

CHAPTER 11

Recreation

Chapter Contributors:

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The Lake Tahoe area offers an abundance of recreational opportunities highly valued by visitors and residents. These recreational resources are one of the major drivers of the regional economy, and contribute to the quality of life in the Basin. Outdoor recreation can also foster an appreciation for the natural world that promotes environmental stewardship.

The TRPA *Bi-State Compact* recognizes that maintaining recreational values is critical to the social and economic health of the region.¹ For this reason, the *Bi-State Compact* requires that the *Regional Plan* include “a recreation plan for the development, utilization, and management of the recreational resources of the region...”² Adopted Threshold Standards for Recreation are statements of policy rather than a Numerical Standard. The adopted Threshold Standard directs TRPA to adopt policies that will preserve and enhance high quality recreational experiences, and provide additional access to the shorezone and other areas for dispersed recreational uses. The Threshold Standard also directs TRPA to “...establish and ensure a fair share of the total basin capacity for outdoor recreation is available to the general public.”³ The goal of the Recreation element of the *Regional Plan* is to promote and manage recreational improvements to achieve the Recreation Threshold Standard, and “ensure equilibrium between the region’s natural endowment and its manmade environment.”⁴

The 2006 Threshold Evaluation determined that the Region was in attainment with adopted standards for Recreation. For this Threshold Evaluation, evaluation criteria were established and compared against available recreation survey and TRPA permit information to assess attainment status. Available information supports that TRPA and other agencies are implementing actions that are effective at satisfying the intent of the adopted Recreation Threshold Standards. It was concluded that the Region is in attainment with adopted Recreation Threshold Standards.

Quality of Recreation Experience and Access to Recreational Opportunities

The first Recreation Policy Statement states: “It shall be the policy of the TRPA Governing Body in development of the *Regional Plan* to preserve and enhance the high-quality recreational experience including preservation of high-quality undeveloped shorezone and other natural areas. In developing the *Regional Plan*, the staff and Governing Body shall consider provisions for additional access, where

¹ Article I (a)(6) of the *Bi-State Compact*

² Article V(c)(4) of the *Bi-State Compact*

³ Attachment C to TRPA Resolution No. 82-11

⁴ Article I (a)(10) of the *Bi-State Compact*

lawful and feasible, to the shorezone and high-quality undeveloped areas for low density recreational uses."

Type of Standard – Policy Statement

Evaluation Criteria – This Policy Statement is evaluated by determining whether the agency has sufficiently adopted policies, ordinances, and programs in support of the Policy Statement, as well as two additional evaluation criteria. The experience of recreation users is one criterion used to assess whether the Policy Statement is in attainment. The quality of recreation experiences was evaluated through recreation user surveys conducted by the U.S. Forest Service. These surveys assessed the overall satisfaction of recreation users, and compare identified recreation attributes, such as the condition of recreation facilities, with the experience that the recreationists perceive. These recreation surveys represent the best available information, but they only apply to U.S. Forest Service lands (which comprise approximately 80 percent of the Basin). As such, the recreation user surveys reported here are surrogate samples of experience, rather than measures of user satisfaction across all recreation amenities in the Region. A second part of the Threshold Standard is the provision of additional public access to the Lake and other natural features. The evaluation criterion for this part of the Policy Statement relies on assessing the extent of public land acquired, and the availability of additional amenities that provide public access for low density recreational uses, such as trails and trailheads.

Attainment Status – The Threshold Standard has been implemented and is in attainment. A review of the *Regional Plan* and programs found that the *Regional Plan* and programs support attainment of the Policy Statement. Recreational user surveys show that the majority of recreational users (89.8 percent) are very satisfied with their recreational experience (USDA 2010b). The Region has seen a consistent increase in the amount of public land available for low-density recreational use, and the number of amenities that provide access to that land (TRPA 2009 and TRPA 2011b).

- 1) Consistency of TRPA Policies, Ordinances, and Programs:
The Recreation element of the *Regional Plan* is organized into three subelements that are distinguished primarily by the level of infrastructure required; dispersed recreation, developed recreation, and urban recreation. Dispersed recreation includes activities such as hiking, kayaking, backcountry skiing, and fishing, which require little or no developed facilities. Activities that require additional infrastructure, such as downhill skiing, or the use of improved campsites, are classified as developed recreation. Urban recreation includes activities that are indoors or highly dependent on developed facilities; e.g., ice rinks, swimming pools, or ball fields. Each subelement contains Goals and Policies that directly support attainment of the adopted Recreation Policy Statement.

The Goals and Policies are implemented primarily through application of the *Code of Ordinances* in the review of proposed projects, and through the Environmental Improvement Program (EIP). An Initial Environmental Checklist (IEC) must be completed for each proposed project. The IEC contains questions designed to identify whether a proposed project would decrease the quality of recreational experiences^{5,6} or limit access to recreational areas.⁷ The EIP includes a recreation program that facilitates implementation of projects that will 1) improve

⁵ TRPA Initial Environmental Checklist Questions 19 (a) & (c)

⁶ TRPA Initial Environmental Checklist Question 18 (b)

⁷ TRPA Initial Environmental Checklist Question 19 (d)

Lake access, 2) develop a comprehensive trail system, 3) improve recreational facilities, and 4) improve educational programs and interpretive facilities.⁷ To date, over 93 recreational facilities have been constructed or rehabilitated as part of the EIP's recreation program.

2) Recreation User Surveys:

In 2009 and 2010, the U.S. Forest Service conducted visitor use surveys to estimate the quality of recreational experiences at a variety of developed and undeveloped recreation sites on National Forest lands in the Tahoe Basin. The surveys were conducted following standard National Visitor Use Monitoring (NVUM) protocols, which use a combination of vehicle counts and user interviews. The surveys were conducted on 170 days, and observations were stratified by type of recreation site and expected level of use (e.g. high, medium, or low use days and times), to ensure they captured a representative cross-section of visitor use. The surveys found that 89.8 percent of respondents were very satisfied with their overall recreational experience (USDA 2011b). This level of satisfaction is higher than the national average of 78 percent of respondents who were very satisfied with their recreational experience for all National Forest lands between 2005 and 2009 (USDA 2011b). This level of satisfaction has not changed since a previous survey conducted in 2005 using the same methods (USDA 2011e). The visitor use surveys also reported users' satisfaction with various factors affecting their recreational experience. Some factors relevant to the Threshold Standard and the percent of visitors that were satisfied or very satisfied with those factors, include: developed facilities (88.5 percent), condition of environment (91.8 percent), parking availability (56.3 percent), availability of recreation information (73.7 percent), feeling of safety (98.8 percent), scenery (96.5 percent), adequacy of signage (70.8 percent), and trail condition (87.4 percent). Table 11.1 summarizes visitor satisfaction and dissatisfaction for the 2005 and 2010 surveys, and shows changes in the percent satisfied for all factors addressed in the surveys.

As shown in Table 11.1, more visitors were dissatisfied, and fewer were satisfied, with parking availability than any other element in both 2005 and 2010. The percent satisfied with parking availability has increased by 11.2 percent between 2005 and 2010, indicating an improvement in the availability of parking. However, based on the continued dissatisfaction, parking availability may be a primary factor limiting the quality of recreational experiences and access to recreational opportunities. Fewer visitors were satisfied with the value for fee paid in 2010 than any other element besides parking availability. This may indicate a desire for more low-cost or free developed recreation sites.

The proportion of visitors engaging in specific uses can provide an indication of the types of recreation amenities necessary to provide a quality recreational experience. Table 11.2 shows the percent of survey respondents participating in specific activities in the 2005 and 2010 surveys. Downhill skiing continues to be the main activity for a majority of visitors, followed by relaxing, then hiking/walking. The survey data indicate that the majority of visitors participate in numerous activities in addition to their main activity. Changes in visitors' main activities between 2005 and 2010 are also shown in Table 11.2. In that time period, the number of visitors who indicated that hiking/walking was their main activity decreased by 9.7 percent, and the number who indicated downhill skiing was their main activity increased by 6.6 percent. These changes may indicate a shift in visitor activities, but they may be partly the result of annual variation in natural conditions (i.e. 2010/11 was an exceptionally snowy winter). There was a less than 5 percent change for all other activities (Table 11.2).

**Table 11.1 Visitor Satisfaction for the Lake Tahoe Basin Management Unit
(Fiscal Years 2005 and 2010)**

Satisfaction Element	Fiscal Year 2005		Fiscal Year 2010		Change in % Very or Somewhat Satisfied
	% Very or Somewhat Dissatisfied	% Very or Somewhat Satisfied	% Very or Somewhat Dissatisfied	% Very or Somewhat Satisfied	
Restroom Cleanliness	30.7	58.6	3.5	82.4	+23.8
Developed Facilities	1.7	92.8	0.0	88.5	-4.3
Condition of Environment	1.2	97.5	3.8	91.8	-5.7
Employee Helpfulness	0.1	98.0	4.6	90.9	-7.1
Interpretive Displays	1.8	84.3	6.2	87.1	+2.8
Parking Availability	43.4	45.1	34.7	56.3	+11.2
Parking Lot Condition	15.9	47.3	11.2	67.9	+20.6
Rec. Info. Availability	2.6	91.4	6.1	73.7	-17.7
Road Condition	3.7	93.0	3.8	83.7	-9.3
Feeling of Safety	0.0	99.2	0.3	98.8	-0.4
Scenery	0.6	98.2	0.0	96.5	-1.7
Signage Adequacy	4.8	88.9	7.0	70.8	-18.1
Trail Condition	1.4	96.1	0.3	87.4	-8.7
Value for Fee Paid	18.3	54.1	28.1	57.8	+3.7

Source: USFS 2005, 2010

**Table 11.2 Activity Participation for the Lake Tahoe Basin Management Unit
(Fiscal Years 2005 and 2010)**

Activity	Fiscal Year 2005		Fiscal Year 2010		Change in % Main Activity
	% Participation ¹	% Main Activity ²	% Participation ¹	% Main Activity ²	
Relaxing	31.1	7.7	65.5	11.2	+3.5
Downhill Skiing	50.3	49.3	62.5	55.9	+6.6
Viewing Natural Features	40.8	10.3	56.3	5.6	-4.7
Hiking/Walking	34.3	18.5	47	8.8	-9.7
Viewing Wildlife	33.2	1.6	43.2	1.5	-0.1
Driving for Pleasure	12.4	1.9	31.8	2.1	+0.2
Visiting Historic Sites	6.2	0	15.1	0.4	+0.4
Other Non-motorized	5.7	1.8	14.9	2.8	+1
Nature Center Activities	3.6	0.2	13.2	0	-0.2
Bicycling	3.3	1.2	11	3.1	+1.9
Resort Use	1.2	0	10.7	0.2	+0.2
Cross-country Skiing	6.5	3.6	9.8	1.5	-2.1
Nature Study	5.2	0	9.6	0.1	+0.1
Picnicking	6.2	0.9	9.5	0.6	-0.3
Non-motorized Water	1.5	0.3	6.9	1.7	+1.4
Motorized Water Activities	5	1.9	6.8	0.9	-1
Snowmobiling	0.4	0.4	6.2	1	+0.6
Fishing	1.2	0.1	5.6	0.4	+0.3
Some Other Activity	1.4	0.3	5.3	1.6	+1.3
Developed Camping	1.7	0.4	5.2	0.4	No change
Gathering Forest Products	0.3	0	4.7	0	No change
Backpacking	0.3	0.1	4.4	0.2	+0.1
Primitive Camping	0.1	0	2.4	0.1	+0.1
Horseback Riding	0.2	0	2	0	No change
OHV Use	0.8	0.3	1.7	0.4	+0.1
Motorized Trail Activity	0.7	0.2	1.4	0	-0.2
Other Motorized Activity	0.2	0	1.3	0	No change
Hunting	0	0	0.1	0	No change
No Activity Reported	0	0	0	0	No change

Notes:

¹ Survey respondents could select multiple activities so this column may total more than 100 percent.

² Survey respondents were asked to select just one of their activities as their main reason for the forest visit. Some respondents selected more than one, so this column may total more than 100 percent.

Sources: USFS 2005, 2010

3) Public Land Acquisition and Development of Access Amenities:

Public agencies, including the California Tahoe Conservancy, Nevada Division of State Lands, and U.S. Forest Service, have active acquisition programs that purchase land and make it available to the public for dispersed recreation. Since the beginning of the EIP in 1996, these agencies have purchased over 3,000 acres of land (TRPA 2009). Over the past 5 years, the rate of public land acquisition has slowed, but acquisitions are still occurring that increase land availability for low-density recreation. In 1983, less than 70 percent of the Tahoe Basin was in public ownership (TRPA 1982a). Today approximately 90 percent of the Basin is public land (TRPA 2012). The decrease in the rate of public land acquisitions is likely a result of fewer private lands available for acquisition.

The Policy Statement specifically highlights the need to provide additional public access to the shoreline. To that end, the acquisition programs have acquired 2,579 linear feet (about ½ mile) of shoreline since 1996 to increase public access to the Lake (TRPA 2011b).

Public agencies and non-profit organizations have been actively increasing the number and quality of access amenities such as trails and trailheads. A summary of existing bicycle and pedestrian facilities (not including unpaved trails) is included in Table 11.3. These bicycle and pedestrian facilities are especially important because they can reduce vehicle miles traveled in private automobiles (and associated air pollution emissions), and improve the quality of recreational opportunities. Bike and pedestrian facilities that provide connectivity between residential or tourist accommodations and recreation sites, serve as a recreational feature by providing an additional recreation opportunity during travel to the recreation sites. Providing new non-motorized access opportunities directly decreases parking demand at recreation sites. By reducing parking demand, bike and pedestrian facilities directly improve parking availability, which visitor use surveys indicate is the element of the recreational experience that the fewest number of visitors are satisfied with.

Table 11.3 Miles of Existing Bicycle and Pedestrian Facilities					
Jurisdiction	Class I Path	Class II Bike Lane*	Class III Bike Route	Sidewalk	Total
El Dorado County, CA	9	7	4	0	20
City of South Lake Tahoe	8	8	9	4	29
Placer County, CA	14	2	2	1	19
Douglas County, NV	2	0.1	1	1	5
Washoe County, NV	10	4	7	6	26
Carson City, NV	0	0	0	0	0
Total	43	21	23	12	99

** Miles of roadway with Bike Lanes. In many cases, this figure could be doubled since bicycle lanes are on both sides of the roadway. Source: TMPO 2010*

Recent examples of other new access amenities include: the Tahoe Rim Trail Association and U.S. Forest Service added 13 miles of new trail to the Tahoe Rim Trail; the California Tahoe Conservancy and Nevada State Parks constructed a new trailhead at the Van Sickle Bi-State Park; the U.S. Forest Service has completed numerous trail construction and improvement projects, including the Lam Watah trail and trailhead near Nevada Beach, and a new trail connecting High Meadows to Star Lake; the California Department of Parks and Recreation is in the process of constructing several new trails at the Ward Creek property; and the California Tahoe Conservancy has implemented a series of river access improvements along the Upper Truckee River.

Interim Target – None, the Threshold Standard is currently in attainment

Target Attainment Date – None, the Threshold Standard is currently in attainment

Recommendation for Additional Actions – Coordinate with public agencies and private entities to develop a more comprehensive recreational user survey that assesses recreational experiences at a wide range of Forest Service and non-Forest Service sites. Update and improve existing recreation resource inventories to identify the current geographic distribution of recreation and access infrastructure. Use this updated resource inventory to implement a more quantitative assessment of Threshold Standard status, identify areas with relatively less infrastructure, and provide information to the general public to enhance their use of recreation resources. Consider the use of an easy to use web-based mapping platform to display information on recreation resources. Promote projects that reduce parking demand or increase the availability of parking at recreation sites.

Fair Share Distribution of Recreation Capacity

The second Recreation Policy Statement states: “*It shall be the policy of the TRPA Governing Body in development of the Regional Plan to establish and ensure a fair share of the total Basin capacity for outdoor recreation is available to the general public.*”

Type of Standard – Policy Statement

Evaluation Criteria – The status of this Threshold Standard is evaluated by reviewing the degree to which the *Regional Plan* and TRPA programs support implementation of the Policy Statement, as well as an assessment of three additional evaluation criteria. The three criteria used to evaluate the status of the Policy Statement are: 1) cumulative accounts of “persons at one time” (PAOT) allocations, which are estimates of the number of users a recreation site can support at one time, 2) facility development for recreation projects that do not require PAOT assignments, and 3) public acquisition of lands that support recreation purposes.

Attainment Status – The Threshold Standard has been implemented and is in attainment. As described below, a review of the *Regional Plan* and programs found that the *Regional Plan* and programs support attainment of the Policy Statement. In general, the evaluation criteria indicate an increase in recreational development that is consistent with the Policy Statement’s direction, that a “fair share” of resource capacity be available for public recreation. Cumulative accounts of PAOT allocations show a slightly slower increase in recreation capacity for eligible projects than in previous Threshold Evaluations. However, there has been a steady increase in the number of recreation facilities that do not require PAOT allocations, and the region has experienced an increase in the amount of public land available to support recreational purposes.

- 1) Consistency of TRPA Policies, Ordinances, and Programs:
As described earlier, the Goals and Policies support attainment determination of the Recreation Policy Statement, and are implemented primarily through the application of the *Code of Ordinances* in the review of proposed projects, and through the implementation of the EIP. An Initial Environmental Checklist (IEC) must be completed for each proposed project. The IEC contains questions designed to identify whether a proposed project would require additional recreation related services or facilities,⁸ create additional demand for recreational facilities,⁹ or create additional recreation capacity.¹⁰ The EIP includes a recreation program that facilitates implementation of projects that will 1) improve Lake access, 2) develop a comprehensive trail system, 3) improve recreational facilities, and 4) improve educational programs and interpretive facilities (TRPA 2010). Implementation of projects under the EIP recreation program ensures that a fair share of resource capacity is available for public recreation.

- 2) Cumulative Accounts of PAOT Allocations:
To ensure a fair share distribution of recreation opportunities throughout the Region, TRPA established and implemented a “persons at one time” (PAOT) recreation capacity allocation system. PAOTs are an estimate of the number of individuals that a recreation facility or area

⁸ TRPA Initial Environmental Checklist Question 14 (d)

⁹ TRPA Initial Environmental Checklist Question 19 (a)

¹⁰ TRPA Initial Environmental Checklist Question 19 (b)

can support at any given time. PAOTs are used as both a target for desired recreation capacity, and a maximum limit to the recreational use that can be supported in an area. A specific number of PAOTs are assigned to summer day use, winter day use, and summer overnight recreation activities. When a qualifying project creates additional recreation capacity, it is assigned PAOTs corresponding to the type and level of increased capacity. However, not all facilities that increase recreational capacity are reflected under the PAOT allocation system. For example, downhill ski facilities require winter day use PAOT allocations, but cross-country ski facilities do not. Day use facilities operated by federal agencies or state departments of parks and recreation (or their permittees) require summer day use PAOT allocations, but facilities operated by local jurisdictions or other state agencies do not.

The number of PAOTs assigned per category is shown below (Table 11.4). Currently, approximately 27 percent of available PAOTs have been assigned. The rate of PAOT utilization has remained similar to the rate experienced during the previous five year evaluation period, with 1,440 PAOTs assigned over the five years since the last Threshold Evaluation (2006 – 2011), compared to 1,615 assigned during the previous five year evaluation period (2001 – 2006) (TRPA 2007c). The percent of PAOTs utilized since the development of the *Regional Plan* (27percent) is less than the percent of Tourist Accommodation Units (37 percent), and the percent of Commercial Floor Area (72 percent) utilized. However, as described below, a significant number of recreation facilities do not require PAOTs. When the number of recreation projects requiring PAOTs is combined with recreation projects not requiring PAOTs, the total increase in recreational development is roughly proportional to the increase in other types of development. A map of recreation facilities including both those that require PAOT allocations and those that do not is included in Figure 11.1.

Table 11.4 Cumulative Accounting of PAOT Allocations					
PAOT Categories	Regional Plan Allocations	Assigned as of 2006 Evaluation	Assigned 2006 to 2011	PAOTs Remaining	Percent of PAOTs Assigned
Summer Day Use*	6,761*	546	646	5,569	17.6%
Winter Day Use**	12,400	4,473	794	7,133	57.5%
Summer Overnight***	6,114	394	0	5,720	6.4%
Total	25,275	5413	1,440	18,422	27.1%
<p><i>* 2,000 reserved in Subsection 50.8.3.C.2 (a) for marina and boat launching facility expansion pursuant to a master plan. These PAOTS apply to all marinas, boat launching facilities, rural sports, golf courses, visitor information centers, off-road vehicle courses, and tour boat operations. When they provide additional recreation capacity, PAOTS also apply to beach recreation, commercial boating, and water-oriented recreation concessions. They apply when a Federal agency or State Department of Parks and Recreation (or their permittees) operate a recreation center, participant sports facility, sport assembly facility, or beach recreation or day use area.</i></p> <p><i>** For downhill ski areas pursuant to a master plan pursuant to TRPA Code Subsection 50.8.3.C.3. (b).</i></p> <p><i>***1,000 of these PAOTS are not assigned to a Plan Area Statement and are available from a Basin-wide pool. They apply to developed campground, group facilities, and RV parks.</i></p>					

3) Facility Development for Projects Not Requiring PAOTs:

Not all facilities that increase recreational capacity are reflected under the PAOT allocation system (TRPA 1987b). For example, downhill ski facilities require winter day use PAOT allocations, but cross-country ski facilities do not. Day use facilities operated by federal agencies or state departments of parks and recreation (or their permittees) require summer day use PAOT allocations, but facilities operated by local jurisdictions or other state agencies do not. Many recreation facilities that do not require PAOTs have been developed or enhanced over the five years since the last Threshold Evaluation (2006 – 2011). These facilities include: Explore Tahoe Visitor Center, Eldorado Beach at Lakeview Commons public access improvement project, Van Sickle Bi-State Park, and recreation and interpretation facilities at the Tahoe City Fish Hatchery. The consistent increase in public recreation capacity from projects not requiring a PAOT allocation supports attainment of the Policy Statement. A map of recreation facilities, including those that do not require a PAOT allocation, is included in Figure 11.1 on the next page.

4) Public Acquisition of Lands Supporting Recreation:

Public agencies including the California Tahoe Conservancy, Nevada Division of State Lands, and U.S. Forest Service have active acquisition programs that purchase land and make it available to the public for recreational use. Since the EIP was initiated in 1996, these agencies have purchased over 3,000 acres of land (TRPA 2009). Recent acquisitions include the U.S. Forest Service's acquisition of Incline Lake, and the California Tahoe Conservancy's acquisition of Tahoe Pines campground and Elks Club river access site. Currently, approximately 90 percent of lands in the Tahoe Basin are publicly owned, the vast majority (85%) of which are open space and available for recreational use (TRPA 2012).

Interim Target – None, the Threshold Standard is currently in attainment

Target Attainment Date – None, the Threshold Standard is currently in attainment

Recommendation for Additional Actions – Reassess and update the PAOT allocation system. Consider updating or replacing the program with a system that would more uniformly reflect recreation capacity regardless of the entity operating the facility.

Figure 11.1: Recreation facilities in the Lake Tahoe Basin (north).
 Source: Nelson/Nygaard 2012; TRPA data

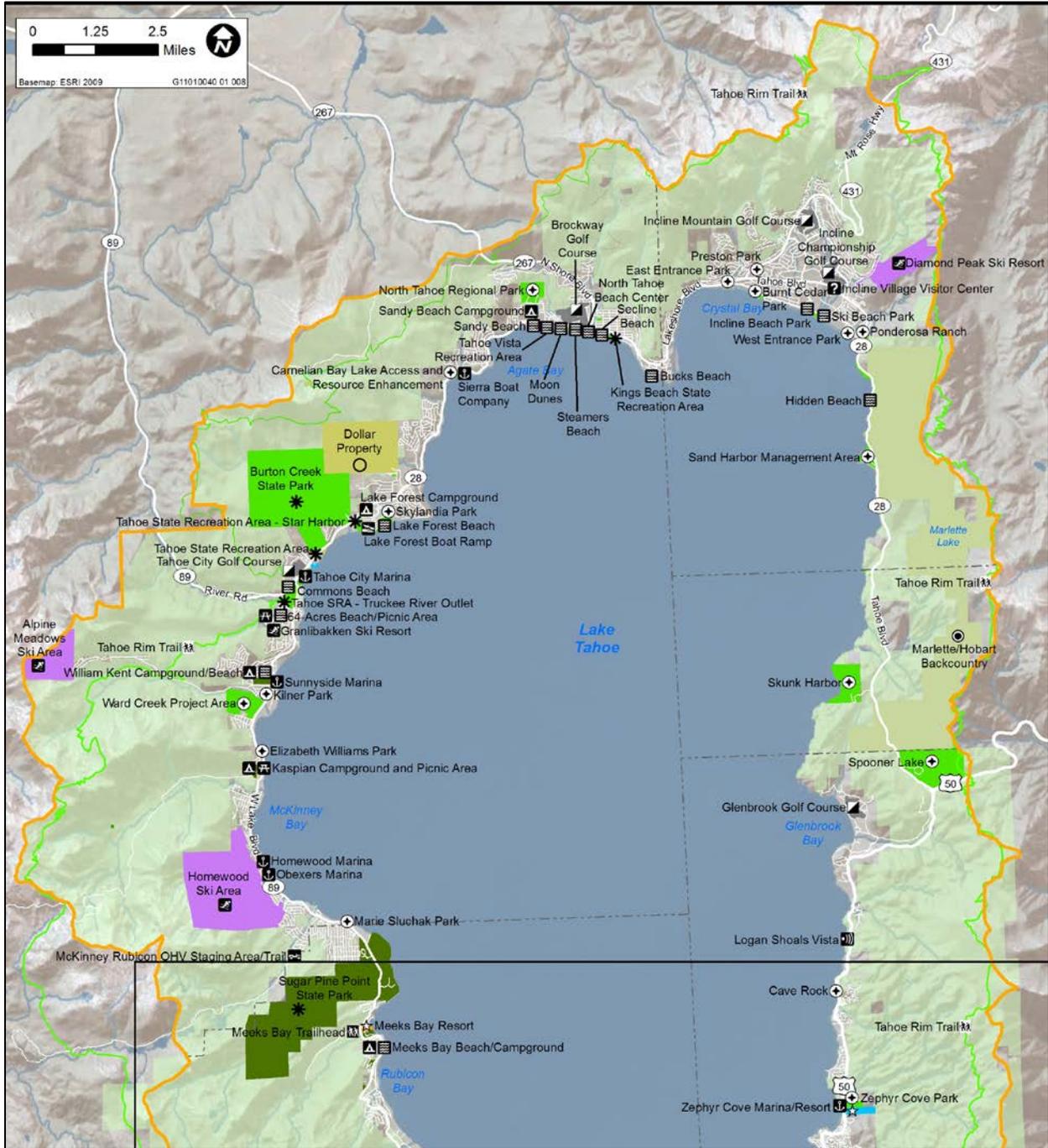


Figure 11.1 (continued): Recreation facilities in the Lake Tahoe Basin (south).
 Source: Nelson/Nygaard 2012; TRPA data

