

7 CONSERVATION AND OPEN SPACE ELEMENT

The Conservation and Open Space Element of the General Plan 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. It identifies Truckee's important open space lands and resources and ensures that future development will respect the natural and scenic qualities of those places, helping to shape the desired physical form of the community by safeguarding open space for future generations. 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 and to improve the overall health of the planet.

The General Plan Vision Statement recognizes that Truckee is a place that 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 provides the setting for many of the elements that define Truckee's sense of place and that are 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. This Element seeks to fulfill the Vision for Truckee through a series of guiding principles and goals, policies and actions that safeguard Truckee's precious open spaces and natural resources, provide recreational opportunities for all, and protect and enhance the environment.

Since open space and natural resources 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.

Conservation and Open Space Element guiding principles are presented on the following page and goals, policies and actions in Section E, at the end of the Element.

Conservation and Open Space Element Guiding Principles

- ❖ 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 associated riparian habitat to enhance their role as critical open space and as a biological and scenic resource.
- ❖ Increase public access to the Truckee River.
- ❖ Protect biologically important areas as open space to maintain Truckee's special biodiversity.
- ❖ Protect sensitive biological resources, specifically special status plants and wildlife, streams and wetlands, and significant wild-life movement corridors.
- ❖ Ensure the continued productivity of mineral, grazing and forestry areas in Truckee, while minimizing land use conflicts and visual impacts associated with these activities.
- ❖ Safeguard important and sensitive visual resources associated with Truckee's open space resources.
- ❖ Improve Truckee's parks and recreation facilities and 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.
- ❖ Make Truckee a leader in environmental conservation and sustainability, and strive to reduce the Town's impact on the local and global environment.
- ❖ Put into action "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.

A. 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 identifies a series of topics which must be addressed in the Conservation Element and the Open Space Element. The Conservation Element is required to address the conservation, development and utilization of natural resources, including forests, rivers and other waters, fisheries, plants and wildlife, minerals and soils. The Open Space Element must address a range of open space types, including four major categories identified in the Government Code: 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 and open space for public health and safety is primarily discussed in the Safety Element.

Table COS-1 summarizes the Government Code Open Space Classifications, and identifies examples specific to Truckee. The table also indicates the location of topics that are included in these classifications, but not discussed in this Element.

In addition, this Conservation and Open Space Element addresses two additional topics that are not specifically required by State law. Issues of air quality are addressed in consideration of the importance of the air as a natural

Government Code Section 65302(d) and Public Resources Code Sections 2762, 2763, and 2764 specify the required contents of the Conservation Element; Government Code Section 65560 and Public Resources Code Section 5076 those for the Open Space Element.

TABLE COS-I **GOVERNMENT CODE OPEN SPACE CLASSIFICATIONS**

Category	Truckee Planning Area Examples
Open Space for the Preservation of Natural Resources	
<ul style="list-style-type: none"> • Plant and animal habitat areas • Rivers, streams, lakes and their banks • Watershed lands • Areas required for ecological and other scientific study purposes 	<ul style="list-style-type: none"> • Truckee River and its riverbanks • Deer Migration Areas
Open Space Used for Managed Production of Resources	
<ul style="list-style-type: none"> • Agricultural lands • Rangelands • Forest and timber lands • Mineral resource production areas 	<ul style="list-style-type: none"> • Aggregate Mining Areas • Forest Lands
Open Space for Outdoor Recreation and Scenic Resources	
<ul style="list-style-type: none"> • Areas of outstanding historic or cultural value⁽¹⁾ • Parks and other areas used for recreation • Areas of outstanding scenic value⁽²⁾ • Scenic corridors⁽³⁾ • Trails and links between different open space areas⁽⁴⁾ 	<ul style="list-style-type: none"> • Downtown Truckee Historic District • Donner Memorial State Park • Scenic Corridors and Hill-sides
Open Space for Public Health and Safety⁽⁵⁾	
<ul style="list-style-type: none"> • Areas requiring special management or regulation because of risks presented by natural hazards such as steep slopes or flooding 	<ul style="list-style-type: none"> • Truckee River 100-year Floodplain • Snow Avalanche Areas
<p>⁽¹⁾ Historic and cultural resources are discussed in the Community Character Element.</p> <p>⁽²⁾ Areas of outstanding scenic value are discussed in the Community Character Element.</p> <p>⁽³⁾ Scenic Corridors are discussed in the Community Character Element.</p> <p>⁽⁴⁾ Trails and Bikeways are briefly discussed in this Element, but are discussed in greater detail in the Circulation Element.</p> <p>⁽⁵⁾ Open Space for Public Health and Safety is discussed in the Safety Element.</p>	

resource, and clean air as a vital contributor to a healthy environment. The Element also speaks to wider issues of environmental quality and sustainability, in which the Town seeks to play its part in minimizing its own impact on the global environment, and in promoting sustainable modes of development.

B. Open Space

The term “open space” is used throughout the Conservation and Open Space Element and the entire General Plan. This section provides both a broad definition of the term as used in the General Plan, as well as a more detailed series of descriptions and background information on a variety of open space types in Truckee that are an important focus of this Element.

Providing these detailed definitions of open space types brings clarity and specificity to the guiding principles, goals, policies and actions of the General Plan that identify and prioritize the types of open space that are desired in Truckee. These definitions also inform the implementation of the General Plan in the future planning processes, decisions, and regulatory documents that flow from the General Plan.

Open Space: General Definition

The term “open space” as used in a general context in this General Plan has the following definition: *“Land that is essentially unimproved, that may be under public or private ownership, and that may be of any of the specific open space types defined in the Conservation and Open Space Element.”*

Open Space Types

As noted above, the general definition of “open space” encompasses a wide range of place types that are essentially free of built development. The various types of open space in and around Truckee can be categorized based on their different characteristics and functions, and the types of activities and uses that typically occur in such areas.



Open space around Donner Lake

Photo: Cedric Ma

This section defines and provides background information regarding seven basic types of open space that occur in and around Truckee. 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 refers to the lands in and around Truckee that are the most protected and the least subject to development or other forms of human incursion. Designated wilderness areas, wildlife preserves, and lands held by land trusts or other similar entities are all lands that can be considered to be pristine open space.

Pristine Open Space

“Pristine” open space is the least developed open space type. It generally consists of large tracts of land, typically under public ownership, where human intrusion and allowed development is highly restricted. Many of Truckee’s important scenic and visual resources, such as mountain peaks, ridgelines, and forest lands, are contained within pristine open space areas, the majority of which lie outside the Town limits. Officially designated Forest Service wilderness areas are among the most strongly protected open space areas around Truckee, although many other areas have some form of permanently



Pristine open space is visible all around Truckee, including these views from Glenshire

protected status, including lands within the 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, including National Forest lands, designated wilderness areas, and other public and permanently-protected open space lands in Truckee are shown in Figure COS-1.

Visible from many parts of Truckee, Mount Rose and its surrounding peaks represent a pristine open space area of particular importance to the town. The Granite Chief Wilderness lies west of Squaw Valley and is also an important local and regional open space resource; additions have been proposed to Granite Chief Wilderness that would extend its area north towards Truckee. A new 18,000-acre wilderness area around Castle Peak, just northwest of Truckee, has also been proposed.

Important open space in and around Truckee includes the lands of Donner Memorial State Park; undeveloped Forest Service lands surrounding the Town; as well as wilderness and wildlife preserves such as the Martis Creek Wildlife Area around Martis Creek Lake.

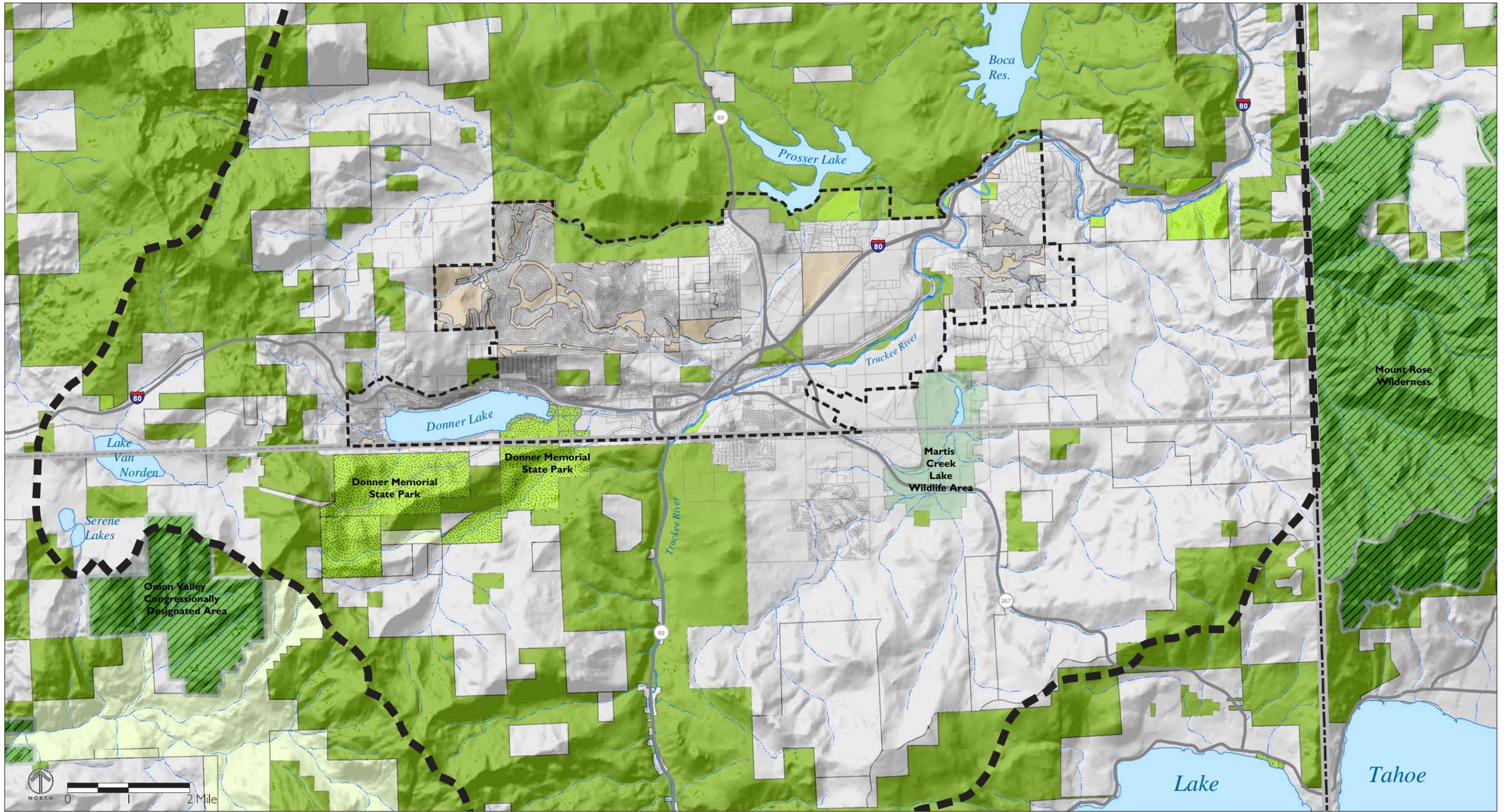
Biological Resource Areas

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 possess a high level of scenic value, and 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 Basin and adjacent upland and mountain areas are rich in biological resources, both within the town and in the surrounding region. Several special status habitats, plant species, and wildlife species have been identified or have the potential to occur in the Truckee area. The General Plan EIR includes additional information and mapping of special status species that are known or suspected to occur in the Truckee area, as identified by the California Natural Diversity Database (CNDDDB). Truckee's important biological resource open space includes both vegetation and habitat areas, as well as wildlife corridors and migration routes that traverse the town.

- ◆ **Vegetation and Habitat Areas.** Several important vegetation and habitat areas exist in Truckee and its surrounds. These vegetation and habitat areas host a wide range of flora and fauna, some of which are designated as special status species, reflecting the high level of biodiversity present in the entire Tahoe region.

Important habitat types found within the town and its surrounding area include Jeffrey Pine Forest and Great Basin Sage Scrub. Other important habitat is associated with riparian, aquatic and wetland resources. These include the Truckee River, the most prominent waterway in Truckee, and supporting riparian habitat; creeks and waterways such as Donner Creek, Martis Creek, Gregory Creek, Alder Creek, Summit Creek, Cold Creek, and Trout Creek, all of which are part of the Truckee River watershed; and open waters such as Donner Lake, and Prosser and Boca Reservoirs. Montane Meadow habitat,



Sources: US Forest Service, US Geological Survey, GreenInfo Network, California Legacy Project

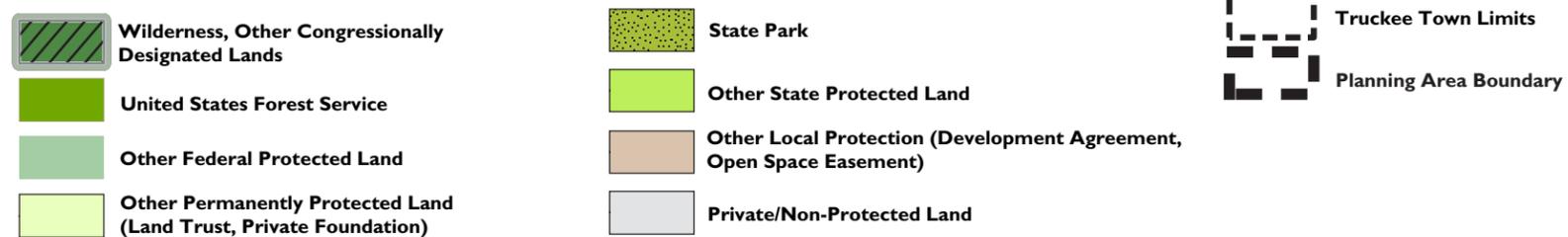


FIGURE COS-1

PUBLIC AND PERMANENTLY PROTECTED OPEN SPACE

which is dependent on a perennial or seasonal water source, is also associated with some of these aquatic resources.

- ◆ **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 annually in the spring from Nevada to the Martis Valley, utilizing the Truckee River and Interstate 80, sometimes making use of the Prosser Village and Fiberboard undercrossings.

Managed Resource Areas

This category of open space includes land under public or private ownership in which uses focus on the land's resource values from activities such as cattle grazing, forestry, or mineral extraction. Generally minimally developed and covering an extensive area, 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 within these areas, some of the particular resource extraction activities, such as timber clear-cutting 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.** A number of important mineral resource areas, as defined by the State of California, exist in Truckee; their location is mapped in Figure COS-2. As shown in the figure, these resources are generally associated with alluvial deposits along the length of the Truckee River Valley, although some mineral resources are associated with vol-

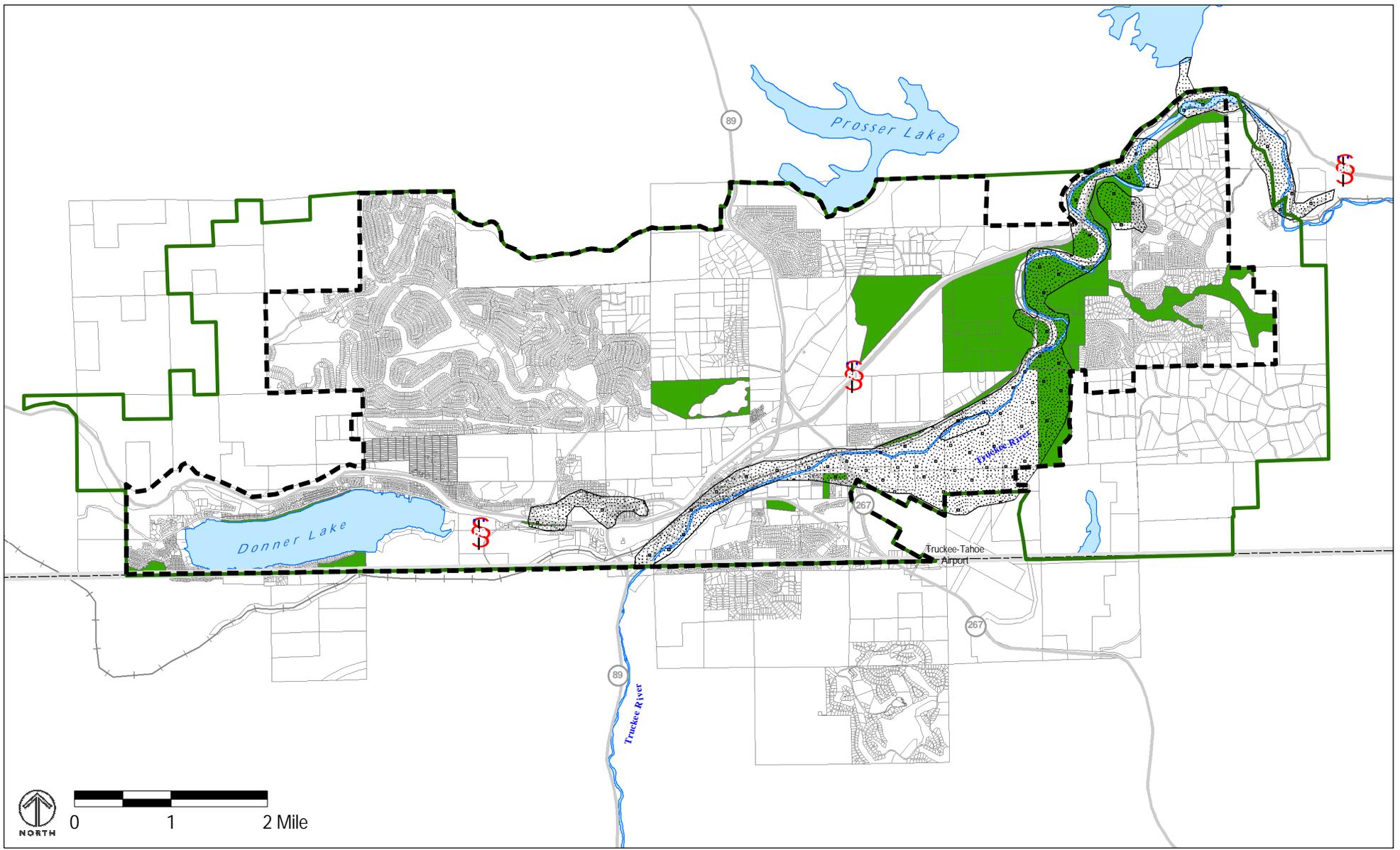
canic features, such as the Hirschdale cinder cone. Alluvial aggregates consist of gravel, sand and broken stone that are used in production of concrete and asphalt; cinders are also used for building and road construction materials. State law requires that the General Plan include policies for important 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 preservation of important mineral resources with other uses can be found in the case of the mineral areas mapped in the Downtown and Gateway areas. Since development of mining operations would be entirely 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 a compatible land use, such as the TTSA/TSD lands in southeast Truckee.

- ◆ **Grazing and Forestry Resources.** Potential grazing and forestry resource open space generally coincides with rangeland vegetation areas and forest land, 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.

Parks and Recreational Areas

This category encompasses a number of different types of recreational and active open space areas, including both publicly- and privately-owned types. These open space areas generally include some level of developed and maintained recreation facilities, oriented towards various types of active use, although also frequently offering opportunities for passive use and enjoyment.



Source: California Division of Mines and Geology, Mineral Classification Report for Nevada County, 1990

FIGURE COS-2

-  Important Mineral Resources
-  Truckee Town Limits
-  Proposed Sphere of Influence
-  Resource Conservation/Open Space

IMPORTANT MINERAL RESOURCES

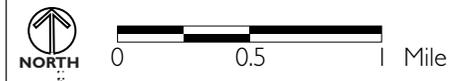
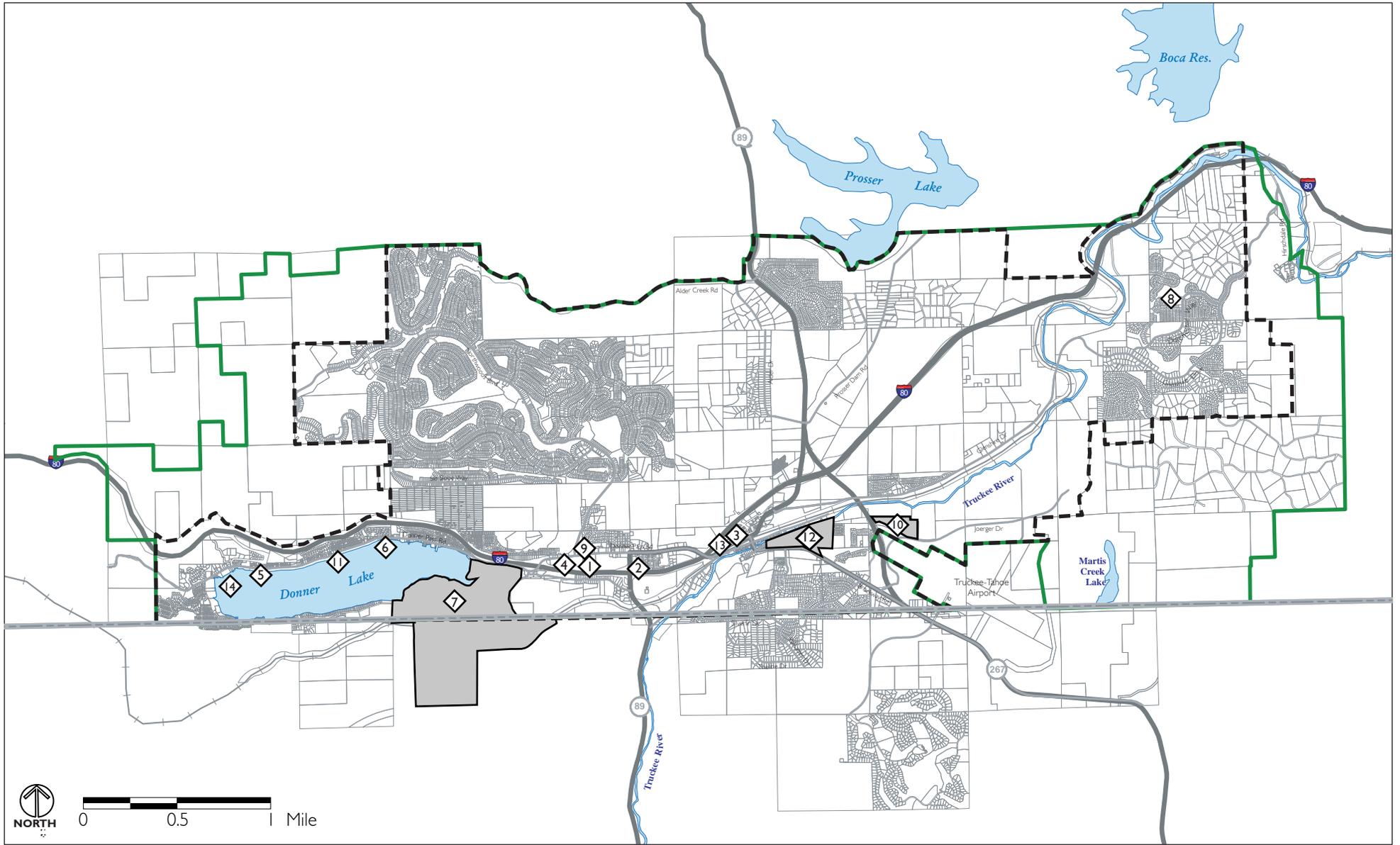
Truckee has ten locally-operated public parks, including the Donner Lake Boat Launch Facility and the Donner Lake Public Piers, that total approximately 120 acres, plus four public recreation facilities.¹ Donner Memorial State Park is also an important recreation resource for the local community. The majority of Truckee's parks are operated by the Truckee Donner Recreation and Parks District (TDRPD), although some small facilities are owned and operated by the Tahoe Truckee Unified School District (TTUSD). Truckee's parks and recreational facilities are mapped in Figure COS-3 and inventoried in Table COS-2. Based on an estimated 2004 population of 15,000, the current parks ratio in Truckee is approximately 8 acres per thousand population.²

A number of types of developed recreation open space and parks are encompassed by this category:

- ◆ **Limited Development Recreation Areas.** These open space areas include places that provide recreational opportunities requiring less intensive improvement or development such as golf courses, equestrian facilities, fly fishing, developed ski areas and campgrounds. These areas are most commonly under private ownership, but may also include public facilities such as a municipal golf course or campground.
- ◆ **Regional Park.** This open space type is more intensely developed with facilities than the limited development recreation areas described above. A broad range of facilities, intended to serve the wider region, are provided. These facilities encompass both active and passive uses, and might include picnic areas, informal playing fields, ball fields, playgrounds, boat launching facilities, an amphitheater, rodeo ground or concession stands. Typically encompassing a several-acre area, these parks may also have certain portions dedicated to habitat preservation and less-intensely developed passive recreation facilities.

¹ This acreage does not include the Donner Memorial State Park.

² Ratio is based on locally-operated, public parks, and does not include the State Park, private recreational facilities, or TTUSD properties.



- Truckee Town Limits
- Proposed Sphere of Influence
- County Boundary
- Interstate or Highway

Parks and Recreation Facilities	
1. Activity Center	8. Glenshire Park
2. Billy Rose Park	9. Meadow Park
3. Community Center	10. River View Community Sports Park
4. Community Swimming Pool	11. Shoreline Park
5. Donner Lake Boat Launch Facility	12. Truckee River Regional Park
6. Donner Lake Public Piers	13. Veteran's Building
7. Donner Memorial State Park	14. West End Beach

FIGURE COS-3

PARKS AND RECREATION FACILITIES

TABLE COS-2 PUBLIC PARKS AND RECREATION FACILITIES

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
Glenshire Park	N	6	Baseball/softball field, open turf
Meadow Park	N,D	6	Ball-fields, picnic area, playground
Riverview Sports Park	D	31	Sportsfields, 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, rodeo arena, amphitheater
West End Beach	D	10	Pavilion, swim area, fishing area, playground, volleyball
Other Facilities			
Activity Center	O	--	Classrooms, pool tables, outdoor patio
Community Center	O	--	TDRPD office, meeting rooms, auditorium, tots area
Community Swimming Pool	O	--	15x25 yard pool, diving board
Veterans Building	O	--	Meeting rooms, kitchen/dining area, indoor basketball court
TTUSD Facilities			
Truckee High School and Middle School	NA	--	Athletic fields, track, basketball hoops
Alder Creek Middle School	NA	--	Basketball hoops, soccer field, outdoor amphitheater

Key:

N=Neighborhood Park, D=District Park, R=Regional Park, S=State Park,

O=Other Park Facility

* Includes acreage outside of Truckee Town limits in Placer County

- ◆ **District Park.** This type of open space park is primarily dedicated to organized sports activities, oriented towards serving the entire town community, or smaller, specialized facilities that serve a town-wide recreation resource like Donner Lake. Facilities provided might include soccer fields, a baseball diamond, swimming pool or skate park, and tennis or basketball courts.
- ◆ **Neighborhood Park.** As its name implies, neighborhood parks are small, public open space areas intended to serve as a neighborhood or community facility. Amenities provided might include some recreational sports facilities such as a basketball hoop, ball field, playground, tot lot or picnic area.
- ◆ **Community Gathering Place.** These open space areas are the smallest and most “town-” oriented public open spaces, intended as a focal point for the entire community. Centrally located in the Downtown, a neighborhood, or other important community area, they are a place for community events and celebrations, a site for public concerts or a farmers market. Examples of such spaces would be a town square, pocket-park or civic plaza.

The TDRPD Master Plan identifies a series of standards for park provision, as follows:

- ◆ Neighborhood Park: 2.5 acres/1,000 population
- ◆ District Park: 2.5 acres/1,000 population
- ◆ Regional Park: 5.0 acres/1,000 population
- ◆ Greenbelt/Open Space: 20 acres/1,000 population
- ◆ Urban Park/Plaza – no standard specified

While it is the goal of the District, under its current Master Plan, to provide park facilities at these ratios, the Town of Truckee can only require new development to provide park land or in lieu fees at a ratio of up to five acres per thousand population, in accordance with the requirements of the Quimby Act.



Truckee's Skate Park

There are also a number of privately-owned and operated recreational facilities in Truckee. Although public use of these facilities, where allowed, is fee based, they nonetheless offer additional recreational opportunities for Truckee's residents and are also significant attractors for the large number of tourist visitors who visit Truckee and the Lake Tahoe region. Private recreational open space facilities in Truckee include four golf courses that are currently in operation; a fifth course will be part of the Gray's Crossing Planned Development. There are also a number of recreational facilities associated with the Tahoe Donner resort area, including several private neighborhood parks and picnic areas, a downhill and cross-country ski area, equestrian center, and campground. Although it is recognized that golf courses do serve as a recreational open space amenity, it is an express policy of this General Plan, stated in the Land Use Element, that no new golf courses should be allowed in Truckee in the future.

Open Space Corridors

Open space corridors have a linear form and provide important links and connections between other dispersed open space areas. Trails, paths and bikeways may be sited along such corridors, providing physical connections that facilitate travel between open space areas and connect disparate open spaces into an integrated network within the town and beyond.

Open space corridors frequently provide a significant biological function, linking often fragmented habitat areas and providing safe corridors for wild-life movement and migration. Riparian habitat associated with Truckee's network of rivers and streams form natural open space corridors that can serve a variety of functions, providing critical habitat, movement corridors, and a naturally-defined alignment for pedestrian trails and bikeways.

Scenic Open Space

Almost all of Truckee's open spaces are associated with some degree of scenic value. They frequently encompass places possessing scenic landscape qualities that contribute to Truckee's sense of place as a mountain community, and offer 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, including habitat areas, pristine open space, forestry, or limited development recreation. However, it is mostly those places that are almost entirely undeveloped that are perceived as offering the highest degree of aesthetic value to the community.

As a critical and central component of the town's community character, scenic open space resources, and goals, policies and actions to ensure their long term preservation are discussed in greater detail in the Community Character Element.

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

Examples of open space corridors include the Truckee River, and the protected linear open space areas that run through Tahoe-Donner and Glenshire/Devonshire.

Scenic open space is a critical component of Truckee's community character. As such, it is discussed in greater detail in the Community Character Element.

space serves as a critical safeguard to avoid or buffer development from known hazards. Such safety open space includes flood plain 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 Element.

C. Other Resource Issues

This section provides background on other natural resource issues in Truckee. The overview includes information on air quality, conservation of water and soil resources, and on the broader issue of environmental conservation and sustainability.

Air Quality

Air quality is a critical element in the natural environment, and the availability of clean, non-polluted air is an important factor for human health and quality of life for all Truckee residents. While Truckee generally enjoys good air quality and low levels of most common air pollutants, the town has historically suffered from high levels of particulate matter pollution.

The largest single contributor to particulate matter pollution in Truckee in 1998 was emissions from wood-burning appliances. Other major sources are construction activities such as grading and demolition, and re-entrained dust and sand (particularly in association with winter road sanding) from vehicles traveling along Truckee's highways and paved and unpaved roads. Motor vehicles also generate particulate matter, along with other pollutants, from tail-pipe emissions and tire wear. Re-entrained road dust and sand may now be the largest single contributor to particulate matter pollution.

To respond to concerns over declining local air quality, the Town of Truckee prepared and adopted the *Particulate Matter Air Quality Management Plan* in

Particulate matter consists of tiny airborne particles (under 10 microns in size) that can become lodged in the lungs when inhaled, causing adverse effects to respiratory health.



Particulate matter pollution is a significant problem throughout the Sierra region Photo: USFS

1999. Prepared in cooperation with the Northern Sierra Air Quality Management District (NSAQMD), the Plan represents a bold and proactive stance in dealing with air quality issues, and presents a wide-ranging series of programs to address particulate matter pollution in Truckee. Measures in the Plan include programs to encourage removal or replacement of polluting woodstoves, best management practices to minimize construction dust, and preparation of guidelines for sanding and sweeping operations on Town roads. Several of these recommended measures have been adopted, including a 2004 ordinance that requires all non-certified wood-burning appliances to be removed or replaced by mid-2007.

The Plan appears to have had a positive effect on air quality in Truckee, with reductions in particulate matter levels since 1999, mostly attributable to a reduction in the number of non-certified woodstoves, as well as the increased town-wide availability of natural gas for heating. While emissions from wood combustion are projected to remain level or decrease, largely due to the Town's efforts, emissions associated with motor vehicle travel, including re-entrained road dust, are projected to rise in step with increased traffic vol-

umes on Truckee’s roads. Accurate monitoring of major pollutants, and efforts to minimize air pollution and work towards improved air quality will need to be ongoing to ensure that Truckee can enjoy clean air in years to come.

Water Resources

Truckee’s network of water resources includes watershed lands, rivers, streams, lakes, reservoir and wetlands, as well as underground aquifers and groundwater recharge areas. The overall health and productivity of many of Truckee’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 and pressures on water supply and quality are likely to increase as the town continues to grow. As well as increasing the need for new supply facilities to serve rising demand, new development and increases in paved areas have the potential to raise pollutant runoff to local waterways, reduce groundwater recharge rates, and cause increased erosion, all with possible negative impacts to Truckee’s local water resources.

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. In terms of human activity, 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 utilities.

Soil erosion is a significant concern in Truckee, both in terms of loss of soil resources, as well as impacts to local water resources. Grading and construction activities greatly increase the potential for soil erosion. The implementa-

Clean water is critical for maintaining the health of Truckee’s river, lake, and wetland habitats, as well as for the human population.

The Safety Element addresses engineering and construction practices to ensure safe buildings in areas of unstable soils and steep slopes.

tion and enforcement of measures to reduce these impacts continues to be a priority for the Town in the development review process.

Environmental Conservation and Sustainability

Like many communities in the United States, Truckee has increasingly come to embrace environmental sustainability and conservation practices. Actions to minimize impacts on the local and global environment can be performed in many different ways. Installation of water and energy efficient fixtures, recycling, and responsible use and disposal of hazardous and toxic household substances are all activities that can be undertaken by Truckee residents and businesses on a daily basis.

Interest in other ways to encourage sustainability and decrease impacts on the environment is also growing. For example, use of “green building” techniques, which incorporate energy efficient design, recycled and non-toxic building materials, siting and landscaping to maximize passive heating and cooling opportunities, and incorporation of water efficient systems and landscaping, can significantly reduce the environmental impacts of new development. New technologies have reduced the cost and increased the feasibility of alternative fueled vehicles such as those powered by hybrid electric-gasoline and biodiesel engines. On a wider scale, a sustainable community can be fostered by development patterns that reflect compact, neighborhood-oriented infill and clustered development that decreases urban sprawl, minimizes loss of open space and natural resource impacts, and encourages alternative modes of transportation.

D. Open Space Land Use Designations

This General Plan supports the guiding principles, goals, policies and actions of the Conservation and Open Space Element by designating certain areas in Truckee for open space land uses or limited development that is compatible with preservation and enhancement of open space.

The OSR and RC/OS General Plan land use designations represent one of many ways in which this General Plan protects Truckee's important open space. Goals, policies and actions included in Section E of this Element and throughout the General Plan, are applicable town-wide, and are dedicated to preserving important open space regardless of the land use designation in which it occurs.

The Land Use Element of the General Plan specifies two land use designations, Open Space Recreation (OSR) and Resource Conservation/Open Space (RC/OS), that are intended to preserve large open space areas in Truckee. Areas assigned with each of these designations are mapped in Figure LU-1, and each of these land use designations are fully described in the Land Use Element.

While these two land use designations are those that most directly address conservation of open space, it must nonetheless be stressed that open space preservation is an important consideration within all General Plan land use designations, including those that allow more intensive development. Application of the open space goals, policies and actions contained in this Element and elsewhere in the General Plan, and the standards and guidelines set forth in the Development Code and other regulatory documents, together serve to protect a variety of types of important open space throughout Truckee, occurring at all scales and across the range of land use designations.

E. Goals, Policies and Actions

<p>Goal COS-1 Preserve existing open space in Truckee, and increase the amount of desired types of open space under permanent protection.</p>
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Policies

- P1.1 Acquire and preserve open space lands in Truckee, and purchase development rights for the purpose of open space preservation, with priority given to the following open space types:
- ◆ Regional parks
 - ◆ Neighborhood parks
 - ◆ Pristine open space and large blocks of undeveloped open space

- ◆ Open space corridors that provide connections between different open space areas
 - ◆ Lands with a high level of scenic value
- P1.2 Support efforts to establish and sustain a long-term funding source for open space acquisition and maintenance in Truckee.
- P1.3 Work with the Tahoe Donner Land Trust to support their efforts to acquire and manage open space lands.
- P1.4 Cluster new development where appropriate in order to maximize preservation of land in open space. Clustering shall conform to the guidelines established in Policies and Actions listed under Goal LU-7 in the Land Use Element.
- P1.5 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:
- ◆ Provide the maximum possible degree of community benefit, as expressed through the Vision for Truckee and the guiding principles, goals and policies of the General Plan.
 - ◆ 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.
 - ◆ Enhance the overall character of Truckee as a scenic, mountain community.

- P1.6 Develop a transfer of development credit program to protect important open spaces.

Actions

- A1.1 Form an Open Space Committee that will serve as an advisory body during the preparation of the Comprehensive Open Space Management and Acquisition Plan (see Action A1.2) Upon adoption of the Plan, consider other roles the committee may assume.

- A1.2 Prepare a Comprehensive Open Space Acquisition and Management Plan for the Town. Promote public involvement in the preparation and implementation of the plan, and involve representative organizations and property owners of properties that may be identified for open space acquisition or other permanent protection. The Plan should include well-defined goals, policies and actions to:

- ◆ Identify and prioritize open space for acquisition or other permanent protection.
- ◆ Institute an open and objective decision-making process for open space acquisition and protection.
- ◆ Identify or establish a Town department or separate legal entity to acquire and manage publicly-accessible open space.
- ◆ Establish clear guidelines and procedures for working with property owners to ensure that land transfers or other agreements are willingly supported and equitable. A fundamental principle of the Plan will be that acquisitions or other agreements will only occur with the full and willing cooperation of the property owner or through the development process in accordance with Town policies and regulations. Establishment of trail and bikeway

A Transfer of Development Credits (TDC) program would allow for increased density, or a reduction in the open space requirement on a certain site in exchange for permanent protection of an alternate site where open space preservation has been identified as a priority.

easements shall continue to be subject to the provisions set forth in the Trails and Bikeways Master Plan.

- ◆ Create effective partnerships with Special Districts, County, State and federal agencies, as well as non-profits such as land trusts, in all aspects of Plan development and implementation.
- ◆ Ensure the long term financial viability of the Open Space Plan through appropriate budgeting and allocation of financial and staff resources towards acquisition and management efforts.
- ◆ Identify clear criteria and an effective process to periodically review and evaluate the achievements of the Plan, and make amendments to it as needed.

A1.3 In conjunction with preparation of the Open Space Plan, develop a GIS-based system to catalog, map and evaluate open space resources in Truckee and its vicinity. The mapping and associated database should incorporate all available data including topography and natural features, biological resources, current land use, protection status, ownership, and connections such as roads and trails. Update the database regularly to ensure that it includes information that is as current as possible.

A1.4 Following completion of the Open Space Plan, update the Development Code as necessary to reflect any relevant findings, policies, and action items identified in the Plan.

A1.5 Initiate a process with Nevada County and Placer County, either in conjunction with development of the Open Space Plan or as separate effort, to develop a coordinated open space protection strategy for the entire Planning Area.

- A1.6 Establish a transfer of development credit (TDC) program and other effective mechanisms for ensuring permanent open space protection. In addition to a TDC program, these mechanisms may include outright purchase, establishment of easements, development incentives, or other means, as appropriate. Long-term management strategies must also be developed. These mechanisms may be established as part of the Open Space Acquisition and Management Plan

Goal COS-2 Preserve and enhance the Truckee River and Donner Lake and the exceptional natural, scenic, economic, and recreational values they provide.

Policies

- P2.1 Prohibit development within established setback areas from the Truckee River, except as otherwise allowed in the Development Code. Outside of the Downtown Specific Plan Area, development shall be set back a minimum of 100 feet from the edge of the Truckee River 100-year floodplain. Within the Downtown Specific Plan Area, development shall be set back a minimum distance from the edge of the 100-year floodplain that is equivalent to one foot above the base flood elevation. Grading, landscaping and drainage uses within the established setback area shall also be subject to strict controls. Improvements for public access and use may be allowed within the established setbacks.
- P2.2 Enhance degraded areas within the Truckee River 100-year floodplain, possibly in association with a related project approval, or as off-site mitigation for development projects.

- P2.3 Support efforts of local community and non-profit organizations to conduct ecological studies of the Truckee River and Donner Lake and their associated waterways, undertake water quality monitoring, and perform clean-up and restoration activities.
- P2.4 Improve and protect public access to the Truckee River and Donner Lake through discretionary project review and other available means.
- P2.5 Support goals, policies and actions of the Downtown Specific Plan that seek to improve public access to the Truckee River, and to improve and integrate a high quality urban and natural environment along the Truckee Riverfront. As identified in the Specific Plan, public access, parking facilities, riverfront parks, picnic areas, and foot bridges should link Downtown and the River and the civic and natural resources of Truckee should be linked together in the Downtown area.
- P2.6 Regulate development and land uses along the Truckee River corridor and Donner Lake to ensure compatibility with their scenic, recreational and habitat values.
- P2.7 Support all efforts to preserve the Glenshire Bridge U.S. Forest Service lands as public open space, even if the USFS proposes to sell or otherwise dispose of the property.
- P2.8 Prohibit development within the established setback areas from Donner Lake, except as otherwise allowed in the Development Code, and enhance degraded areas within the Donner Lake 100-year floodplain and setback, possibly in association with a related project approval, or as off-site mitigation for development projects.

Goal COS-10 also supports improving access to the Truckee River by means of establishing a greenway or parkway along the Truckee River and Donner Creek from Donner Lake to the eastern Town limit.

Actions

- A2.1 Work with the Truckee River Watershed Council, TDRPD and other agencies to develop comprehensive, long term management plans for the Truckee River corridor within the Town limits 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 Truckee River and Donner Lake, including scenic and habitat values, opportunities for riparian restoration and enhancement, flood protection, water quality, and access and recreation opportunities.
- A2.2 Establish design standards for the Truckee River corridor to protect and enhance views to and from the River.
- A2.3 Develop a program to actively facilitate relocation of industrial uses along the Truckee Riverfront to other, more suitable locations in the town.
- A2.4 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 stream banks and the Lake.
- A2.5 Establish design standards for Donner Lake to protect and enhance views to and from the lake.

Goal COS-3 Protect and increase the amount of pristine open space in and around Truckee.

Policies

- P3.1 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 State Park to encompass additional undeveloped open space.
- P3.2 Support appropriate trail construction to provide public access to and across wilderness and other pristine open space areas.

Policies under Goal COS-7 also support Goal COS-3 by encouraging preservation and responsible management of the National Forest lands which comprise much of the pristine open space surrounding Truckee.

Goal COS-4 Protect areas of significant wildlife habitat and sensitive biological resources.

Policies

- P4.1 Provide for the integrity and continuity of biological resources open space, habitat and wildlife movement corridors and support the permanent protection and restoration of these areas, particularly those identified as sensitive resources.
- P4.2 Protect sensitive wildlife habitat from destruction and intrusion by incompatible land uses where appropriate. All efforts to protect sensitive habitats should consider:
- ◆ Sensitive habitat and 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.

Sensitive wildlife habitat in Truckee includes each of the types described in Section C, above, including forest lands, meadows, wetlands and riparian corridors, deer migration routes and other wildlife movement corridors and deer fawning areas.

- ◆ 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.
- ◆ Potential mitigation or elimination of impacts through mandatory clustering of development, and/or project re-design.

P4.3 Encourage restoration of native habitat on Town- and Special District-owned property.

P4.4 Preserve riparian corridors, Donner Lake and aquatic and wetland areas through application of setbacks and other development standards that respect these resources.

P4.5 Development shall be prohibited within established setback areas for streams and waterways other than the Truckee River, except as otherwise allowed in the Development Code; such setbacks shall be between 20 and 50 feet on parcels less than 175 feet deep (depending on parcel depth), and 50 feet on parcels 175 feet deep or more.

Goal COS 11, concerning preservation of water quality, and Goal COS-12, regarding soil erosion, also support preservation of Truckee's riparian, aquatic and wetland habitats.

Actions

A4.1 Prepare, and subsequently update as necessary, a comprehensive plan for the management and protection of sensitive biological resources such as wetlands, riparian corridors, and critical habitat areas. The plan should be developed in cooperation with the California Department of Fish and Games, the US Fish and Wildlife Service, and local interest groups, and should address all known critical habitat areas, wildlife movement corridors and deer migration routes, and should prioritize areas for management and protection that are likely to be impacted by development.

- A4.2 As part of the biological resources protection plan described in A4.1, monitor the ongoing 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.
- A4.3 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 within buffer areas adjacent to sensitive habitats.
- A4.4 Initiate a program to restore native habitat on undeveloped portions of Town-owned properties, and remove exotic and invasive species where they occur.
- A4.5 Actively pursue funding opportunities from State and federal sources for riparian habitat restoration. Examples of potential funding sources include the Riparian Habitat Conservation Program and other programs of the California Wildlife Conservation Board, the *California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act* of 2002 (Proposition 40), and Urban Streams restoration grants.
- A4.6 Amend the Development Code to add incentives for the permanent protection of areas of significant wildlife habitat and sensitive biological resources.

Goal COS-5 Maintain biodiversity among plant and animal species in the Town of Truckee and the surrounding area, with special consideration of species identified as sensitive, rare, declining, unique, or representing valuable biological resources.

Policies

- P5.1 Require biological resource assessments for all development in areas where special status species may be present.
- P5.2 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.
- P5.3 Protect to the extent possible federal or State-designated endangered, threatened, special status or candidate species.
- P5.4 Support efforts to eradicate invasive and noxious weeds and vegetation on public and private property.

Actions

- A5.1 Prepare and maintain an updated list of State and federal rare, threatened and endangered species known or suspected to occur in the Town of Truckee and its immediate vicinity, as well as special status or rare and endangered species identified by the California Department of Fish and Game and the California Native Plant society. This list should be monitored and updated every two years.
- A5.2 As part of the biological resources management plan described in Action A4.1, develop a set of guidelines for preser-

vation of special status species, including, if it is found to be feasible, a tiered approach that would prioritize protection of State- and federally-designated special status species. Such an approach may include identification of appropriate buffers for preservation of species identified on a development site, and appropriate avoidance and mitigation measures for species determined to be affected by a proposed development.

- A5.3 Assemble and maintain up-to-date GIS-based mapping of the occurrence of rare, endangered and other special status species in Truckee that can be used in the development review process to evaluate the need for detailed biological resource assessments.

Goal COS-6 Protect economically viable mineral resources and related industries in Truckee while avoiding land use conflicts and environmental impacts from mining activities.

Policies

- P6.1 Recognize, accept, and adopt by reference those State Classification Reports, as they currently exist and may be amended, that provide information on the location of significant mineral deposits in and around Truckee.
- P6.2 Restrict permitted uses on lands mapped as important Mineral Resource Areas within the RC/OS land use designation to those compatible with mineral resource extraction activities.
- P6.3 Restrict permitted uses on lands containing important mineral resources within the PUB land use designation to those compatible with mineral extraction, except in cases where

Important Mineral Resources in Truckee are mapped in Figure COS-2. Areas depicted include those designated as Mineral Resource Zone 2 (MRZ-2) areas in the 1990 Nevada County Mineral Resource Classification Report, published by the California Division of Mines and Geology.

such uses offer public benefits that outweigh those of resource extraction.

Permitted land uses in the RC/OS land use designation are described in the Land Use Element; these requirements also serve to implement Policy P6.2 in this Element.

P6.4 New or expanded mining operations within the Town limits shall adhere to the following guidelines:

- ◆ 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, agricultural resources 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 guidelines described in the Noise Element.
- ◆ Incorporate landscaping buffers and other measures to minimize visual impacts to the extent possible.

The Land Use Element provides specific guidance for several former mining sites including the former Teichert Quarry (Planned Community 1) and the Hirschdale Mine site.

P6.5 Reclaim former mining sites to a condition which is readily adaptable for alternative land uses, consistent with the Land Use Map and other applicable policies, in accordance with the California Surface Mining and Reclamation Act (SMARA).

Actions

A6.1 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 presented to the Town. The map shall be amended to reflect the Re-

port within 12 months. When it is necessary, due to the lack of specificity, to precisely map the exact location of mineral resources identified, the Classification Report shall be used instead to identify the nature and location of important mineral resources within the Town of Truckee.

Goal COS-7 Protect and conserve managed resource open space for its productive resource values, including timber harvesting and grazing uses, and for its recreational, scenic, and biological values.

Policies

- P7.1 Work closely with the Forest Service and private property owners to ensure that forest or rangeland areas are preserved, to the extent feasible, for continued managed resource, recreation, scenic or biological resource open space uses.
- P7.2 Work with the Forest Service to coordinate planning on USFS lands within and adjacent to the Town, so as to ensure appropriate land uses, consistent with preservation of the resource, recreational, scenic and biological values of these lands.
- P7.3 Require a Conditional Use Permit for any proposed conversion of timberland to an alternate use not associated with an approved development project.
- P7.4 Coordinate with the California Department of Forestry in the review of all timber harvesting and conversion plans relative to potential impacts on visual, biological and recreational resources.

- P7.5 Buffer residential uses from adjacent forest resources so as to minimize conflicts resulting from timber harvesting.
- P7.6 Oppose commercial timber harvesting that involves clear cutting within Town limits and in visually and biologically sensitive areas of the Planning Area.

Actions

- A7.1 In cooperation with the U.S. Forest Service and the California Department of Forestry, review all timberland harvesting and conversion plans for compliance with goals of protecting and conserving forest resources for timber harvesting, and preserving the recreational, aesthetic and biological value of these forest areas. In commenting on such plans, the Town will request application of standards for Special Treatment Areas (Title 14, California Administrative Code) for visually sensitive areas. Exempt from this requirement are actions necessary for environmental studies, and for control of fire fuels.

Goal COS-8 Provide or support a comprehensive, high quality system of parks and other recreational open space facilities in Truckee.

Policies

- P8.1 Require land or in-lieu fees for parks to be provided by new development at a minimum ratio of five acres per thousand population, to conform with standards established by the Town in accordance with the Quimby Act.
- P8.2 Support efforts to create a new regional park, neighborhood parks in new neighborhoods, and at least an additional two

new neighborhood parks for existing neighborhoods in Truckee.

- P8.3 Cooperate with the Truckee Donner Recreation and Parks District to improve and maximize the use of existing parks, trails and recreational facilities, identify needed facilities and improvements, and to effectively plan for the future parks and recreation needs of Truckee’s residents and visitors.
- P8.4 Encourage new and existing destination resort and private recreational facilities to provide opportunities for access and enjoyment by the wider community. In all cases, specific incentives for such developments to provide increased public access should be considered.
- P8.5 Improve public recreational access to the Truckee River and to Donner Lake.
- P8.6 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.
- P8.7 Work with TDRPD and Placer County to increase cooperation in the funding and development of parks and recreational facilities in Truckee that serve the wider regional population.

Policy P2.4, P2.5 and A2.1 under Goal COS-2 also support improved public access to the Truckee River.

Actions

- A8.1 Work with TDRPD to initiate a comprehensive update of its Parks Master Plan, to implement the updated Plan, including seeking appropriate funding sources. The Plan should address the creation of a new regional park, neighborhood parks in new neighborhoods, and new neighborhood parks in existing neighborhoods.

- A8.2 Whenever possible, review and comment on plans and actions of local, State and federal agencies concerning management and releases from local reservoirs. In so doing, request that the recreational and wildlife benefits of local lakes and streams be considered.
- A8.3 In cooperation with TDRPD, prepare and implement a focused plan to develop a town square or similar community gathering place in Downtown Truckee.

Goal COS-2 and its accompanying policies and actions support the preservation of the Truckee River and other riparian corridors. Policies and actions under Goal COS-4 address preservation of important wildlife movement corridors.

Goal COS-9 Link open space areas in Truckee through a well-connected network of open space corridors and trails.

Policies

- P9.1 Provide for links between open space areas, both within Truckee and beyond the Town limits, to create contiguous habitat areas and enhance public access through greater connectivity.
- P9.2 Support the development and construction of a town-wide system of trails and bikeways, including, as priorities, the development of the Donner Lake/Truckee River parkway (see Goal COS-10), and the establishment of trails linking the Downtown with the Gateway Area and surrounding developed areas.
- P9.3 Require new development to incorporate trail corridors identified in the *Trails and Bikeways Master Plan* into the overall project site plan.
- P9.4 Preserve existing open space corridors, and connections to adjacent open space areas, and integrate publicly accessible trails

and open space corridors into new development to the extent feasible.

Actions

- A9.1 Implement the recommendations of the *Trails and Bikeways Master Plan* to establish trail links and other connections between Truckee’s parks and recreational areas and public open space outside of Town limits. In so doing, coordinate with TDRPD, adjacent jurisdictions, State and federal agencies, and land trusts to most effectively create a comprehensive trails system for Truckee.
- A9.2 As part of the implementation of the *Trails and Bikeways Master Plan*, develop a listing of the public agencies responsible for the construction and maintenance of various components of Truckee’s trail system, including the specific role(s) that the Town wishes to take in this regard, and the roles and responsibilities of each public agency for trail construction and maintenance.
- A9.3 At least every five years, review and update the *Trails and Bikeways Master Plan* to ensure that it reflects needed trail links in relation to Truckee’s public open space resources.

Additional goals, policies and actions concerning implementation of the Trails and Bikeways Master Plan, which will create a comprehensive trails system in Truckee, can be found in the Circulation Element.

Goal COS-10 Create a greenway or parkway that extends from Donner Lake, along Donner Creek and the Truckee River, to the eastern Town Limit.

Policies

- P10.1 Actively support the construction of a parkway or similar linear open space connection from Donner Lake, along Donner Creek and the Truckee River to the eastern Town limit.

Actions

- A10.1 Develop and implement, as a top priority, a plan to create the Donner Lake/Truckee River trail described in P10.1 above. The plan should include:
- ◆ Identification of suitable alignment(s) for all trail segments.
 - ◆ Exploration of potential constraints associated with trail development, including topographical, engineering and access issues, and realistic strategies to overcome them.
 - ◆ A detailed schedule for design, engineering and construction of various trail segments, including priorities for development of various trail segments, and a realistic timeline for implementation of various project phases.
 - ◆ A detailed summary of projected costs for all phases of trail development and for future maintenance needs.
 - ◆ Identification of responsibilities and roles in project development, construction and maintenance, including the components of the project for which the Town will take direct responsibility.
 - ◆ A funding strategy for development and maintenance of the trail, including identification of available grant funding and monies from public and private sources.

Goal COS-11 Protect water quality and quantity in creeks, lakes, natural drainages and groundwater basins.

Policies

- P11.1 Minimize excessive paving that negatively impacts surface water runoff and groundwater recharge rates.
- P11.2 Protect surface and groundwater resources from contamination from runoff containing pollutants and sediment, through implementation of the Regional Water Quality Control Board's (RWQCB) Lahontan Region's, Best Management Practices.
- P11.3 Cooperate with State and local agencies in efforts to identify and eliminate all sources of existing and potential point and non-point sources of pollution to ground 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.
- P11.4 Enforce guidelines set forth by the Regional Water Quality Control Board Lahontan Region (RWQCB) regarding waste discharge associated with domestic wastewater facilities such as septic tank leachfield systems.
- P11.5 Require new development projects that have the potential to impact local water quality through increased stormwater runoff or erosion to include analysis of water quality impacts as a component of project review, and to integrate mitigation measures that would reduce identified impacts to an acceptable level.

- P11.6 Utilize Low Impact Development and Best Management Practices established in the Regional Water Quality Control Board's Truckee River Hydrologic Unit Project Guidelines for Erosion Control, and 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.
- P11.7 Ensure that all proposed developments can be adequately served by available water supplies.
- P11.8 Support all efforts to encourage water conservation by Truckee residents and businesses, and public agencies, including working with the Truckee Donner Public Utility District, to implement water conservation programs and incentives that facilitate conservation efforts.
- P11.9 Recognize the importance of stormwater management in protecting all water resources in Truckee, for example, flood control, surface and ground water quality, and river, stream and lake health.

Actions

- A11.1 Establish coverage limitations for impervious paved areas in new development, and encourage the use of permeable paving materials and other water quality management practices to minimize stormwater runoff and the loss of groundwater recharge from paving. Such limitations shall take into account Policy P13.2 under Goal COS-13, concerning particulate matter pollution associated with unpaved roads.

- A11.2 In coordination with the Truckee Citizens Waste Management Committee and Nevada County, develop and distribute an informational brochure to promote awareness of non-point source pollution and to educate local residents and business-owners about ways to reduce it. The brochure might address topics such as responsible use of pesticides, fertilizers, household chemicals, landscaping to control erosion, maintenance of septic systems, and proper disposal of used motor oil and batteries.
- A11.3 Work with the Truckee Donner PUD to study ways in which the development review process can be strengthened to define more stringent requirements for documentation of a project's projected water needs and the availability of local water supplies to serve it.
- A11.4 Coordinate with the TDPUD to develop a list of feasible water conservation programs and incentives that might be offered to the District's customers, and develop related strategies for how the Town might support the District's efforts in implementing these programs.
- A11.5 Work with the Truckee River Watershed Council and the Lahontan RWQCB to establish current condition water quality information and to monitor regulatory compliance regarding water quality in the Truckee River Basin.
- A11.6 Form a citizens advisory committee that will serve as an advisory body during the preparation of the stormwater and/or water quality management plan. Upon adoption of the plan, consider other roles the committee may assume.
- A11.7 Prepare a stormwater and/or water quality management plan for the Town with the goal of the plan to improve the quality of our surface and ground waters. The Plan should in-

clude, but not be limited to, well-defined goals, policies and actions to:

- ◆ Create effective partnerships with special districts, County, State and federal agencies, as well as non-profit organizations such as the Truckee River Watershed Council, in all aspects of plan development and implementation.
- ◆ Ensure the long term financial viability of the plan through appropriate budgeting and allocation of financial and staff resources towards implementation of the plan.
- ◆ Identify clear criteria and an effective process to periodically review and evaluate the achievements of the plan, and make amendments to it as needed.

A11.8 Following completion and adoption of the plan, review and update the Development Code as necessary to reflect any relevant findings, policies, and action items identified in the plan.

A11.9 Work with the Truckee Donner PUD to prepare a cooperative study to analyze long-term regional water availability based on scientifically valid assumptions and projections of future climatic changes.

Goal COS-12 Protect the Town's soil resources from erosion.

Policies

P12.1 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.

- P12.2 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.
- P12.3 Require discretionary project review for all substantial grading activities not associated with an approved development project or timber harvesting plan.

Actions

- A12.1 Work with the Truckee River Watershed Council and Lahontan RWQCB to identify existing critical erosion problems and to pursue funding to resolve these problems.
- A12.2 Establish standards for temporary and permanent erosion control measures for grading associated with single family residences, duplexes, and second units on existing and future lots.

Goal COS-13 Reduce particulate matter pollution in Truckee to meet State and federal ambient air quality standards.

Policies

- P13.1 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*.

- P13.2 Existing non-paved roads within new development and subdivision, and existing off-site non-paved roads that serve new development and subdivisions shall be paved to the extent necessary to offset emissions generated by the development and subdivision traffic to the degree feasible. New non-paved roads shall not be allowed for new development and subdivisions except for single family residences, secondary residential units and duplexes on existing lots. New paving shall take into consideration the policies under Goal COS-11 concerning minimization of impacts to water quality and groundwater recharge that may result from increases in paved areas.
- P13.3 Require all construction projects to implement dust control measures to reduce particulate matter emissions due to disturbance of exposed top-soils. Such measures would 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.

Actions

- A13.1 Periodically review and update the *Particulate Matter Air Quality Management Plan* to ensure that it adequately reflects existing conditions and applicable standards for pollutants.
- A13.2 Implement the policies and control strategies of the *Particulate Matter Air Quality Management Plan*.

Goal COS-14 Reduce emissions of air contaminants and minimize public exposure to toxic, hazardous and odoriferous air pollutants.

Policies

- P14.1 Minimize potential impacts created by unpleasant odors, as well as other airborne pollutants from industrial and commercial developments.
- P14.2 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, and prohibit the establishment of such uses in the vicinity of sensitive receptors.
- P14.3 Reduce automobile dependence, thereby reducing greenhouse gas emissions, by encouraging mixed land use patterns that locate services such as banks, child care facilities, schools, neighborhood shopping centers and restaurants in close proximity to employment centers and residential neighborhoods.
- P14.4 Review all discretionary development applications to determine the need for pedestrian/bike paths connecting to adjacent development and services, in order to provide alternatives to automobile transportation.
- P14.5 Encourage the use of alternative fuels in vehicle fleets operated by local ski resorts, local Special Districts, and by the Town.
- P14.6 Work with the NSAQMD to accurately monitor PM₁₀, Carbon Monoxide, and other regulated air pollutants in Truckee, and to upgrade its facilities as needed in the future to ensure that accurate monitoring is maintained.

Circulation Element Goal CIR-6 and Goal CIR-9, and their related Policies and Actions also implement Goal COS-14, as do Land Use Element Goals LU-3, LU-5 and LU-7, and the Land Use Map.

Alternative-fuel technologies, include vehicles powered by bio-diesel (a cleaner burning diesel fuel derived from vegetable oil), and hybrid gasoline-electric motors. The use of alternative-fuel technologies will reduce greenhouse gas emissions and other pollutant emission and improve air quality and the environment.

- P14.7 Promote the use of public and private transit services within Truckee and between the Town and ski resorts and other destinations in the Tahoe area.
- P14.8 Require developers of projects that would locate sensitive receptors such as residences within the California Air Resource Board's recommended buffer of 500 feet of I-80 and the railway 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.
- P14.9 Require new development with the potential to generate significant quantities of ozone precursor air pollutants to be analyzed in accordance with guidelines provided by the NSAQMD and appropriate mitigation be applied to the project to minimize these emissions.

Actions

- A14.1 Prepare an Air Quality Management Plan similar in detail and scope to the *1999 Particulate Matter Air Quality Management Plan* when and if any other air pollutants are found to have become a significant issue in Truckee.
- A14.2 Develop a program to improve congestion and traffic flow during peak travel times, special events, and snowy conditions to reduce tailpipe emissions from idling vehicles. Cooperate with Caltrans to address these situations on the Interstate and State Highways.
- A14.3 In association with the major ski areas, develop a strategy to provide information on public transit and ride sharing to their employees.

- A14.4 Establish targets for replacement of Town-owned vehicles, as appropriate, with alternative fuel models, and aggressively pursue funding sources to facilitate a replacement program.

Goal COS-15 Encourage conservation of energy and fuel resources, strive to reduce generation of solid waste, and promote environmental sustainability.

Policies

- P15.1 Support recycling programs town-wide, including the curb-side recycling and business waste reduction programs.
- P15.2 Support and expand innovative programs such as the “Keep Truckee Green” Community Awards that recognize local businesses’, agencies’ and organizations’ efforts to reduce waste.
- P15.3 Encourage energy conservation, waste reduction and environmental sustainability in all Town activities.
- P15.4 Work with energy providers to encourage community-wide reductions in energy consumption through conservation practices.
- P15.5 Encourage new private and public development to maximize opportunities for use of passive or natural heating and cooling and encourage sites with solar opportunities to be designed with natural heating and cooling principles.
- P15.6 Maintain or surpass the 2003 annual solid waste reduction rate of approximately 70 percent throughout the life of the General Plan.

Techniques to encourage reductions in energy consumption include rebates for installation of energy efficient fixtures and appliances, use of innovative technologies for heating and hot water heating, solar energy, or special building techniques resulting in greater insulation and less need for energy.

LEED, Leadership in Energy and Environmental Design, is a building rating system that promotes a whole-building approach to sustainability by recognizing building performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. LEED certified buildings are recognized as being sustainable, high performance, low impact and green buildings.

Food waste typically constitutes a much higher proportion of total solid waste in tourist-oriented communities compared to other places. Food waste is highly recyclable through a process that generates compost as a beneficial by-product.

Green building is defined in the Glossary.

- P15.7 Support efforts to develop a regional food waste recycling program in Truckee, in cooperation with Nevada County, Placer County, Special Districts, and local resorts and ski areas.
- P15.8 Reduce the use of non-biodegradable and non-recyclable materials.

Actions

- A15.1 Prepare and adopt a Green Building Strategy for Truckee. The Strategy should identify the best ways to encourage, incentivize and promote all aspects of “green building,” and include goals, policies and actions that seek to actively increase green building practices into development in Truckee. The strategy may consider and recommend standards for green building practices.
- A15.2 As an interim action, prior to completion of the Green Building Strategy, compile informational resources on green building techniques, and make that information available at the Planning Division and local library. As part of this effort, create a “green building” page on the Town website, and provide information and links to internet resources such as the U.S. Green Building Council, and U.S. Department of Energy’s Building Technologies Program.
- A15.3 Amend the existing Solar Access Ordinance to include commercial, public and institutional development as well as residential uses.
- A15.4 Periodically review the Source Reduction and Recycling Ordinance 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.

- A15.5 Coordinate with Nevada County to prepare and update the county-wide *Integrated Waste Management Plan* and *Hazardous Waste Management Plan*.
- A15.6 In cooperation with local utility providers, conduct an energy audit of Town-owned facilities, and implement feasible energy-saving measures wherever possible. Such alterations may include automatic heating and cooling systems, insulation, energy efficient lighting, and natural ventilation.
- A15.7 Amend the Development Code to require an evaluation of solar opportunities for all discretionary development.
- A15.8 Consider an ordinance to prohibit the sale of non-biodegradable and non-recyclable materials if reasonable alternative materials are available.

TOWN OF TRUCKEE
2025 GENERAL PLAN
CONSERVATION AND OPEN SPACE ELEMENT