reviewing development proposals, consider:

- ▶ sensitive habitat and wildlife movement corridors in the areas adjacent to development sites, as well as on the development site itself;
- ▶ prevention of habitat fragmentation and loss of connectivity;
- ▶ use of appropriate protection measures for sensitive habitat areas such as non-disturbance easements and open space zoning;
- ▶ off-site habitat restoration as a potential mitigation, provided that no net loss of habitat value results; and
- ▶ potential mitigation or elimination of impacts through mandatory clustering of development or project redesign.
- ▶ the effect of summer and autumn water demand on groundwater-dependent ecosystems and surface waters.

COS-3.2

Protection of Resources Through Development Standards

Apply setbacks and other development standards to preserve riparian corridors, streams, and wetland areas and the scenic, recreational, and biological values these areas provide.



Source: Truckee Donner Land Trust (photo by Elizabeth Carmel).

Perazzo Meadow.

COS-3.3**Requirements for Biological Surveys**

Require a site survey, conducted by a qualified biologist, for development on sites with the potential to contain critical or sensitive habitat or where special-status species may be present. Where special-status species are present, require mitigation in accordance with guidance from the appropriate state or federal agency charged with the protection of the subject species. Mitigation shall include implementation of impact minimization measures based on accepted standards and guidelines and best available science and prioritized as follows: avoid impacts, minimize impacts, and compensate for unavoidable impacts.

COS-3.4**Protection of Sensitive Habitats and Wildlife Corridors**

Require that all new development avoid identified sensitive habitats, wetlands, other non-wetland waters, native wildlife nursery sites, and wildlife corridors within or adjacent to the development site, as feasible, by implementing no-disturbance buffers around these areas or implementing project-specific design features (e.g., wildlife-friendly fencing and lighting) in wildlife corridors.

COS-3.5**Protection of Native Plant Species**

Protect native plant species in undisturbed portions of a development site and encourage planting and regeneration of native plant species wherever possible in undisturbed portions of the project site. Encourage use of locally collected, native seeds from near the study area, in the same watershed, and at a similar elevation for revegetation of sites disturbed by construction.

COS-3.6**Eradication of Invasive Plants**

Support efforts to eradicate invasive plants and noxious weeds on public and private property.

COS-3.7**Habitat Restoration on Town and Special District Property**

Encourage restoration of native habitat on Town- and Special District-owned property.

COS-3.8**Ground and Surface Water Protection**

Protect groundwater-dependent ecosystems and surface waters through participation in regional planning efforts, such as updates to the Martis Valley Groundwater Management Plan, that might affect these natural resources.



Open space along the Truckee River.

Actions

COS-3.A

Management and Protection of Sensitive Biological Resources

Coordinate with the California Department of Fish and Wildlife, the US Fish and Wildlife Service, and local interest groups to prepare a comprehensive plan for the management and protection of sensitive biological resources such as wetlands, riparian corridors, and critical habitat areas. The plan should address all known critical habitat areas, wildlife movement corridors, and deer migration routes and should include mapping of sensitive biological resources, identification of potential development conflicts, and establishment of wetland setbacks.

Responsibility: Community Development Department

Time Frame: Short-term

COS-3.B

Monitoring of Sensitive Resources

Monitor the health of sensitive wildlife and habitat resources in Truckee and ensure the continued effectiveness of General Plan policies intended to protect, preserve, and enhance these resources.

Responsibility: Community Development Department

Time Frame: Ongoing

COS-3.C

Education Strategy for Property Owners

Develop guidelines and an education strategy for property owners about issues concerning development near or adjacent to sensitive wildlife habitats. The guidelines should clearly define the range of activities allowed in buffer areas adjacent to sensitive habitats.

Responsibility: Community Development Department, Public Works Department

Time Frame: Midterm

COS-3.D

Incentives for Protection of Significant Wildlife Habitat and Sensitive Biological Resources

Create incentives for the permanent protection of areas of significant wildlife habitat and sensitive biological resources.

Responsibility: Community Development Department

Time Frame: Ongoing

COS-3.E

Gregory Creek Floodplain

Explore floodplain management and/or floodplain modification options in support of property redevelopment for parcels currently impacted by mapped Gregory Creek floodplain.

Responsibility: Community Development Department

Time Frame: Midterm

COS-3.F

List and Map of Special-Status Species in Truckee

Establish, maintain, and regularly update a list and GIS-based map of the occurrence of rare, threatened, endangered, and other special-status species known or suspected to occur in Truckee and its immediate vicinity to be used in the development review process to evaluate the need for detailed biological resource assessments. The list and map should be established in 2025, should include special-status or rare and endangered species identified by the California Department of Fish and Wildlife and the California Native Plant Society, and should be monitored and updated every 2 years.

Responsibility: Community Development Department, Public Works Department

Time Frame: Short term

COS-3.G**Standards for Mule Deer Migration Corridors**

Amend the Development Code to establish development standards (e.g., wildlife-friendly fencing and lighting) for new development adjacent to or in proximity to wildlife movement corridors (i.e., wildlife movement to nursery sites and between critical summer and winter range) or nursery sites (i.e., deer fawning areas) mapped by the California Department of Fish and Wildlife to avoid or reduce indirect adverse effects of project development such that habitat functions and values are not lost.

| **Responsibility:** Community Development Department

| **Time Frame:** Short term



Source: Truckee River Guide.

Mule deer in natural vegetation area.

COS-3.H**Requirements for Preconstruction Survey of Invasive Plants**

Amend the Development Code to establish requirements for all new development involving ground-disturbing activities to complete a preconstruction survey, conducted by a qualified biologist, to determine the presence of invasive plants. Require treatment of any identified invasive plants and monitoring of treatment effectiveness. Ensure vehicles and equipment used during development projects are clean and weed-free. Prioritize the use of on-site or local fill materials and seeds, and ensure fill materials and seeds are free of invasive or noxious weeds.

| **Responsibility:** Community Development Department

| **Time Frame:** Short term

COS-3.I**Support for Restoration Funding**

Pursue funding opportunities from state and federal sources for riparian habitat restoration.

| **Responsibility:** Community Development Department, Public Works Department

| **Time Frame:** Ongoing

Goal COS-4: Mineral Resources

Protect economically viable mineral resources and related industries in Truckee while avoiding land use conflicts and environmental impacts from mining activities.

Policies

COS-4.1

Mineral Resource Deposits

Maintain classification and/or designation reports and maps of mineral resource deposits as identified by the California State Geologist as having regional or statewide significance and any additional deposits identified by the Town, and as provided by the State Mining and Geology Board. Provide notice to landowners and the general public on the location of significant mineral resource deposits.



Source: California State University, Sacramento.

Mining boca volcanics in the Truckee area.

COS-4.2

Permitted Uses in RC/OS Land Use Designation

Restrict permitted uses on lands mapped as important Mineral Resource Areas (see Figure COS-2) within the Resource Conservation/Open Space and Public land use designations to those compatible with mineral resource extraction activities, except in cases where such uses offer public benefits that outweigh those of resource extraction.

COS-4.3

Mining Operations Guidelines

Require mining operations within the town limits to adhere to the following requirements:

- ▶ demonstrate no significant adverse impacts from the mining operations on adjoining areas and uses, including, but not limited to, those associated with noise, dust, and vibration;
- ▶ demonstrate no substantial increase in hazards to neighboring uses, water quality, air quality, or biological resources;
- ▶ demonstrate that the proposed plan complies with existing applicable County and State waste management standards;
- ▶ incorporate sufficient buffering between mining operations and adjacent non-mining uses to minimize noise in accordance with the standards described in the Safety and Noise Element; and
- ▶ incorporate landscaping buffers and other measures to minimize visual impacts to the extent possible.

COS-4.4

California Surface Mining and Reclamation Act

Require all mining projects to be conducted in accordance with a reclamation plan that meets the minimum reclamation standards required by the California Surface Mining and Reclamation Act and associated regulations.

Actions

COS-4.A

Amendment of Mineral Resource Maps as Needed

Amend the map of important mineral resources, included in this General Plan Element as Figure COS-2, when a new or revised mineral resource classification report is published by the California State Geologist. The figure shall be amended to reflect the new or revised report within 12 months of its publication.

| **Responsibility:** Public Works Department

| **Time Frame:** Ongoing



A quarry in Truckee.

Goal COS-5: Soil Resources

Protect the town's soil resources from erosion.

Policies

COS-5.1

Preservation of Steep Slopes

Continue to preserve slopes of 30 percent or greater as open space and avoid slopes of 20 percent to 30 percent if there are other, more suitable areas for development with slopes less than 20 percent.

COS-5.2

Minimization of Erosion and Sedimentation

Continue to require projects that require earthwork and grading, including cuts and fills for roads, to incorporate measures to minimize erosion and sedimentation. Typical measures include project design that conforms with natural contours and site topography, maximizing retention of natural vegetation, and implementing erosion control best management practices.

COS-5.3

Project Review for Grading Activities

Require discretionary project review for grading activities involving 500 square feet of disturbance and/or 20 cubic yards of grading not associated with an approved development project or timber harvesting plan.

Actions

COS-5.A

Identification of Existing Critical Erosion Problems and Pursue Funding

Work with the Truckee River Watershed Council and Lahontan Regional Water Quality Control Board to identify existing critical erosion problems, such as unpaved parking areas along Donner Lake, and to pursue funding to resolve these problems.

| **Responsibility:** Public Works Department

| **Time Frame:** Ongoing

COS-5.B

Use of Innovative Erosion Control Measures

Update standards as new innovative practices are developed, for temporary and permanent erosion control measures.

| **Responsibility:** Public Works Department

| **Time Frame:** Ongoing

Goal COS-6: Forestry Resources

Protect and restore areas previously used for timber harvesting to improve forest health, recreational, scenic, and biological values.

Policies

COS-6.1

Preservation of Forestland

Work closely with the US Forest Service and private property owners to ensure that forestland within and adjacent to the town are preserved, to the extent feasible, for continued managed resource, recreation, scenic, or biological resource open space uses.

COS-6.2

Coordination of Review with the California Department of Forestry and Fire Protection

Coordinate with the California Department of Forestry and Fire Protection in the review of all timber harvesting and conversion plans relative to potential impacts on visual, biological, and recreational resources.

COS-6.3

Buffering of Residential Uses from Adjacent Forestry Resources

Require a buffer between timber harvesting operations and residential uses to minimize conflicts.

COS-6.4

Support Integrated Forestry Planning and Management Activities

Support forest management actions that consider the management of the ecosystem. Collaborate with landowners and regulators on improving forest health through actions that balance wildfire protection with ecological, economic and social sustainability. Educate the community on the benefits of restored forest ecology by way of fuels reduction, fire-tolerant/resistant tree species, buffer areas/fuel breaks, etc.



Source: National Forest Foundation.

Trail building near Truckee.

Goal COS-7: Water Quality

Protect water quality and quantity in creeks, lakes, natural drainages, and groundwater basins.

Policies

COS-7.1

Prohibition against Development in Setbacks

Development shall be prohibited within established setback areas for streams and waterways, except as otherwise allowed in the Development Code.

COS-7.2

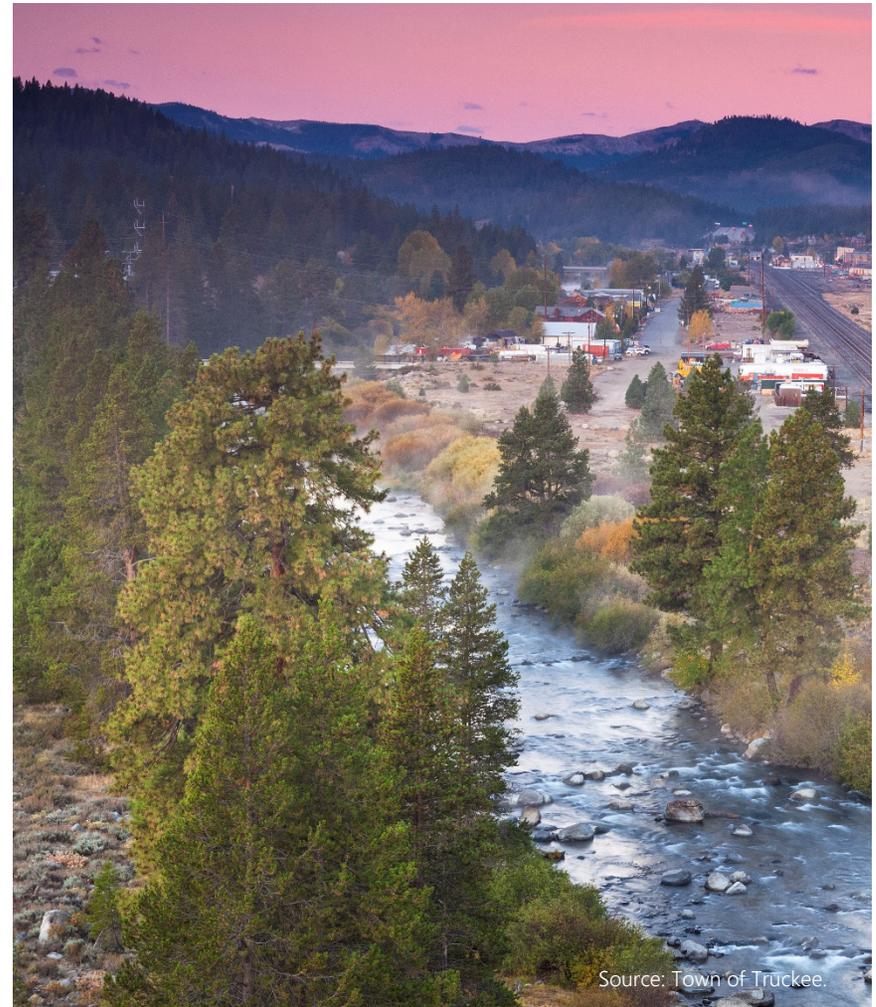
Implementation of Best Management Practices

Protect surface water and groundwater resources from contamination from runoff containing pollutants and sediment through implementation of the Lahontan Regional Water Quality Control Board's best management practices.

COS-7.3

Elimination of Sources of Pollution to Groundwaters and Surface Waters

Cooperate with state and local agencies in efforts to identify and eliminate all sources of existing and potential point-source and nonpoint-source pollution to groundwaters and surface waters, including leaking fuel tanks, discharges from storm drains, auto dismantling, dump sites, sanitary waste systems, parking lots, roadways, and logging and mining operations.



Source: Town of Truckee.

View of the Truckee River.

COS-7.4**Low-Impact Development Measures**

Require low-impact development measures to limit the amount of impervious surface in new development and to increase the retention, treatment, and infiltration of stormwater runoff.

COS-7.5**Enforcement of Waste Discharge Guidelines**

Enforce guidelines set forth by the Lahontan Regional Water Quality Control Board regarding waste discharge associated with domestic wastewater facilities such as septic tank leach field systems.

COS-7.6**Low Impact Development and Best Management Practices**

Use low impact development and best management practices established in the Lahontan Regional Water Quality Control Board's Truckee River Hydrologic Unit Project Guidelines for Erosion Control, the State of California Stormwater Best Management Practices Handbooks, and other resources such as the Practice of Low Impact Development (US Department of Housing and Urban Development) and Water Quality Model Code and Guidebook (State of Oregon, Department of Land Conservation and Development) as guidelines for water quality and erosion control measures required by the Town.

COS-7.7**Analysis of Water Availability**

Require will-serve letters for new development proposed on sites served by the Truckee Donner Public Utility District. Require a water availability analysis for new development proposed in areas served by on-site wells.

COS-7.8**Water Conservation**

Encourage Truckee residents, businesses, and public agencies to conserve water and work with the Truckee Donner Public Utility District to implement water conservation programs and incentives.



Source: Town of Truckee

View of Donner Lake.

COS-7.9**Importance of Stormwater Management**

Recognize the importance of stormwater management in protecting all water resources in Truckee, for example, flood control, surface water and groundwater quality, and river, stream, and lake health.

COS-7.10**Stormwater Runoff and Loss of Groundwater Recharge**

Encourage the use of water quality management practices to minimize stormwater runoff and the loss of groundwater recharge from paving. Such limitations shall take into account Policy COS-8.2 under Goal COS-8, concerning particulate matter pollution associated with unpaved roads.

COS-7.11**Snow Removal**

When evaluating projects that require snow maintenance plans, consider off-site environmental impacts, including impacts to water quality.

Actions

COS-7.A

Monitoring of Water Quality in Truckee River Basin

Continue to work with the Truckee River Watershed Council and the Lahontan Regional Water Quality Control Board to document current condition water quality information and to monitor regulatory compliance regarding water quality in the Truckee River Basin.

Responsibility: Public Works Department

Time Frame: Ongoing

COS-7.B

National Pollutant Discharge Elimination Permit and Stormwater Quality Ordinance

Continue to implement the National Pollutant Discharge Elimination (NPDES) permit and the Stormwater Quality Ordinance. Review the Stormwater Quality Ordinance and evaluate its achievements. Make necessary amendments to improve the ordinance and update the Development Code to reflect any amendments to the Stormwater Quality Ordinance.

Responsibility: Public Works Department

Time Frame: Annually

COS-7.C

Performance Guarantees

Review the Development Code for opportunities to strengthen requirements for performance guarantees to require sureties to mitigate negative impacts such as erosion or unpermitted runoff for all projects, including single-family residential construction, to ensure completion of a project once an identified threshold is met, or reversion to the natural terrain and revegetation of abandoned projects.

Responsibility: Community Development Department

Time Frame: Short term



Source: Water Education Foundation.

Truckee River.

Goal COS-8: Air Quality

Improve and maintain a high level of air quality to protect public health, safety, and welfare.

Policies

COS-8.1

Consistency with Particulate Matter Air Quality Management Plan

Require multi-family residential, commercial, industrial, subdivisions, and other discretionary development to maintain consistency with the goals, policies, and control strategies of the Town's Particulate Matter Air Quality Management Plan to meet state and federal ambient air quality standards.



Source: Tahoe Environmental Research Center.

Poor air quality over Lake Tahoe.

COS-8.2

Paving of Roads to Offset Emissions

Require new developments, including subdivisions, to pave existing nonpaved roads planned to serve the new development to the extent necessary and feasible to offset dust, PM₁₀, and other emissions generated by traffic from the development. New nonpaved roads shall not be allowed for new development and subdivisions. New paving shall take into consideration the policies under Goal COS 7 concerning

minimization of impacts to water quality and groundwater recharge that may result from increases in paved areas.

COS-8.3

Dust Control Measures

Require all construction projects to implement dust control measures to reduce particulate matter emissions due to disturbance of exposed topsoil. Such measures include watering of active areas where disturbance occurs, covering haul loads, maintaining clean access roads, and cleaning the wheels of construction vehicles accessing disturbed areas of the site.

COS-8.4

Impacts from Airborne Pollutants

Minimize public exposure to toxic, hazardous, and odoriferous air pollutants, in particular airborne pollutants from industrial and commercial developments.

COS-8.5

Prohibition against Establishment of Sensitive Uses near Air Polluters

Prohibit sensitive receptors such as residential uses, schools, and hospitals from locating in the vicinity of industrial and commercial uses known to emit toxic, hazardous, or odoriferous air pollutants. Prohibit the establishment of such uses in the vicinity of sensitive receptors.

COS-8.6

Accurate Monitoring of Regulated Air Pollutants

Work with the Northern Sierra Air Quality Management District to accurately monitor air pollutants (e.g., particulate matter, carbon monoxide) and to upgrade its facilities as needed to ensure accurate monitoring.

COS-8.7**Health Risk Assessments for Siting New Receptors**

Require developers of projects that would locate sensitive receptors (e.g., residences, schools, healthcare facilities) within 500 feet of Interstate 80 and 1,000 feet of the railway, consistent with the California Air Resources Board's buffer recommendations, to prepare a health risk assessment to determine the significance of the impact, and to incorporate project-specific mitigations to minimize or avoid this risk.



Source: Town of Truckee.

View of the Truckee River in fall.

COS-8.8**Mitigation for Projects with the Potential to Generate Significant Ozone Precursors**

Require new development with the potential to generate significant quantities of ozone precursor air pollutants to be analyzed in accordance with Northern Sierra Air Quality Management District guidelines and appropriate mitigation be applied to the project to minimize these emissions.

COS-8.9**Reduction in Traffic-Related Tailpipe Emissions**

Continue to improve congestion and traffic flow during peak travel times, special events, and snowy conditions to reduce tailpipe emissions from idling vehicles.

COS-8.10**Emission Standards for Diesel-Powered Off-Road Equipment**

Require any discretionary development project that would generate construction-related emissions at a level that exceeds NSAQMD thresholds to use off-road construction equipment that meets EPA Tier 4 emission standards (as defined in 40 CFR 1039) and to comply with the appropriate test procedures and provisions as contained in 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers or is demonstrated to the satisfaction of the Town to be otherwise unavailable. Alternatively, battery-electric off-road equipment may be used as it becomes available. Project applicants must submit a report or project improvement plan to the Town outlining a plan to fulfill this requirement prior to the use of any off-road, diesel-powered construction equipment.

COS-8.11**Health Risk Assessments for New Toxic Air Contaminant Sources**

Require project applicants to prepare a project-level health risk assessment to evaluate construction- and operation-related toxic air contaminant exposure for new development involving a permitted stationary source regulated by NSAQMD or loading docks accommodating more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU operation exceeds 300 hours per week.

Actions

COS-8.A

Particulate Matter Air Quality Management Plan Update and Review

Review and update the Town's Particulate Matter Air Quality Management Plan to ensure that it adequately reflects existing conditions and applicable standards for pollutants.

| **Responsibility:** Community Development Department

| **Time Frame:** Midterm

COS-8.B

Anti-idling Program

Evaluate the development of a voluntary anti-idling program and/or enforcement ordinance that focuses on idling at commercial centers, commercial districts and school zones, and areas adjacent to other sensitive receptors and vulnerable populations such as Tahoe Forest Hospital.

| **Responsibility:** Community Development Department

| **Time Frame:** Midterm

Goal COS-9: Parks and Recreation

Ensure the availability of and equal access to a diverse range of recreational opportunities for Truckee's existing and future population through comprehensive planning and collaboration.

Policies

COS-9.1

Quimby Act

Require new development to provide land or in-lieu fees for parks in a ratio of five acres per thousand population in compliance with standards established by the Town in accordance with the Quimby Act.

COS-9.2

Creation of New Parks

Support efforts for the equitable creation of new parklands throughout Truckee, specifically in the Downtown and near multi-family housing.

COS-9.3

Cooperation with the Truckee Donner Recreation and Park District

Cooperate with the Truckee Donner Recreation and Park District to improve and maximize the use of existing parks, trails, and recreational facilities; identify needs for new facilities and/or improvements; and effectively plan for the future park and recreation needs of Truckee residents, workers, and visitors.

COS-9.4

Support for Truckee Donner Recreation and Park District and Truckee Donner Land Trust

Work with the Truckee Donner Recreation and Park District and the Truckee Donner Land Trust to increase cooperation in the funding and development of parks and recreational facilities in Truckee.

COS-9.5

Recreational Opportunities for All

Encourage new and existing private recreational facilities to provide opportunities for access and enjoyment by the wider community. Efforts may include locating new parks near affordable housing; ensuring accessible design for picnic areas, viewing points, or trails; and providing low-cost programs for all age levels.



Source: Truckee Donner Recreation and Parks District.

Playground and picnic areas at West End Beach.

COS-9.6

Public Recreation Access to Truckee River and Donner Lake

Support improvements to public recreational access to the Truckee River and to Donner Lake.

COS-9.7**Appropriate Management of Local Lakes and Reservoirs**

Support appropriate management of local lakes and reservoirs and releases from these water bodies to sustain recreational uses and a healthy environment for aquatic and other species.

Actions**COS-9.A****Quimby Act Standards**

In coordination with the Truckee Donner Recreation and Park District, evaluate census and parkland data and revise land dedication and park in-lieu fee requirements, as appropriate, to ensure conformance with the Quimby Act.

Responsibility: Community Development Department

Time Frame: Short term



Source: Truckee Donner Recreation and Parks District

Summer camp provided by Truckee Donner Recreation and Parks District.

COS-9.B**Support for the Truckee Donner Recreation and Park District Master Plan**

Support the Truckee Donner Recreation and Park District in initiating a comprehensive update of its Parks Master Plan, including implementation of the updated plan. The Master Plan should address the creation of a new parklands in Truckee's neighborhoods and the Downtown.

Responsibility: Community Development Department

Time Frame: Midterm

COS-9.C**Review and Comment on Management and Releases from Local Reservoirs**

Whenever possible, review and comment on the plans and actions of local, state, and federal agencies concerning management and releases from local reservoirs. In so doing, request that the recreational, wildlife, and wildfire mitigation benefits of local lakes and streams be considered.

Responsibility: Community Development Department

Time Frame: Ongoing

Goal COS-10: Energy and Solid Waste

Encourage conservation of energy and fuel resources, reduce generation of solid waste, and promote environmental sustainability.

Policies

COS-10.1

Townwide Recycling and Waste Reduction

Continue to support Keep Truckee Green's recycling programs townwide, including the curbside recycling and business waste reduction programs.

COS-10.2

Green Business

Support the Sierra Business Council's participation in the California Green Business Network.

COS-10.3

Conservation in All Town Activities

Encourage energy conservation, waste reduction, and environmental sustainability in all Town activities.

COS-10.4

Passive Heating and Cooling Opportunities

Encourage new private and public development to maximize opportunities for use of passive or natural heating and cooling. Encourage sites with solar opportunities to be designed with natural heating and cooling principles.



The Climate Action Plan Element includes additional policies and actions to address energy conservation and solid and organic waste.



Source: Keep Truckee Green.

Solar-power trash and recycling compactors in Downtown Truckee.

COS-10.5

Reduction in Per Capita Disposal Rate

Continue to reduce the townwide per capita solid waste disposal rate.

COS-10.6

Reduction in Use of Nonrecyclable Materials

Reduce the use of nonbiodegradable and nonrecyclable materials.

Actions

COS-10.A

Periodic Review of Source Reduction and Recycling Ordinance

Review the Source Reduction and Recycling Ordinance every five years to ensure it adequately reflects community goals for solid waste reduction and recycling and update the ordinance as necessary and as required by state law to address these aspects.

| **Responsibility:** Keep Truckee Green

| **Time Frame:** Midterm

COS-10.B

Pursue Single-Use Plastic Reduction

Investigate townwide reduction of single-use plastic sales and use, including water bottles and other single-use beverage containers.

| **Responsibility:** Keep Truckee Green

| **Time Frame:** Midterm



Source: Keep Truckee Green

Tahoe Truckee Sierra Disposal provides blue recycling bins.