

## 5 Recreation and Public Services & Facilities Element

Parks and recreation, and public utility services like water and waste management are a vital part of a livable, sustainable community. The purpose of this element is to help document existing infrastructure and services, identify areas of improvement, and ensure that they meet the needs of community members and visitors as the Community Plan Area grows.

### 5.1 Recreation

---

Lake Tahoe offers year-round recreation, allowing visitors and residents alike places to recreate in a natural setting. Lake Tahoe has beautiful beaches, several state parks, recreation areas, and bike and pedestrian trails. Beside their recreational function, well-designed parks can create a positive image for the Community Plan Area and help to foster a sense of community. To be successful, however, these facilities need to be accessible to all, safe to use, and well-maintained. This section will guide the development of the Community Plan Area's parks and recreation facilities. Recreation goals and policies provide a framework to improve existing facilities and develop new facilities to meet the needs of the community.

The State of California owns the bed of Lake Tahoe on the California side below the elevation of 6223 feet Lake Tahoe Datum and has a public trust easement for public uses of navigation, fishing, and lake related recreational uses such as bathing, swimming and open space between elevations 6228.75 feet and 6223 feet Lake Tahoe Datum (the high and low water lines respectively). *State of California v. Superior Court (Fogerty)* (1981) 29 Cal.3d 240. The State Lands Commission has leasing authority over the bed of Lake Tahoe waterward of elevation 6223 feet Lake Tahoe Datum, including commercial and recreational uses and structures. Leasing of the submerged land is authorized by Public Resources Code sections 6216, 6301, 6501.1 and 6503.5 along with regulations found in Title 2 of the California Code of Regulations, section 2000 et seq.

#### **PARKS AND OPEN SPACE**

Public parks and recreation areas are owned by Placer County (PC), North Tahoe Public Utility District (NTPUD), Tahoe City Public Utility District (TCPUD), California Department of Parks and Recreation (CA Parks), the United States Forest Service (USFS), and the California Tahoe Conservancy (CTC). NTPUD, TCPUD, and California State Parks operate the majority of parks located within the Community Plan Area, including parks owned by CTC and Placer County.

The Community Plan Area has 18 day use beaches, six day use areas, four community sports and recreation parks, four community centers, one publicly-owned golf course, and five campgrounds. There are also more than 1,000 acres of additional undeveloped parkland that is owned by CTC, CA Parks and NTPUD. The Community Plan Area’s current inventory of parks and recreation facilities is listed in Table 5.1-1 and Figure 5-1 maps their location in the Community Plan Area.

**Table 5.1-1: Parks and Recreation Facilities Inventory**

<i>Park or Recreation Facility Name</i>	<i>Acreage</i>	<i>Operator</i>	<i>Owner</i>
<b>Day Use Beaches</b>			
64-Acres Park	56.0	TCPUD	USFS
Bay Street East Beach	0.8	N/A	PC
Carnelian East Beach (Patton Landing)	2.6	Concessionaire	CTC
Carnelian West Beach	3.3	CA Parks	CTC
Cherry Street Access	0.03	N/A	PC
Commons Beach Park	7.2	TCPUD	PC
Coon Street Boat Launch	2.6	NTPUD	DBW
Elizabeth Williams Park	4.4	TCPUD	TCPUD
Fawn Street-Marina Walkway	0.1	N/A	PC
Griff Creek Recreation Area	0.8	NTPUD	PC
Heritage Plaza Park	0.8	TCPUD	PC
Kings Beach State Recreation Area	5.6	CA Parks	CA Parks
Lake Boulevard Beach	3.4	N/A	PC
Lake Forest Beach Park	6.2	TCPUD	PC
Lake Forest II Beach	1.2	N/A	PC
Lakeside Park	3.2	N/A	PC
Moon Dunes Beach	4.4	NTPUD	PC/CTC
North Tahoe Beach	7.0	CA Parks	CTC
Sandy Beach	3.1	CA Parks	CTC
Secline Beach	3.8	NTPUD/ CA Parks	CTC/PC
Skylandia Park and Beach	26.9	TCPUD	CA Parks
Speedboat (Buck’s) Beach	2.0	NTPUD	PC
Tahoe State Recreation Area - Star Harbor	6.8	TCPUD	CA Parks
Tahoe State Recreation Area - Outlet Parcel	6.5	TCPUD	CA Parks
Tahoe Vista Recreation Area	6.3	NTPUD	NTPUD
<i>Subtotal Day Use Beaches</i>	<i>165.0</i>		
<b>Day Use Areas</b>			
Burton Creek State Park	2,000.0	CA Parks	CA Parks
Highlands Community Center/Day Use Area	45.7	TCPUD	TCPUD
Kilner Park	5.9	TCPUD	TCPUD
Marie Sluchak Community Park	3.0	TCPUD	TC HOA
North Tahoe Regional Park	124.5	NTPUD	NTPUD
Ward Creek Property	183.3	CA Parks	CA Parks
<i>Subtotal Day Use Areas</i>	<i>2,362.5</i>		

**Table 5.1-1: Parks and Recreation Facilities Inventory**

<i>Park or Recreation Facility Name</i>	<i>Acreage</i>	<i>Operator</i>	<i>Owner</i>
<b>Community Sports and Recreation</b>			
Kings Beach Neighborhood Park	2.3	NTPUD	TTUSD
Pomin Park	3.1	TCPUD	CA Parks
Rideout Community Center	10.7	TCPUD	TTUSD
Tahoe Lake School Fields	2.2	TCPUD	TTUSD
<i>Subtotal Community Sports and Recreation</i>	<i>18.3</i>		
<b>Community Centers</b>			
Fairway Community Center		TCPUD	TCPUD
Tahoe City Community Center		TCPUD	PC
Rideout Community Center		TCPUD	TCPUD
Highlands Community Center		TCPUD	TCPUD
<i>Subtotal Community Centers</i>	<i>n/a</i>		
<b>Golf Courses</b>			
Tahoe City Golf Course	35.8	TCPUD	TCPUD
<i>Subtotal Golf Courses</i>	<i>35.8</i>		
<b>Campgrounds</b>			
Kaspian Campground and Picnic Area	34.0	Private	USFS
Tahoe State Recreation Area	16.3	CA Parks	CA Parks
William Kent Campground/Beach	24.7	Private	USFS
Lake Forest Campground	2.1	TCPUD	CA Parks
<i>Subtotal Campgrounds</i>	<i>77.1</i>		
<b>Undeveloped Parkland</b>			
Dollar Property	969.1	CA Parks	CA Parks
Parcels 3081 and 3082	5.3	CA Parks	CA Parks
Tahoe State Recreation Area	1.9	CA Parks	CA Parks
Firestone Property	85.0	NTPUD	NTPUD
<i>Subtotal Undeveloped Parkland</i>	<i>1,061.3</i>		

Note: North Tahoe Public Utility District (NTPUD), Tahoe City Public Utility District (TCPUD), California State Parks (CA Parks), California Tahoe Conservancy (CTC), United States Forest Service (USFS), Placer County (PC), Tahoe-Truckee Unified School District (TTUSD), and California State Department of Boating and Waterways (DBW).

Sources: TRPA, Placer County; 2013.

## **BIKE AND PEDESTRIAN TRAILS**

A number of bike and pedestrian paths are found throughout the Community Plan Area. In recent years the popularity of trails has increased and is now one of the most popular recreation activities in the Tahoe Basin. TCPUD reports annual usage in excess of 500,000 people annually on their multi-use bike trail along the west shore, through Tahoe City, and along the Truckee River. The multi-use bike trail consists of the Lakeside Trail from Dollar Point to Tahoe City, the West Shore Trail from Tahoe City to Meeks Bay, and the Truckee River Trail from Tahoe City to Squaw Valley. The Community Plan Area's current inventory of bike and pedestrian trails is listed in Table 5.1-2 and Figure 5-1 maps their location in the Community

Plan Area. Existing and proposed bicycle and pedestrian facilities and their role in the transportation network are also discussed in Chapter 3, Transportation and Circulation Element.

**Table 5.1-2: Existing and Proposed Trails**

<i>Trail</i>	<i>Location</i>	<i>Length (miles)</i>
<b>Existing Trails</b>		
64-Acres	Tahoe City	0.8
Lakeside Trail	Tahoe City	1.2
Pinedrop Trail	Kings Beach	1.5
Rubicon Trail	Tahoma	22.0
State Route 28	Tahoe City	2.2
Tahoe Rim Trail	Tahoe City, Tahoe Pines, Homewood	35.9
Truckee River Trail	Tahoe City, Squaw Valley	3.5
West Shore Bike Trail	Tahoe City, Sunnyside, Homewood, Tahoma	8.6
<b>Proposed Trails</b>		
Brockway Vista Path	Kings Beach	1.0
Dollar Creek Shared Use Trail	Kings Beach	2.2
Lake Forest Trail	Dollar Point	0.3
National Ave Bike Path	Tahoe Vista	
North Tahoe Bike Path	Dollar Hill, Tahoe Vista, Brockway Summit	12.5
Martis Valley Trail	Martis Valley, Northstar, Brockway Summit	10.4
West Shore Bike Trail	Homewood, Sunnyside	1.5

*Source: Placer County, 2013; Truckee North Tahoe Transportation Management Association, 2011.*

### **Planned Improvements**

Future trail sections are planned for the North Tahoe-Truckee Loop Trail. There are two gaps in the Lakeside Trail system one within Tahoe City, and the other within the Homewood area on the west shore. These gaps in an otherwise continuous trail system network are the highest priority for completion. Other priorities are extensions to existing paths that begin to complete the 71 mile round-the-lake “Lake Tahoe Bikeway” network.

There are currently seven proposed improvements to the bicycle and pedestrian network in the Community Plan Area. TCPUD is working on a one-mile improvement for the Lakeside Trail. Placer County is making improvements to the North Tahoe Bike Path from Dollar Hill to the North Regional Park and to sidewalks in Kings Beach. TCPUD is also making pedestrian and biking improvements to Fanny Bridge. For further discussion of planning bike and pedestrian improvements see Chapter 3, Transportation and Circulation Element.

### **GOALS AND POLICIES**

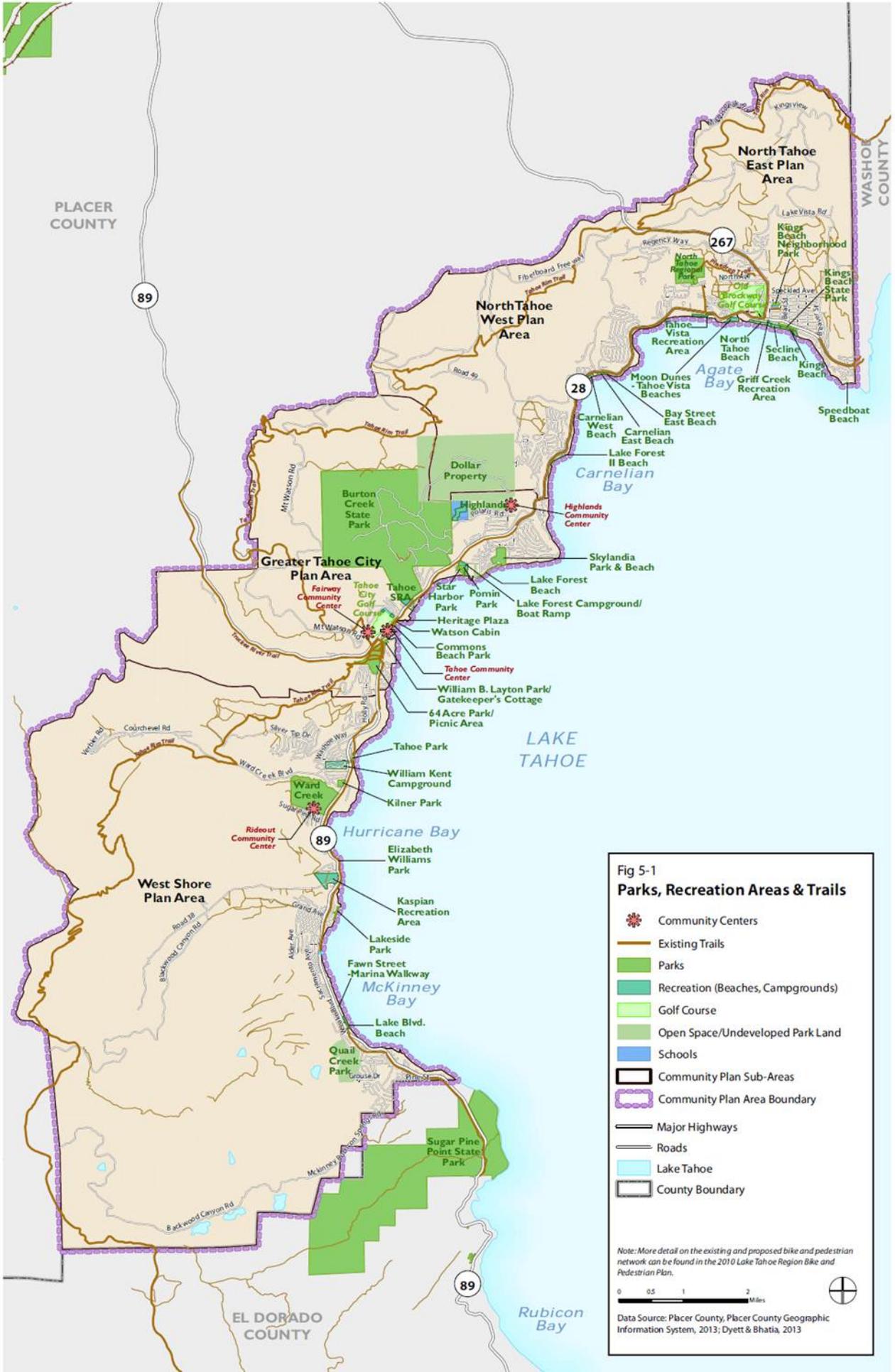
- R-G-1**            **Encourage opportunities for dispersed recreation (e.g. hiking, horseback riding, cross country skiing, and back country camping) when consistent with environmental values and protection of natural resources.**

- R-P-1 Provide low-density recreational experiences along undeveloped shorelines and other natural areas, consistent with the tolerance capabilities and character of such areas.
- R-P-2 Regulate areas selected for nature study and wildlife observation to prevent unacceptable disturbance of the habitat and wildlife.
- R-P-3 Expand trail systems for hiking and horseback riding to accommodate projected demands and provide a link with major regional or interstate trails.
- R-P-4 Relocate existing trails that are either underutilized or located in environmentally-sensitive areas to enhance their use and to protect natural resources.
- R-P-5 Prohibit off-road vehicle use in the Community Plan Area except on specified roads, trails, or designated areas where the impacts can be mitigated.
- R-P-6 Continue to provide winter recreational opportunities and improve access for cross country skiers.
- R-G-2 Provide high-quality recreational opportunities by working with local districts, agencies, schools and sports leagues to provide programming where possible.**
- R-P-7 Manage wilderness and other undeveloped and roadless areas for low-density use.
- R-P-8 Establish separate use areas for the dispersed winter activities of snowmobiling, cross-country skiing and snowshoeing when conflicts of use exist.
- R-P-9 Encourage public recreation opportunities on the Lower Truckee River such as rafting.
- R-P-10 Locate nearshore/foreshore structures to minimize impacts to recreational boating and top line fishing.
- R-G-3 Provide a fair share of the total basin capacity for outdoor recreation.**
- R-P-11 Commit all existing reservations of services for outdoor recreation.
- R-G-4 Provide for the appropriate type, location, and rate of development of outdoor recreational uses.**
- R-P-12 Expand recreational facilities and opportunities in response to demand.
- R-P-13 Expand bike trails to provide alternatives for travel in conjunction with transportation systems.
- R-P-14 Expand public boat launching facilities and provide maintenance operations and dredging where appropriate and when consistent with environmental constraints.

- R-P-15 Encourage private marinas to provide public boat launching facilities.
- R-P-16 Locate new campground facilities in areas of suitable land capability and in proximity to the necessary infrastructure.
- R-P-17 Encourage existing recreational facilities in some sensitive areas, except those that are slope dependent such as downhill skiing, through incentives, to relocate to higher capability lands.
- R-P-18 Encourage development of day-use facilities in or near established urban areas, whenever practical.
- R-P-19 Locate visitor information facilities, to the extent feasible, near entry points to the Community Plan Area or close to urban areas.
- R-P-20 Restrict parking along scenic corridors to protect roadway views and roadside vegetation.
- R-P-21 Coordinate with USFS and operators of the Northstar ski facility to assess the feasibility of, and demand for, expanding the Northstar operations into the Community Plan Area. Ski expansion within the Basin should be limited to lifts and runs. Access should be from facilities located outside the Tahoe Basin. Other accessory uses to ski areas, such as warming huts and eating and drinking establishments, should be serviced from outside the Basin. Also, such facilities, if constructed, should be screened from view originating from within the Basin.
- R-P-22 Limit new commercial ski facilities to base areas of existing facilities.
- R-P-23 Coordinate planning to assess feasibility and demand for expanded ski facilities in Homewood.
- R-G-5 Expand bikeways and multi-purpose trails to provide continuous, safe alternatives for recreational and commuter travel in conjunction with transportation systems.**
- R-P-24 Support the funding, construction, and maintenance of the total mileage of multi-use bike trails identified available for public use in the Community Plan Area, complete linkages in the system, and complete alignments.
- R-P-25 Encourage funding and perform selective snow clearing of trails, particularly in high use areas, to enhance the “year round” economy.
- R-G-6 Use open space to meet multiple needs including bike and pedestrian linkages, stormwater drainage, wildlife habitat, and active and passive recreation opportunities.**
- R-G-7 Protect natural resources from overuse and rectify incompatibility among uses.**

- R-P-26 Regulate intensity, timing, type, and location of use to protect resources and separate incompatible uses.
- R-P-27 Prohibit snowmobile uses in important wildlife habitat, including Page Meadows.
- R-P-28 Optimize recreation and travel use of the Lower Truckee River corridor to maintain its attractiveness and environmental stability.
- R-G-8 Provide for the efficient use of outdoor recreation resources.**
- R-P-29 Promote the use of underutilized recreation areas through programs that improve the public awareness of recreation opportunities and through an expanded water and inland transit system.
- R-P-30 Provide opportunities for alternative uses of seasonal facilities in the off-season, wherever appropriate.
- R-P-31 Encourage common management and consolidation of Homewood and Tahoe Ski Bowl.
- R-P-32 Encourage multi-use of ski area base facilities, especially joint use agreements between the ski areas and local marinas to share parking.
- R-G-9 Provide sufficient capacity for local-oriented forms of outdoor and indoor recreation in urban areas.**
- R-P-33 Reserve sufficient public service and facility capacity to accommodate all forms of urban recreation.
- R-P-34 Encourage urban outdoor recreational facilities located in sensitive areas to relocate to other suitable sites.
- R-G-10 Parks and recreational facilities should be upgraded consistent with the Regional Plan and service level standards.**
- R-P-35 Provide opportunities to expand public camping (both day use and overnight camping).
- R-P-36 Provide opportunities for snowmobile use and staging area when such uses do not include the location of concession base facilities within town and neighborhood centers.
- R-P-37 Coordinate with the US Forest Service on the overall development of the 64-Acre Tract property.
- R-P-38 Expand and upgrade marina facilities in Homewood to accommodate increasing boating needs.

- R-G-11**      **Protect and support existing public beach access as well as secure additional public access rights as opportunities arise.**
  
- R-P-39      Improve and enhance those areas where lake access exists and where access is obtained in the future in a manner that is consistent with the purpose and character of the particular area.
  
- R-P-40      Utilize all appropriate opportunities (land acquisition, obtaining easement rights, etc.) to increase opportunities for public access to the shoreline of Lake Tahoe.
  
- R-P-41      Maintain and expand public access to the shoreline on public lands, particularly on areas of existing public interest at Tahoe Pines.
  
- R-P-42      Increase opportunities for public access to the Truckee River and Lake Tahoe in the 64-Acre Tract.



**Fig 5-1  
Parks, Recreation Areas & Trails**

-  Community Centers
-  Existing Trails
-  Parks
-  Recreation (Beaches, Campgrounds)
-  Golf Course
-  Open Space/Undeveloped Park Land
-  Schools
-  Community Plan Sub-Areas
-  Community Plan Area Boundary
-  Major Highways
-  Roads
-  Lake Tahoe
-  County Boundary

Note: More detail on the existing and proposed bike and pedestrian network can be found in the 2010 Lake Tahoe Region Bike and Pedestrian Plan.

0 0.5 1 2 Miles

Data Source: Placer County, Placer County Geographic Information System, 2013; Dyett & Bhatia, 2013

## 5.2 Public Services & Facilities

This section addresses the Community Plan Area’s public services and facilities needs, specifically schools, police and fire services, and utility infrastructure such as water, wastewater, and stormwater. Plan goals and policies focus on ensuring that public services and facilities have the capacity to meet growth demands in the Community Plan Area.

### SCHOOLS

The Community Plan Area is served by the Tahoe-Truckee Unified School District (TTUSD). The District office is located in the town of Truckee and serves about 4,000 students in California’s Nevada, Placer and El Dorado counties. District boundaries stretch from Hobart Mills, eight miles north of Truckee to Emerald Bay, near South Lake Tahoe; and from Cisco Grove, 20 miles to the west, to Floriston, 15 miles to the east. The district encompasses more than 720 square miles. Schools within the Community Plan Area are Kings Beach Elementary (K-4), Tahoe Lake Elementary (K-4), North Tahoe Middle School (5-8), North Tahoe High School (9-12), and Cold Stream Alternative School (6-12). Altogether, more than 1,400 students attend public schools in the Community Plan Area. Public schools, enrollment and capacity for each school are detailed in Table 5.2-1 and are mapped in Figure 5-2.

**Table 5.2-1: Existing Schools in Tahoe-Truckee Unified School District**

<i>School</i>	<i>Total Enrollment 2012-13</i>	<i>Total Capacity</i>	<i>Percent Underutilized</i>
<b>Elementary Schools (K-4)</b>			
Kings Beach Elementary School	355	496	28%
Tahoe Lake Elementary School	330	304	-9%
<b>Middle Schools (5-8)</b>			
North Tahoe Middle School	424	535	21%
<b>High Schools (9-12)</b>			
North Tahoe High School	303	631	52%
<b>Alternative Schools</b>			
Cold Stream Alternative	30	n/a	n/a
<b>Total</b>	<b>1,442</b>	<b>1,966</b>	<b>27%</b>

*Source: California Department of Education, Tahoe Truckee Unified School District Master Plan; 2007.*

Sierra College is the regional community college that serves the Northern California foothill counties of Placer, Nevada as well as parts of El Dorado and Sacramento. The Tahoe-Truckee campus is located at 11001 College Trail in Truckee, and serves the communities of Truckee, Squaw Valley, Alpine Meadows, Tahoe City, Kings Beach, Incline Village, and other locations on Tahoe’s north and west shores. The first permanent building at the Tahoe-Truckee campus was completed in 2008 and is designed to serve a student body of approximately 1,000 students. In fall 2011 enrollment at the Tahoe-Truckee Campus was a little more than 560 students.

## **POLICE SERVICES**

Placer County Sheriff's Department (PCSD) provides law enforcement within the Community Plan Area. PCSD has a service area of approximately 125 square miles, stretching from Tahoma on the southern boundary, around the northern and western shores of Lake Tahoe to the California/Nevada State line, north to Truckee, and west to the crest of the Sierra Nevada.

PCSD maintains a substation near Tahoe City located 1.5 miles east of Tahoe City on State Route (SR 28) at 2501 North Lake Boulevard (See Figure 5-2). The Tahoe Station is slotted for 48 staff positions and commanded by a Sheriff's captain. The Tahoe Station covers the largest portion of Lake Tahoe, from the California/Nevada state line on SR 28 west to the Nevada County line in Truckee and south on State Route 89 (SR 89) to the El Dorado County line in Tahoma. The station also covers State Route 267 (SR 267) from Kings Beach to the Nevada County line in Truckee, as well as a small portion of Donner Lake.

The Sheriff's Office does not presently have any planned improvements to the Tahoe Station, as existing facilities are currently adequate to maintain a sufficient level of service for anticipated future population growth.

### **Facility and Response Time Standards**

The Placer County General Plan Policy 4.H.1 specifies a goal of one officer per 1,000 residents. Due to the transient nature and widely fluctuating seasonal population, there is no specific ratio goal for the Lake Tahoe area. Normally three officers are on patrol at one time. Response times vary depending upon weather conditions and other calls for service.<sup>1</sup>

## **FIRES SERVICES**

The North Tahoe Fire Protection District (NTFPD) provides fire, rescue, hazardous materials, river rescue, technical rope rescue, vehicle extrication, advanced life support ambulance service, pre-fire planning, and public education services within the Community Plan Area. NTFPD was created in 1993 through the consolidation of the North Tahoe and Tahoe City Fire Protection Districts and protects approximately 31 square miles within the district boundary. NTFPD also provides additional services beyond district boundaries to the communities of Alpine Meadows (full services) and within El Dorado County from the county boundary to Emerald Bay (ambulance service only).

Currently there are six fire stations located in the Community Plan Area. Most of the NTFPD's fire stations were constructed in the 1960s and 1970s and have been maintained to a high standard. In July 2012 NTFPD relocated Station 51 from 300 North Lake Boulevard to 222 Fairway Drive in Tahoe City, across from TCPUD. Station 51 serves as the district's headquarters and is expected to accommodate projected growth in demand for services over the next 15 years.<sup>2</sup> Figure 5-2 maps the location of the fire stations located in the Community Plan Area.

---

<sup>1</sup> Public Services and Utilities. Homewood Mountain Resort Ski Area Master Plan EIR/EIS (2011).

<sup>2</sup> Fire/Emergency Protection Services, Municipal Service Review. Placer LAFCO.



**Fig 5-2  
Schools & Public Safety Services**

- F Fire Station
- P Police Station
- M Medical Facility
- L Library
- \* Federal/Civic Centers
- \* Community Centers
- Schools
- Golf Course
- Parks, Recreation & Open Space
- North Tahoe Fire Protection District
- Community Plan Sub-Areas
- Community Plan Area Boundary
- Major Highways
- Roads
- Lake Tahoe
- County Boundary

0 0.5 1 2 Miles

Data Source: Placer County, Placer County Geographic Information System, 2013; Dyett & Bhatta, 2013

NTPFD is staffed by 49 uniformed and support personnel and provides service to 20,000 residents within the service area.

Water supplies for firefighting efforts come primarily from roughly 850 fire hydrants located throughout the fire district, the majority of which are owned and operated by the two Public Utility Districts—NTPUD and TCPUD. In addition to these hydrants, 13 privately held water purveyors provide water supplies for areas located outside of the PUD/hydrant service areas.

### **ISO Rating**

Fire departments are rated by ISO's Public Protection Classification (PPC) program. The program uses the Fire Suppression Rating Schedule (FSRS), which is comprised of a long list of elements a community may use to fight fires effectively. Each element is given a point score. Using the point scores and various formulas, ISO derives a PPC rating. On a scale of 1 (exemplary fire protection) to 10 (not meeting minimum criteria) NTPFD scored a 4 for areas served by hydrants and 8B for areas located outside of hydrant service areas, depending on the distance to the nearest fire station.

### **Current Unmet Facility Needs**

According to the Lake Tahoe Basin California Portion Community Wildfire Protection Plans, the 13 privately held water systems pose a significant concern. In many cases, these systems lack adequate storage and size of main/lateral lines. Additionally, many of these private water systems do not provide standby generators or adequately fund system upgrades. In underserved areas with inadequate flow and storage, NTPFD is currently supporting its fire efforts with water tenders and/or mutual aid water tenders.

## **UTILITIES**

The Community Plan Area is served by a comprehensive network of infrastructure and utilities that support its economic function and growth. Various public and private utility companies provide water and sewer services within the Community Plan Area.

### **Public Utility Districts**

Two public utility districts—NTPUD and TCPUD—provide water and sewer services to the majority of residents that live within the Community Plan Area (see Figure 5-3).

#### **North Lake Tahoe Public Utility District (NTPUD)**

NTPUD was formed in 1948 to provide sewer service to the residents of the north shore. In 1967, NTPUD added water service, and in 1968 formed the Recreation and Parks Department, which manages and maintains most of the public beaches within the service area, as well as North Tahoe Regional Park.

### ***Tahoe City Public Utility District (TCPUD)***

TCPUD was formed in 1938 and is the oldest local government in the Tahoe Region. Water service is provided in five separate systems and serves about half of the homes and businesses in the district (including the Rubicon service area located in El Dorado County). Sewer collection and parks and recreation are provided for the entire area of the district.

### **Water Supply and Demand**

Drinking water for the Community Plan Area comes primarily from Lake Tahoe itself, local streams, smaller nearby lakes, and groundwater. The two largest water providers in the Community Plan Area are NTPUD and TCPUD. Additionally, there are 13 small public and private water companies that provide drinking water to residents located outside of public utility district boundaries. See Figure 5-3 for the location of district service areas for water purveyors in the Community Plan Area.

### ***North Lake Tahoe Public Utility District (Water Service)***

NTPUD relies almost entirely on surface water for its drinking water supply. About 90 percent of water supplies come from surface water diversions from Lake Tahoe, with the remaining supply coming from groundwater wells. NTPUD currently services 3,872 water connections. As of 1984 all water connections within the district were metered.

In 2010, the district's gross water demand was 1.8 million gallons per day (mgd), which is projected to increase to 3.2 mgd by 2030. In 2010, approximately 90 percent of water deliveries were for residential uses, 6 percent for commercial-hotel/resorts, 2 percent for irrigation, and 2 percent for fire. NTPUD plans to meet 2030 water demand using existing water supply sources. Additionally, the Dollar Cove lake intake, which is currently inactive, can supply 240 gpm, if necessary.

NTPUD recently completed a new 1.3 million gallon water storage tank off SR 267 in Kings Beach at the end of Canterbury Drive. This tank serves as added water storage and supports wildfire suppression efforts. With the installation of this tank and booster station, the district will be able to demolish the existing Kingswood 500,000 gallon tank and booster station that is currently within the Griff Creek stream zone and restore the creek to its natural state.

### ***Tahoe City Public Utility District (Water Service)***

In contrast to NTPUD, TCPUD relies almost entirely on groundwater sources for its drinking water supply. About 95 percent of water supplies come from groundwater sources, with the remaining water supply coming from surface water diversions from Lake Tahoe. TCPUD currently services 3,910 water connections and recently acquired the Lake Forest Water Company, a private water company that serviced the Lake Forest Subdivision located northwest of Tahoe City. The Lake Forest area includes an additional 118 water connections in a small mixed-use neighborhood. The Lake Forest water system is being completely rebuilt, funded by grants from the California Department of Public Health.

In 2010, the district's gross water demand was 1.0 mgd, which is projected to increase to 1.1 mgd by 2030. In 2010, approximately 91 percent of water deliveries were for residential uses, 5 percent for institutional/governmental and 4 percent for commercial.

Future surface water supply development is planned for the Tahoe City Main system, which will include a new lake intake and treatment plant that will supply approximately 1,000 GPM. TCPUD also plans to increase its yield at the McKinney/Quail intake from 300 to 500 GPM. By 2020, surface water diversions from Lake Tahoe are expected to account for nearly 30 percent of TCPUDs water supply. Additionally, in the past, the district has experienced difficulties in meeting summer peak water demands for the McKinney/Quail system. To provide additional supply, in 2004, the district installed an interim surface water treatment system to meet demands. Funding is currently earmarked in the TCPUD 5-year Capital Improvement Program (CIP) for construction of a permanent surface water treatment system.

### ***Other Public and Private Water Companies***

Historically many of the smaller public and private water companies within the Community Plan Area relied on surface water diversions from Lake Tahoe. However, since passage of the California Safe Drinking Water Act in 1986, which required that all surface water be treated prior to use by a consumer, the majority of these companies now rely primarily on groundwater sources for drinking water. Some of the smaller water companies in recent years have had difficulty in meeting federal and state water quality standards. Most recently Lake Forest Water Company was acquired by TCPUD when 72 percent of the company's customers petitioned the TCPUD board to acquire the system. TCPUD had supplied the Lake Forest Water Company with drinking water since 2001 before acquiring it through eminent domain proceedings in 2011.

### **Wastewater Collection and treatment**

NTPUD and TCPUD provide wastewater collection and Tahoe-Truckee Sanitation Agency (TTSA) provides wastewater treatment for the Community Plan Area. The 1969 Porter-Cologne Water Quality Control Act in California and executive order by the Governor of Nevada (dated January 27, 1971) prohibited the discharge of domestic, municipal or industrial wastewater into Lake Tahoe, its tributaries, groundwater, or the portion of the Truckee River within the Tahoe Basin. Following, treatment plants were retrofitted with export pipelines and pump stations to transport wastewater out of the Tahoe Basin. In 1971, both states also prohibited the use of septic tanks requiring all sewage generators in the Tahoe Basin to be connected to an existing wastewater system.

Currently, all collected raw sewage is conveyed out of the Tahoe Basin through a large diameter gravity pipeline known as the Truckee River Interceptor (TRI), which is owned and operated by TTSA. The TRI conveys all raw sewage 17 miles to Truckee where it is treated at the Truckee Water Reclamation Plant (TWRP). TWRP also treats and disposes of wastewater for Squaw Valley, Alpine Meadows and the Town of Truckee.

### ***North Lake Tahoe Public Utility District (Wastewater Service)***

The NTPUD Sewer Department was founded in 1948, and services an area of approximately 6.5 square miles including Kings Beach, Brockway, Tahoe Vista, and surrounding areas (see Figure 5-3). The district's sanitary sewer collection system consists of approximately 94 miles of gravity sewer pipe, 6 miles of force main, 5,400 lower laterals, 4 main pumping facilities, and 16 satellite pumping facilities. Numerous pumping stations are required to transport the sewage from a number of small communities. Sewage flows in gravity collection lines toward

the lake where it is collected and pumped east to west through one or more main pump stations. When the lowest point in a gravity system is too low to flow into a main station, a smaller or satellite pump station lifts the sewage into the main transport system.

### *Capacity*

NTPUD serves 5,524 customers with 4,010 sewer line connections. In 2010, the average daily flow to TWRP was 0.861 mdg. The Design Daily Flow or allocated maximum flow to TWRP is 6 mgd. According to the 2010 NTPUD Risk-Based Sewer System Management Plan, the existing collection system pipeline network has pipeline diameters large enough to convey historic and future sewage loading based on potential growth.

### *Planned Improvements*

Under the NTPUD Capital Improvement Program (CIP), several updates to the sewage system are being made. A new pump station for Carnelian Bay and Dollar Hill is being considered, and the sewer main at Brook Avenue is being replaced. This project includes the replacement of the existing sewer mains and service laterals in Brook Avenue and Coon Street and the installation of a new sewer main, manholes, and service laterals on SR 28 between Coon Street and Bear Street in order to abandon a mid-block sewer main in which the district does not have adequate access. Other projects, such as the Beaver Street Water and Sewer Line Replacement Project, have already been completed.

### **Tahoe City Public Utility District (Wastewater Service)**

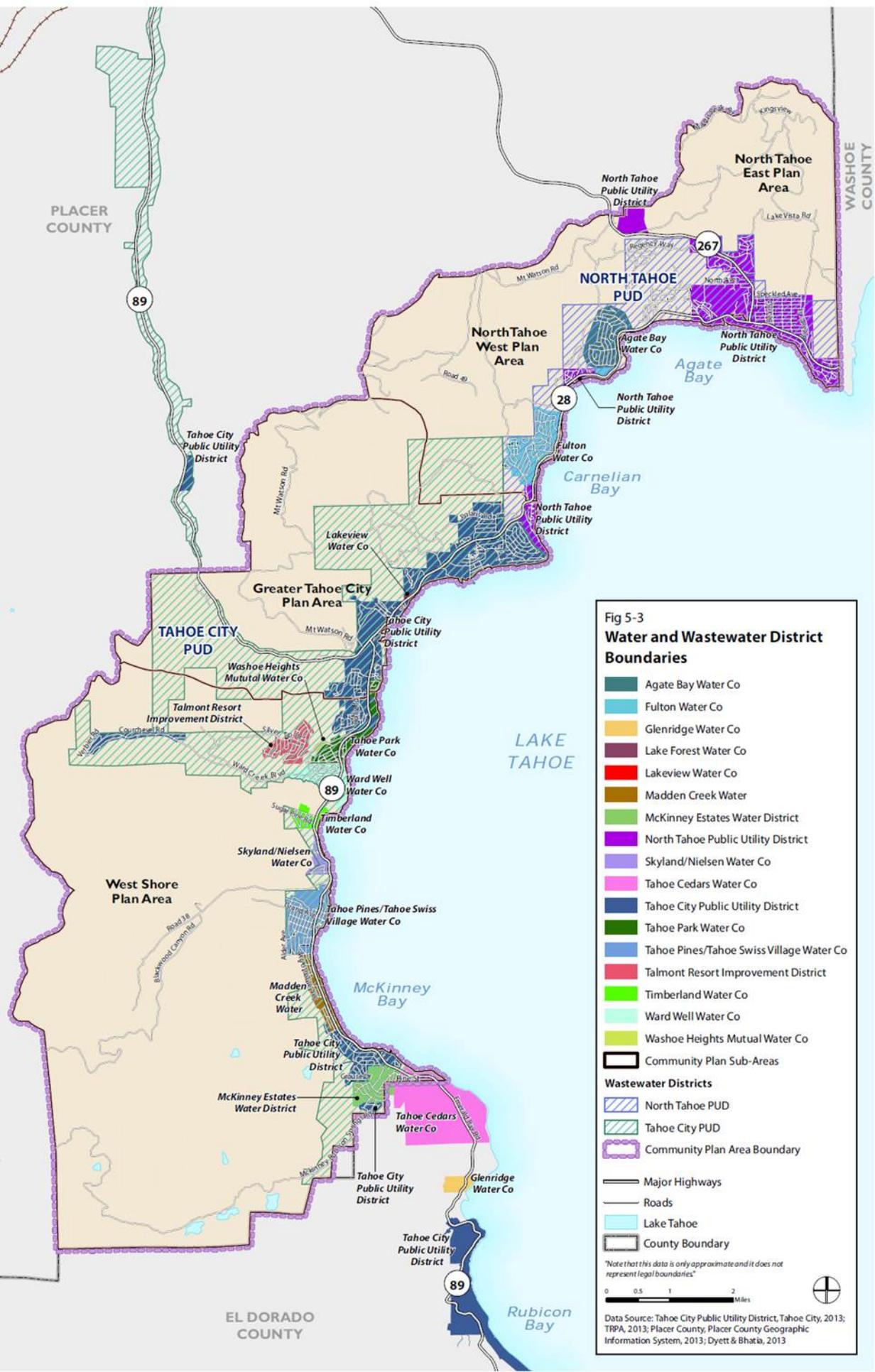
The TCPUD Sewer Department services an area of approximately 22 square miles stretching from D.L. Bliss State Park to the Dollar Point area, extending north from Tahoe City to the Placer/Nevada County line just south of Truckee town limits (see Figure 5-3). The district's sanitary sewer collection system consists of approximately 130 miles of sewer pipe, 2,349 manholes, and 21 lift stations.

### *Capacity*

TCPUD serves 7,540 sewer connections within the district. In 2010, the average daily flow to TWRP was 0.9 mdg. The Design Daily Flow or allocated maximum flow to TWRP is 7.8 mgd. Over time the flows appear to be decreasing, particularly since 2006. According to the 2010 TCPUD Risk-Based Sewer System Management Plan, there are no known hydraulic capacity limitations within the collection system during dry weather or during peak wet weather events.

### *Planned Improvements*

Under the NTPUD Capital Improvement Program (CIP), several updates to the sewage system are being made. The primary focus of the CIP in 2013 is the Tahoe City Residential Sewer System Rehabilitation, which commenced with planning and design work in 2013. Other project priorities include pump and control upgrades, sewer flow meters and pump station bypass facilities.



**Fig 5-3 Water and Wastewater District Boundaries**

- Agate Bay Water Co
- Fulton Water Co
- Glenridge Water Co
- Lake Forest Water Co
- Lakeview Water Co
- Madden Creek Water
- McKinney Estates Water District
- North Tahoe Public Utility District
- Skyland/Nielsen Water Co
- Tahoe Cedars Water Co
- Tahoe City Public Utility District
- Tahoe Park Water Co
- Tahoe Pines/Tahoe Swiss Village Water Co
- Talmon Resort Improvement District
- Timberland Water Co
- Ward Well Water Co
- Washoe Heights Mutual Water Co
- Community Plan Sub-Areas
- Wastewater Districts
  - North Tahoe PUD
  - Tahoe City PUD
  - Community Plan Area Boundary
- Major Highways
- Roads
- Lake Tahoe
- County Boundary

*Note that this data is only approximate and it does not represent legal boundaries.*

0 0.5 1 2 Miles

Data Source: Tahoe City Public Utility District, Tahoe City, 2013; TRPA, 2013; Placer County, Placer County Geographic Information System, 2013; Dyett & Bhatia, 2013

### **Tahoe Truckee Sanitation Agency**

Tahoe Truckee Sanitation Agency (TTSA) plans, administers, and coordinates wastewater treatment and disposal services throughout the north and west Tahoe area, as well as the town of Truckee. TTSA works with five member sewage collection districts including TCPUD, NTPUD, Alpine Springs County Water District, Squaw Valley Public Service District, and the Truckee Sanitary District.

TTSA is located in Martis Valley, east of the town of Truckee in Nevada County. The state-of-the-art 9.6 mgd advanced water reclamation plant provides primary and secondary treatment, phosphorus removal, biological nitrogen removal, disinfection, and effluent filtration. Because of its location in the pristine Lake Tahoe-Truckee River watershed, the plant is required to meet some of the most stringent effluent requirements in the country.

### **Stormwater**

Lake Tahoe is listed as “high priority” on the Federal Clean Water Act, Section 303(d) list of waterways impaired by the presence of nutrients due to, among other sources, urban stormwater. Pollutants from residential areas, commercial areas, construction sites, and winter operations of roads all contribute to degraded water quality. Data and research indicate that the pollutants with the greatest impact on Lake Tahoe water quality and clarity are fine sediment, phosphorous and nitrogen. Future water quality improvement projects will continue to focus on reducing the discharge of these pollutants.

The Lake Tahoe Federal Interagency Partnership, created in 1997 to coordinate actions to address environmental and economic concerns at Lake Tahoe and including several Federal agencies (USDA, ACOE, BLM, USDOT, and the EPA) created a subcommittee to address stormwater issues. This subcommittee is known as the Stormwater Quality Improvement Committee, and was established to improve the design and effectiveness of stormwater quality improvement projects and increase the efficiency of implementing water quality improvement projects.

A Stormwater Management Plan was adopted to guide the implementation of the stormwater quality program. This program describes the actions and requirements necessary to reduce pollutant loads, including new development requirements. Comprehensive development regulations will always be required to ensure a high standard of environment protection.

### **GOALS AND POLICIES**

- PS-G-1            Upgrade and expand public services and facilities in a timely manner consistent with the Regional Plan and service demand.**
  
- PS-P-1            Upgrade and expand public services and facilities consistent with the land use element of the Regional Plan and federal, state, and local standards.
  
- PS-P-2            Coordinate the provision of public and private services to reduce costs of service and avoid duplication of services.

- PS-P-3 Phase expansion of public services and facilities to meet the needs of new development without creating inefficiencies from over-expansion or under-expansion.
- PS-P-4 Employ appropriate devices to conserve water and reduce water consumption in all new development. Retrofit existing development with water conservation devices on a voluntary basis in conjunction with a public education program operated by the public utility districts.
- PS-P-5 Consolidate Placer County facilities at the “Burton Creek” site through the construction of new facilities or relocate facilities to a new location. Coordinate this project with an overall coverage reduction and BMP retrofit.
- PS-P-6 Encourage strategies to provide adequate new and more appropriate sites for existing facilities, such as the Caltrans corporation yard and Liberty Energy Tahoe City Power Substation, out of environmentally and visually sensitive areas.
- PS-P-7 Consider opportunities to locate County facilities such as the criminal justice facility; TART facilities; as well as other public service uses in the Community Plan Area.
- PS-P-8 Promote the establishment of high-speed fiber optic communications equipment within the Tahoe Region.
- PS-G-2 Consider the existence of adequate and reliable public services and facilities in approving new development.**
- PS-P-9 Require new development to demonstrate an adequate water supply within an existing water right.
- PS-P-10 Prohibit additional development in any area unless there are adequate storage and distribution systems to deliver an adequate quantity and quality of water for domestic consumption and fire protection.
- PS-P-11 Ensure that all proposed developments are reviewed for fire safety standards by local fire agencies responsible for its protection, including providing adequate water supplies and ingress and egress
- PS-P-12 Encourage all water systems address fire suppression water needs.
- PS-G-3 Prevent liquid and solid wastes from degrading Lake Tahoe and the surface and groundwaters of the Region.**
- PS-P-13 Prohibit the discharge of municipal or industrial wastewaters to the surface and groundwaters of the Community Plan Area, except for existing development discharging wastewaters under a state- or TRPA-approved disposal plan.

- PS-P-14 Export all solid wastes from the Community Plan Area and reduce the volume of wastes being transported to landfills.
- PS-P-15 Locate water treatment facilities such as settling ponds in Tahoma.
- PS-G-4 To ensure protection of the public health, safety and general welfare of the Community Plan Area, educational and public safety services should be sized to be consistent with projected population levels.**
- PS-P-16 Review the impact on educational and public safety services when reviewing projects and plan amendments proposed within the Community Plan Area. To the extent feasible, mitigate adverse impacts as part of the review process.
- PS-G-5 Promote equitable distribution of and access to community-serving facilities throughout the Community Plan Area.**
- PS-G-6 Protect water supply and quality through conservation and good storm-water management practices.**
- PS-G-7 Encourage the development of joint use facilities (e.g., use of fire stations at trailheads with public restroom facilities) on public land as well as the joint use of recreational facilities at schools.**
- PS-G-8 Encourage efficient use of water resources and investment by promoting consolidations, joint use facilities, and regional water resource planning.**