

CHAPTER 11

Recreation

The Lake Tahoe Region 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 Tahoe Region. 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. 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...” (Public Law 96-551). The adopted threshold standards for recreation are statements of policy rather than numerical standards. The threshold standard includes two separate policy statements that are evaluated separately. One policy statement directs TRPA to preserve and enhance high quality recreational experiences and provide additional access to the shorezone and other areas for dispersed recreational uses. The second policy statement directs TRPA to “...establish and ensure a fair share of the total basin capacity for outdoor recreation is available to the general public” (TRPA 1982). The goal of the recreation element of the Regional Plan is to manage recreation consistent with the guidance provided in the recreation threshold policy statements to “ensure equilibrium between the region’s natural endowment and its manmade environment” (Public Law 96-551).

The 2011 Threshold Evaluation Report determined that the adopted policy statements for recreation had been implemented. For this threshold evaluation, the evaluation criteria were again compared against the best available information to assess the status of the policy statements. The best available information includes reporting provided through the Environmental Improvement Program on recreation facility development and land acquisition, as well as a series of recreation user satisfaction surveys conducted by recreation providers throughout the Region. Limited information is available on the quality of recreation user experiences, and the available information is not comparable to the data evaluated in previous threshold evaluations. The lack of comparable data on the quality of recreation user experiences limits the confidence in the threshold determination. However, the best available information indicates that TRPA and other agencies are implementing actions that are effective at satisfying the intent of the adopted recreation policy statements and the adopted recreation threshold standards have been implemented.

Table 11-1: Summary of status and trend of recreation indicator reporting categories from the 2011 and 2015 Threshold Evaluation Reports.

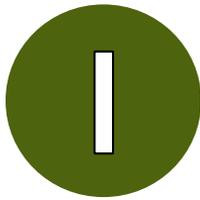
Standard	2011	2015
Quality of Recreation Experience & Access to Recreational Opportunities		
Fair Share Distribution of Recreation Capacity		

Table 11-2. Key to the reporting icon used to characterize the implementation status of management standards and policy statements.

Status Category	Description	Reporting Icon
Implemented	The management standard or policy statement has been integrated into the Regional Plan and is consistently applied to a project design or as a condition of project approval as a result of project review process. Examples of programs or actions can be identified to support the management standard's implementation. Adopted programs or actions support all aspects of the management standard or policy statement's implementation, or address all major threats to implementation.	
Partially Implemented	The management standard or policy statement has been integrated into the Regional Plan, but is not consistently applied during the project review process. No more than two examples of programs or actions can be identified to support the management standard's implementation and/or adopted programs or actions support some aspects of the management standard or policy statement's implementation, or address some major threats to implementation.	
Not Implemented	The management standard or policy statement has not been integrated into the Regional Plan and is not applied during the project review process. No examples of programs or actions can be identified to support implementation.	

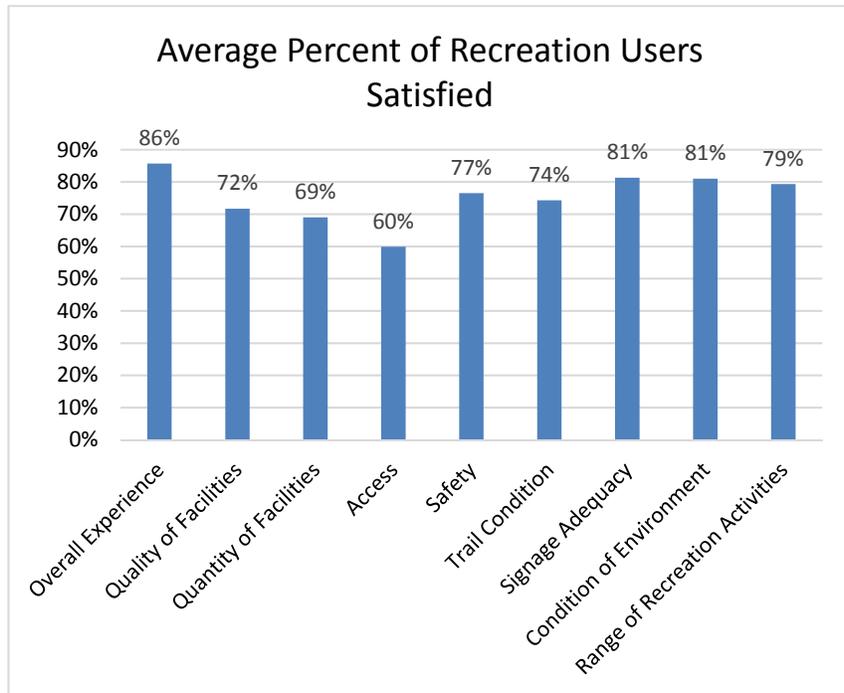
Recreation: Quality of Recreation Experience and Access to Recreational Opportunities

Status



QUALITY OF RECREATION EXPERIENCE & ACCESS TO RECREATIONAL OPPORTUNITIES

Status: **Implemented**



The average percent of recreation users that reported being satisfied or very satisfied with various components of the recreational experience in the Tahoe Region. Data are aggregated from multiple recreation user surveys collected in different portions of the Region since 2011 (see Appendix H of this Report).

Data Evaluation and Interpretation

BACKGROUND

Relevance – The recreation element of the Regional Plan provides for the development, utilization, and management of the recreational resources of the Region. The recreation element contains goals and policies that are intended “to achieve the intent of the thresholds over the life of the Plan by ensuring that recreational opportunities keep pace with public demand, that recreational facilities remain high on the development priority list, and that the quality of the outdoor recreational experience will be maintained.” (TRPA 2012e)

TRPA Threshold Category – Recreation

TRPA Threshold Indicator Reporting Category – Quality of recreation experience and access to recreational opportunities.

Adopted Standards – 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 Board shall consider provisions for additional access, where lawful and feasible, to the shorezone and high-quality undeveloped areas for low density recreational uses.

Type of Standard – Policy statement

Indicator (Unit of Measure) – The policy statement is assessed with three evaluation criteria. The first criterion evaluates whether TRPA has taken actions to implement the policy statement, and the second and third criteria evaluate whether there is evidence to suggest these actions are achieving the intent of the policy statement. The criteria include:

1. Determining whether TRPA and partner agencies have sufficiently adopted policies, ordinances, and programs in support of the policy statement.
2. Evaluating recreation user surveys to determine user satisfaction.
3. Reviewing public land acquisitions and the development of public access amenities.

Human & Environmental Drivers – Human and environmental drivers of the quality of recreation experiences include the variety of recreational activities available, the condition of the natural environment and developed recreation facilities, the density of visitors using recreation sites, and the ease of accessing recreation sites.

MONITORING AND ANALYSIS

Monitoring Partners – Tahoe Regional Planning Agency, City of South Lake Tahoe, El Dorado County, Tahoe City Public Utility District, Lake Tahoe Visitors Authority, and North Lake Tahoe Resort Association.

Monitoring Approach – The quality of recreation experiences has been assessed through recreation user surveys conducted by recreation providers and organizations in the Region since the 2011 Threshold Evaluation Report was prepared. These surveys measure the overall satisfaction with recreation experiences. The surveys also measure satisfaction with specific components of the recreation experience, such as the condition of recreation facilities. These recreation surveys represent the best available information and they primarily apply to developed recreation resources on the south and north shores. As such, the recreation user surveys are helpful indicators focused on multiple user groups, rather than a comprehensive measure of user satisfaction with all recreation amenities in the basin. The surveys evaluated here were conducted by the City of South Lake Tahoe, El Dorado County, Tahoe City Public Utility District, Lake Tahoe Visitors Authority, and North Lake Tahoe Resort Association.

The 2011 Threshold Evaluation Report relied on recreation user surveys completed by the U.S. Forest Service on National Forest lands in the Region. Comparable U.S. Forest Service surveys are not yet available. The most recent data collected in 2015 is being analyzed. The 2016 U.S. Forest Service survey outcomes will be published as soon as available but cannot be made a part of this report. TRPA's four-year threshold assessment reporting cycle no longer coincides with the U.S. Forest Service's five-year recreation user survey cycle. Therefore, this evaluation relies on recreation user surveys conducted by various other recreation providers and organizations in the Region since the 2011 Threshold Evaluation Report was prepared. The available surveys were conducted for different purposes, do not address the full range of recreation opportunities in the Region, and are not comparable to the surveys used in previous evaluations. While these surveys are the best available information on user satisfaction, there is limited confidence in their ability to accurately or reliably reflect regional recreation satisfaction.

The Lake Tahoe Visitors Authority surveyed winter visitors on the South Shore late in 2011 (SMG 2011). Visitors to the North Shore were surveyed during summer 2014 as part of a summer visitor research study

for the North Lake Tahoe Resort Association (NLTRA 2014). To support the development of the South Lake Tahoe Parks, Trails and Recreation Master Plan, the City of South Lake Tahoe and El Dorado County used online and mail-in surveys in 2013 (MIG 2014). The Tahoe City Public Utility District (TCPUD) surveys people on its network of bike trails on the North Shore and West Shore.

Analytic Approach – Responses to recreation user surveys by various recreation providers are aggregated to provide an estimate of regional recreation user satisfaction. Responses to different surveys are organized into categories of similar questions. Then, responses to questions in each category are averaged.

INDICATOR STATE

Status – Implemented. The threshold standard is implemented. Surveys show that 85.7 percent of recreational users are satisfied with their recreational experience, which is higher than overall user satisfaction rates found in other communities and national forests. As described under “Programs and Actions Implemented to Improve Conditions,” below, a review of the Regional Plan and programs found that they support implementation of the policy statement. The percentage of total land area held in public ownership and managed for public access has continued to increase in the Region, and currently approximately 90 percent of the region is public land (TRPA 2015b). The amount of public land available for low-density recreational use, and the number of amenities that provide access to that land, has also increased.

- Lake Tahoe Visitors Authority South Shore Intercept Survey (Winter 2011): A survey of winter visitors to the South Shore late in 2011 (SMG 2011) found that 97 percent of respondents were somewhat satisfied or very satisfied with their recreational experience at the South Shore. Overall, 79 percent of the respondents felt the South Shore had improved as a place to vacation with 70 percent of respondents stating the South Shore has the kind of outdoor recreation activities they like. This indicates a significant majority of the respondents are satisfied with the recreational experience on the South Shore.
- North Lake Tahoe Resort Association Visitor Research Summary (Summer 2014): Visitors to the North Shore were surveyed during summer 2014 as part of a research study for the North Lake Tahoe Resort Association (NLTRA 2014). The survey found that 66 percent of respondents were satisfied with the variety of activities and attractions on the North Shore.
- South Lake Tahoe Parks, Trails and Recreation Master Plan (November 2014): To support the development of the South Lake Tahoe Parks, Trails and Recreation Master Plan which primarily looked at developed parks and amenities available to visitors in the most urbanized parts of the south shore, the City of South Lake Tahoe and El Dorado County used online and mail-in surveys in 2013 (MIG 2014). When compared to benchmark results from a group of other communities, the master plan survey responses indicated similar or much higher satisfaction with factors such as the quality of overall natural environment, number of paths and walking/biking trails, amount of preserved natural areas and open space, and ease of bicycle travel. However, the master plan survey responses indicated a much lower satisfaction with the number of developed parks and recreation facilities, ease of walking, and overall quality of park and recreation services when compared to other benchmark results.
- Tahoe City Public Utility District Bike Trail Annual Surveys (2011, 2014, 2015): The Tahoe City Public Utility District (TCPUD) surveys people on their network of bike trails on the North Shore and West Shore. Survey responses from trail users in 2011, 2014, and 2015 indicate that 90 percent of respondents were satisfied with their overall experience recreating on TCPUD trails (TCPUD 2011, 2014, 2015). surveys. Other factors relevant to the threshold standard are the percent of recreation users that were satisfied or very satisfied with cleanliness and quality (96.7 percent) and availability and access (94.0 percent).

IMPLEMENTATION AND EFFECTIVENESS

Programs and Actions Implemented to Improve Conditions -Goals and policies are implemented primarily through application of the TRPA Code of Ordinances in the review of proposed projects, and through capital investment in new or restored recreation facilities and amenities as a subprogram of 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 or limit access to recreational areas (TRPA 2015c). Projects that would have a significant negative effect related to these topics are required to mitigate the impact, and can only be approved if they would not cause this threshold standard to be degraded. The recreation subprogram of the EIP facilitates implementation of projects that 1) improve lake access, 2) develop a comprehensive trail system, 3) improve recreational facilities, and 4) improve educational programs and interpretive facilities.

An update to the Regional Plan was approved in December 2012. In addition to minor organizational and clarifying edits to the recreation element of the Goals and Policies, the 2012 amendments to the land use and conservation elements of the Goals and Policies, and revisions to the TRPA Code of Ordinances, directly support implementation of the recreation threshold policy statements. These amendments include revisions that encourage the creation of additional non-motorized trails (TRPA 2012c), which is expected to accelerate the implementation of the comprehensive recreational trail system plan encompassed within the Regional Plan. The 2012 Regional Plan update also created an area plan framework that promotes community-level planning and includes requirements to connect developed areas to the regional bicycle and pedestrian trail network (TRPA 2012d) that will increase access to recreation areas.

- **Public Land Acquisition and Development of Access Amenities:** The threshold standard addresses the provision of additional public access to the lake and other natural areas for low density outdoor recreation. The evaluation criterion for this part of the policy statement involves 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. Public agencies, including the California Tahoe Conservancy, Nevada Division of State Lands, and U.S. Forest Service, have land acquisition programs to purchase suitable land and make it available to the public for dispersed recreation. Between 1996 and 2009, these agencies purchased over 3,000 acres of land (TRPA 2009). In 1983, less than 70 percent of the region was in public ownership (TRPA 1982). Today, approximately 90 percent of the region is public land (TRPA 2015b). Since the 2011 Threshold Evaluation Report, the California Tahoe Conservancy has acquired over 28 acres on 13 parcels throughout the California portion of the Region (Prior, pers. comm. 2015), and the Nevada Division of State Lands has acquired 0.31 acres on two parcels in the Region (Stewart, pers. comm. 2015). Over the past several years, the rate of public land acquisition has slowed, but acquisitions are still occurring. Given increased land availability for low-density recreation and the high proportion of the Region that is already in public ownership, the decrease in the rate of public land acquisitions is largely a result of fewer suitable private parcels available for acquisition.

Effectiveness of Programs and Actions – The policy statement specifically highlights the need to provide additional public access to the shoreline of Lake Tahoe. To that end, the acquisition programs have acquired or enhanced 2,770 linear feet of shoreline since 1996 to provide public access to the lake (TRPA 2015a). Currently, approximately 169,730 linear feet or almost 43 percent of the shoreline is in public ownership (TRPA 2015b). Acquisitions since the 2011 Threshold Evaluation Report include the California Tahoe Conservancy acquisition the Alta Mira property in the City of South Lake Tahoe, which made an additional 191 linear feet of shoreline available for public access. Other recent shoreline access improvements include a new management structure and expanded outreach program for the Lake Tahoe Water Trail, which promotes paddle trips around the 72-mile shoreline of Lake Tahoe (Lake Tahoe Water Trail 2015), and completion of a parking lot for vehicles and boat trailers for visitors to the Tahoe Vista Recreation Area.

Public agencies and non-profit organizations have been actively increasing the number and quality of access amenities such as trails and trailheads, with over 19.5 miles of trail developed or improved in 2012

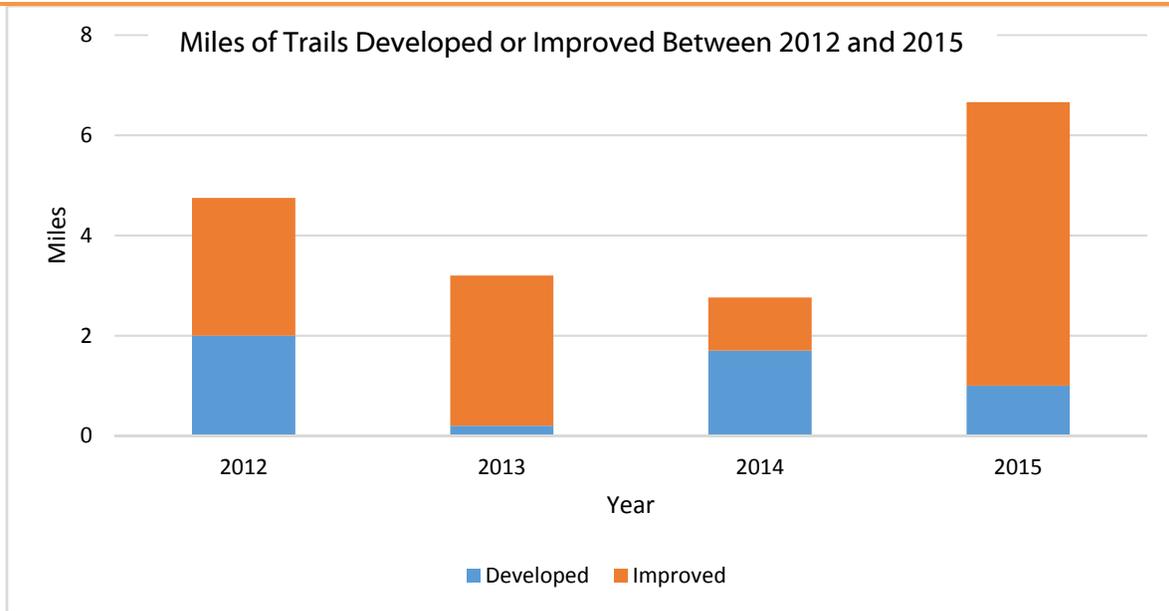


Figure 1. Miles of Trails Developed or Improved Between 2012 and 2015. Source: Lake Tahoe EIP 2016
Note: Trails are considered improved when an action is taken to enhance an existing trail for the benefit of outdoor recreation. Actions to improve trails include constructing bridges, improving stormwater drainage, and trail grooming. Adding new amenities, like wayfinding signage, kiosks, and interpretive displays, also qualifies as an improvement action. Some trail maintenance and improvement work was not reported as a part of annual reporting for the Environmental Improvement Program reporting.

through 2015 (Figure 1). While substantial trail improvements have been documented, it should be noted that the majority of recent trail projects consisted of trail improvements rather than the development of new trails. While trail improvement projects provide public benefits, they often do not provide new recreational or access opportunities, as would occur with the development of a new trail.

Table 1 includes a summary of bicycle and pedestrian facilities that provide both recreational and transportation benefits. As of 2015, the Region has approximately 120 miles of bicycle and pedestrian facilities (i.e., class 1 bicycle trails, and roadways with bicycle lanes or sidewalks), which are in addition to unpaved mountain biking, equestrian, and hiking trails. These bicycle and pedestrian facilities are especially important because they can reduce private automobile use and associated pollution, while providing direct recreational opportunities. Bike and pedestrian facilities that provide access to recreation sites directly address concerns about parking, access, and trail connectivity, which have been a consistent concern expressed in recreation user surveys (TMPO 2015; TRTA 2015; MIG 2014; USFS 2010a, 2010b, 2005).

Table 1: Miles of Existing Bicycle and Pedestrian Facilities (reported miles are rounded to the nearest whole number)

Jurisdiction	Class I Path	Class II Bike Lane ¹	Class III Bike Route	Sidewalk	TOTAL
El Dorado County	11	6 ²	0	0	17
City of South Lake Tahoe	8	15	8	12	43
Placer County	20	11	2	4	36
Douglas County	5	1	0	3	9
Carson City	0	0	0	0	0
Washoe County	7 ²	4 ²	0	4	15
TOTAL³	51	37	9	23	120

Source: TRPA 2012a; Beryl, pers. comm., 2015

¹ Miles of roadway with bike lanes. In many cases, this figure could be doubled since bicycle lanes are on both sides of the roadway.

² Due to corrections in mapping inaccuracies, the totals for these facilities appear lower than was reported for 2010.

³ Miles per jurisdiction do not add to total miles due to rounding.

Shared-use (class I) trails constructed since the 2011 Threshold Evaluation Report include a portion of the South Tahoe Greenway from Herbert Avenue to the edge of Bijou Meadow at Glenwood Way, and completion of over three miles of the Sawmill Bike Trail and Lake Tahoe Boulevard Bike Trail that connect South Tahoe High School with U.S. Highway 50 in Meyers. The South Demonstration Project shared-use path has been largely constructed, with completion in 2015 of the portion between 4H Road and Round Hill Pines Beach near Stateline, Nevada. New shared-use trails constructed in the North Shore since 2011 include the National Avenue bike path in Tahoe Vista and the Lakeside Trail (Phases 5, 6, and 7) in Tahoe City.

Examples of other new or improved access amenities added since 2011 include approximately 17 miles of trail constructed by the Tahoe Rim Trail Association and U.S. Forest Service, including the Daggett Reroute Project which added the Van Sickle Connector Trail and the Daggett North East Loop and made improvements to over 68 miles of trails (Fessler pers. comm. 2015). The U.S. Forest Service rerouted or reconstructed an additional 26 miles of trails, upgraded 34 miles of trails and performed maintenance improvements on 71 miles of trails since 2011 (Quinn pers. Comm. 2015). Much of the work completed by the U.S. Forest Service was in coordination with the Tahoe Area Mountain Biking Association (Joell pers. comm. 2015). Table 2 provides a summary of major trail construction or enhancement projects completed since the 2011 Threshold Evaluation Report.

Table 2: Recent Trail Construction Projects

Name	Year Completed	Miles of New Trail	General Location
Sawmill 2B Bike Path and Erosion Control Project	2015	1.2	El Dorado County
South Tahoe Greenway Shared-Use Trail - Phase 1a	2015	0.42	South Lake Tahoe
Nevada Stateline to Stateline Bikeway - Laura Drive Kahle Drive	2015	0.33	Stateline, Douglas County
Lake Tahoe Boulevard Bike Trail	2014	1.7	El Dorado County
Harrison Avenue Streetscape Improvement & Bike Trail Project	2014	0.8	City of South Lake Tahoe
Snow Creek Wetlands Restoration Project	2014	0.16	Tahoe Vista
Sawmill 2A Bike Path and Erosion Control Project	2013	0.7	El Dorado County
Nevada Stateline to Stateline Bikeway - Laura Drive to Round Hill Pines Beach (Phases 1B, 1C, 1D)	2013	2.4	Stateline
Tahoe City Lakeside Trail	2012	1.52	Tahoe City
Tahoe City Transit Center	2012	1.1	Tahoe City
Van Sickle Bi-State Park: Phase 1A	2012	0.25	Stateline
Tahoe Rim Trail Daggett Reroute Project	2012	16.33	Kingsbury
Source: Lake Tahoe EIP 2016, Tahoe Rim Trail Association, 2015			

RECOMMENDATIONS

Analytic Approach – Once the recommended changes to the monitoring approach are implemented, the analytical approach should be modified to include an evaluation of changes in user satisfaction and the rate of trail facility development over time.

Monitoring Approach –Monitoring and evaluation has relied on existing recreation user survey data that was collected using a variety of approaches focused on different portions of the Region. Regional recreation policy or improvement programs could be guided more effectively with a more coherent and consistent planned monitoring approach. An improved monitoring approach could consider:

1. Coordination with the U.S. Forest Service on the timing cycle of user surveys so that National Visitor Use Monitoring data can be regularly reported in the threshold evaluation.
2. Collaboration with local jurisdictions and interested organizations to perform a consistent and repeatable survey of recreation users at non-Forest Service sites.
3. Coordinating and combining the scenic threshold monitoring system’s regular assessment of recreation sites with recreation quality data collection and surveys for efficiency.
4. Closely tracking public land acquisitions and recreation facility projects to allow for an evaluation of trends over time.

Modification of the Threshold Standard or Indicator – Objective determination of “attainment” status for standards without a specific target is a recurrent challenge both in the Region and in the larger field of monitoring and evaluation (M&E). In addition, the standard contains a number of terms that are ambiguous and subject to interpretation. These include: a) “high quality,” and b) “low density”. Their interpretation has varied in past threshold evaluations. The standard should be assessed against best practice for the establishment of standards and indicators for M&E, and amended as necessary to improve the evaluability of the standard and the information it provides for management.

Attain or Maintain Threshold – The policy statement specifically calls for providing public access to the shoreline. Approximately 90 percent of the Region is public land, but less than 43 percent of the shoreline is in public ownership. Public acquisition of shoreline areas has not occurred at the same pace as acquisitions of other lands. An increased focus on shoreline acquisitions or other methods of providing public access to the shoreline would support the recreation threshold.

User surveys have consistently identified access to recreation sites, trail connectivity, and the availability of parking at recreation sites as major issues (TMPO 2015; TRTA 2015; MIG 2014; USFS 2010a, 2010b, 2005). Based on the surveys, difficulty in accessing recreation sites, particularly during the heaviest use periods, appears to be one of the primary factors reducing the quality of recreational experiences. Improving recreation site access is one of the greatest opportunities to improve the quality of the Region’s recreational experiences. Specific strategies to improve access could include:

1. Increased connectivity of non-motorized trails to recreation sites.
2. Increased transit service to recreation sites.
3. Increased outdoor recreation opportunities within walking distance of tourist accommodation and residential areas.
4. Targeted parking expansions or increased trail or transit connections between off-site parking areas and recreation sites.
5. Information targeted at better distribution of visitors across a wider range of available recreation sites.

Adaptation to climate change may require examination of how the public accesses Lake Tahoe and how to maintain and improve that access within environmental constraints.

Recreation: Fair Share Distribution of Recreation Capacity

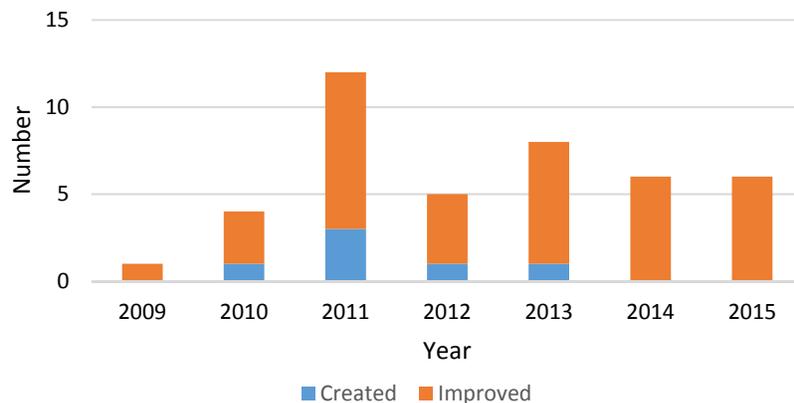
Status



FAIR SHARE DISTRIBUTION OF RECREATION CAPACITY

Status: **Implemented**

Recreation Facilities Improved or Created



The total number of public outdoor recreation facilities created and improved per year from 2009 through 2015. Facilities are considered improved when an action is taken to enhance an existing facility for the benefit of public recreational use. Improvements do not include routine maintenance. A facility is considered improved with the inclusion or improvement of one or more new amenities that are conducive to the comfort, convenience, or enjoyment of facilities. Amenities include, but are not limited to fences, lighting systems, drinking water fountains, picnic tables, benches, refuse containers, bike racks, trellises, educational displays, playgrounds, parking lots with fewer than 8 spaces and restrooms under 500 square feet in floor area. Source: Lake Tahoe EIP 2016.

Data Evaluation and Interpretation

BACKGROUND

Relevance – The Tahoe Region offers a diverse array of recreation opportunities to visitors and residents. The recreation element of the Regional Plan provides for the development, utilization, and management of the recreational resources of the Region. The recreation element contains goals and policies intended “to achieve the intent of the thresholds over the life of the Plan by ensuring that recreational opportunities keep pace with public demand, that recreational facilities remain high on the development priority list, and that the quality of the outdoor recreational experience will be maintained.” (TRPA 2012e)

TRPA Threshold Category – Recreation

TRPA Threshold Indicator Reporting Category – Fair share distribution of recreation capacity

Adopted Standards – 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

Indicator (Unit of Measure) – The status of this threshold standard is evaluated by reviewing four evaluation criteria: 1) the degree to which the TRPA Regional Plan and TRPA programs support implementation of the policy statement, 2) 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, 3) recreation facility development for projects that do not require PAOT assignments, and 4) public acquisition of lands that support recreation purposes.

Human & Environmental Drivers – The main drivers affecting the fair share distribution of recreation capacity are land use and the location and amount of private development relative to recreation capacity.

MONITORING AND ANALYSIS

Monitoring Partners – Tahoe Regional Planning Agency

Monitoring Approach – Recreation facility development and public land acquisitions are tracked on an ongoing basis using permit software and EIP accomplishment reporting provided by partner agencies.

Analytic Approach – Qualitative evaluation of the four evaluation criteria identified as indicators.

INDICATOR STATE

Status – Implemented. The threshold standard has been implemented. As described below, a review of the TRPA Regional Plan and programs found that they support implementation of the policy statement. 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 indicate the increases in recreation capacity for eligible projects have not occurred at the same rate as other forms of development. However, many types of recreation facilities do not require PAOT allocations. When the number of recreation projects requiring a PAOT is combined with recreation projects not requiring a PAOT, the total increase in recreational capacity is roughly proportional to the increase in other types of development. The Region has also experienced a slight increase in the amount of public land available to support recreational purposes since 2011. Taken together, these evaluation criteria indicate that a fair share of the Region’s capacity is available for public recreation.

IMPLEMENTATION AND EFFECTIVENESS

Programs and Actions Implemented to Improve Conditions - The Goals and Policies support implementation of the recreation policy statement. The Goals and Policies are applied primarily through application of the Code of Ordinances in the review of proposed projects and through capital investment in new or restored recreation facilities and amenities as a subprogram 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, create additional demand for recreational facilities, or create additional recreation capacity (TRPA 2015c). Projects that would have a significant negative effect related to these topics are required to mitigate the impact and can only be approved if they would not cause this threshold standard to be degraded.

The recreation subprogram of the EIP facilitates implementation of projects that 1) improve lake access, 2) develop a comprehensive trail system, 3) improve recreational facilities, and 4) improve educational programs and interpretive facilities (TRPA 2010). Application of the Code of Ordinances and implementation of projects under the EIP recreation program support maintaining a fair share of available resource capacity for public recreation.

TRPA approved an update to the Regional Plan in December 2012. In addition to minor organizational and clarifying edits to the recreation element of the Goals and Policies, the 2012 amendments to the land use and conservation elements of the Goals and Policies and revisions to the Code of Ordinances directly

support implementation of the recreation threshold policy statements. These amendments established a process for local jurisdictions and TRPA to cooperatively plan for improved recreation opportunities as part of the comprehensive planning process (TRPA 2012d).

California State Bill 630 (SB630) provides funding to promote and enhance public access to the Lake. Under SB630, the California Tahoe Conservancy receives funding for “Near-shore aquatic invasive species projects and projects to improve public access to sovereign land in Lake Tahoe, including planning and site improvement or reconstruction projects on public land, and land acquisitions from willing sellers.”

Effectiveness of Programs and Actions – To achieve a fair share distribution of recreation opportunities throughout the Region, in 1987 TRPA established and implemented a “persons at one time” (PAOT) recreation capacity allocation system. The PAOT measure is an estimate of the number of individuals that a recreation facility or area can support at any given time. The PAOT allocations are used as both a target for desired recreation capacity, and a maximum limit to the recreational use that can be supported in the Region. A specific number of PAOT allocations are reserved for summer day use, winter day use, and summer overnight recreation activities. When a qualifying project creates additional recreation capacity, it is assigned PAOT allocations corresponding to the type and level of increased capacity. However, not all facilities that increase recreational capacity are required to use the PAOT allocation system.

The number of PAOT allocations assigned to projects within each category is shown in Table 1. Currently, approximately 29 percent of available PAOT allocations have been assigned. The rate of PAOT utilization has slowed when compared to the rate experienced during the previous threshold evaluation periods. Only 530 PAOT allocations have been assigned since the 2011 Threshold Evaluation Report, compared to 1,440 PAOT allocations assigned from 2006 to 2011, 1,615 from 2001 to 2006, 2,618 PAOT allocations from 1996 to 2001, 280 PAOT allocations assigned from 1991 to 1996, and 900 PAOT allocations assigned from 1986 to 1991 (TRPA 1991, 1996, 2012a; see Figure 1). The percent of PAOT allocations utilized since the development of the Regional Plan in 1987 (29 percent) is less than the percent of residential units (62 percent), tourist accommodation units (45 percent), and the percent of commercial floor area (54 percent) utilized. Allocations of summer day use, and especially, summer overnight PAOT allocations are significantly lower than allocations of other development commodities. However, as described below, a significant number of recreation facilities do not require PAOT allocations. When the number of recreation projects requiring PAOT allocations is combined with recreation projects not requiring PAOT allocations, the total increase in recreational development is roughly proportional to the increase in other types of development. Maps of recreation facilities, including both those that require PAOT allocations and those that do not, are included at the end of this chapter (Figures 11.1 to 11.4).

Table 1: Cumulative Accounting of PAOT Allocations

PAOT Categories	Regional Plan Allocations	Assigned as of 2011 Evaluation	Assigned 2011 to 2015	PAOTs Remaining	Percent of All PAOTs Assigned
Summer Day Use*	6,761*	1,192	530	5,039	25.5%
Winter Day Use**	12,400	5,267	0	7,133	42.5%
Summer Overnight***	6,114	394	0	5,720	6.4%
Total	25,275	6,853	530	17,892	29.2%

* Per TRPA Code Subsection 50.9.3.C.2, 2,000 PAOTs are reserved 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. PAOTs 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.

**For downhill ski areas pursuant to a master plan pursuant to TRPA Code Subsection 50.9.3.c.3.

***These PAOTs apply to certain developed campgrounds, group facilities, and RV parks.

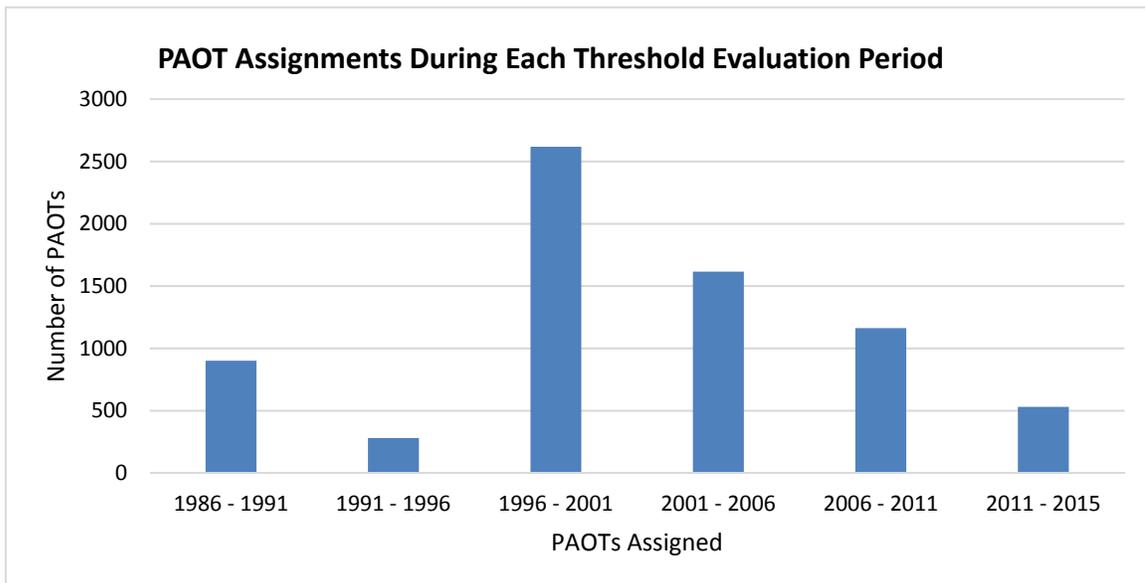


Figure 1: PAOT assignments during each threshold evaluation period. Source: TRPA 1991, 1996, 2012a
 Note: After 2011, the evaluation period was reduced from five years to four years between each threshold evaluation.

- Facility Development for Projects Not Requiring PAOTs:** Not all facilities that increase recreational capacity are reflected under the PAOT allocation system (TRPA 2012f). 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 PAOT allocations have been developed or enhanced since the last threshold evaluation. As shown on page 11-11, 50

recreation facilities have been created or improved since 2012, with the majority of projects improving existing facilities rather than creating new facilities.

Table 2 lists major recreation projects that have created new facilities or improved existing facilities since the 2011 Threshold Evaluation Report. Maps of existing recreation facilities in the Tahoe Region, including both facilities that do and do not require PAOT allocations, are included as Figures 11.3 – 11.6.

Table 2: Major recreation projects created or improved since the 2011 Threshold Evaluation Report

Name	Year Completed	General Location
Bijou Bike Park	2015	South Lake Tahoe
Sand Harbor Accessibility Improvement Project	2015	Sand Harbor
Nevada Beach Day Use Area and Campground BMP Retrofit Project	2015	Stateline
Lake Forest Boat Ramp Rehabilitation	2015	Lake Forest
Eagle Point Campground Rehabilitation	2014	Emerald Bay
Heavenly Flyer Zipline	2013	Stateline
Tahoe Vista Recreation Area Phase 2	2013	Tahoe Vista
Lakeview Commons Phase 2 - El Dorado Beach Improvements	2013	South Lake Tahoe
Heavenly Powderbowl Kids Adventure Zone	2013	Stateline
Sugar Pine Point State Park Ehrman Mansion Pier Repairs	2012	Sugar Pine Point
Source: Lake Tahoe EIP 2016		

- Public Acquisition of Lands Supporting Recreation:** Public agencies including the California Tahoe Conservancy, Nevada Division of State Lands, and U.S. Forest Service have acquisition programs that purchase land and make it publicly available for recreational use. When the standard was adopted, 69 percent of the land in the Region was publicly owned (TRPA 1991). Today, approximately 90 percent of lands in the Tahoe Region is publicly owned, the vast majority (85 percent) of which are open space and available for recreational use (TRPA 2015b). Recent acquisitions include the California Tahoe Conservancy’s acquisition of the Alta Mira property in South Lake Tahoe, and a property at the corner of Sawmill Road and US 50 in Eldorado County.

RECOMMENDATIONS

Analytic Approach – Information from the PAOT system has historically been used to evaluate the “fair share” standard, and this report, follows that convention. The application of the PAOT system to analyze distribution of recreation is problematic, because PAOTs provide an estimate of regional recreation capacity, but do not speak to the “fairness” of the distribution of the recreational opportunities. In addition, PAOT allocations currently serve as both a target for desired recreation capacity, and a maximum limit to the recreational use that can be supported in the Region. Achieving the maximum recreation capacity could result in a degree of crowding that could be greater than the desired for adequate user satisfaction. The PAOT system and analytical approach should be revised to allow for separate

consideration of the desired use levels and maximum recreation capacities.

Monitoring Approach – The significant limitations of the PAOT system have been noted in past threshold evaluation reports. The PAOT system does not apply to all facilities that provide recreation capacity, does not apply a standardized process for determining PAOT allocations for individual projects, and allows no accounting for reductions in capacity. It also includes capacity targets that were established decades ago and may not reflect current needs or conditions. For example, the Eagle Falls day-use/trailhead area receives in excess of 50,000 visitors a season, yet it is assigned 75 PAOT allocations. The PAOT system could be revised or replaced with a new approach that takes into account other criteria such as capacity, demand, supply, distribution, quality of experience, utilization, accessibility or other factors representing a sustainable recreation framework. A modified or replaced recreation capacity system could better inform recreation policy and project decisions, and it could build upon best practices used elsewhere, such as the Recreation Opportunity Spectrum, and Visitor Use Management approaches used by federal agencies. Specific improvements could include: 1) a recreation measure that accounts for all public recreation opportunities regardless of the entity managing the facility, 2) a measure that reflects current trends and changes in recreation visitation and use patterns, 3) a measure that reflects decreases as well as increases in recreation capacity, 4) a system that allows for separate evaluation of the maximum and desired recreation capacity, and/or 5) a revised assessment system that reduces uncertainty in the review of recreation projects.

Modification of the Threshold Standard or Indicator – Objective determination of “attainment” status for standards without a specific target is a recurrent challenge both in the Region and in the larger field of monitoring and evaluation (M&E). In addition, the standard contains a number of terms that are ambiguous and subject to interpretation. These include: a) “fair share,” b) “available,” and c) “general public.” Their interpretation has varied in past threshold evaluations. The standard should be assessed against best practice for the establishment of standards and indicators for M&E, and amended as necessary to improve the evaluability of the standard and the information it provides for management.

Attain or Maintain Threshold – No recommended changes.

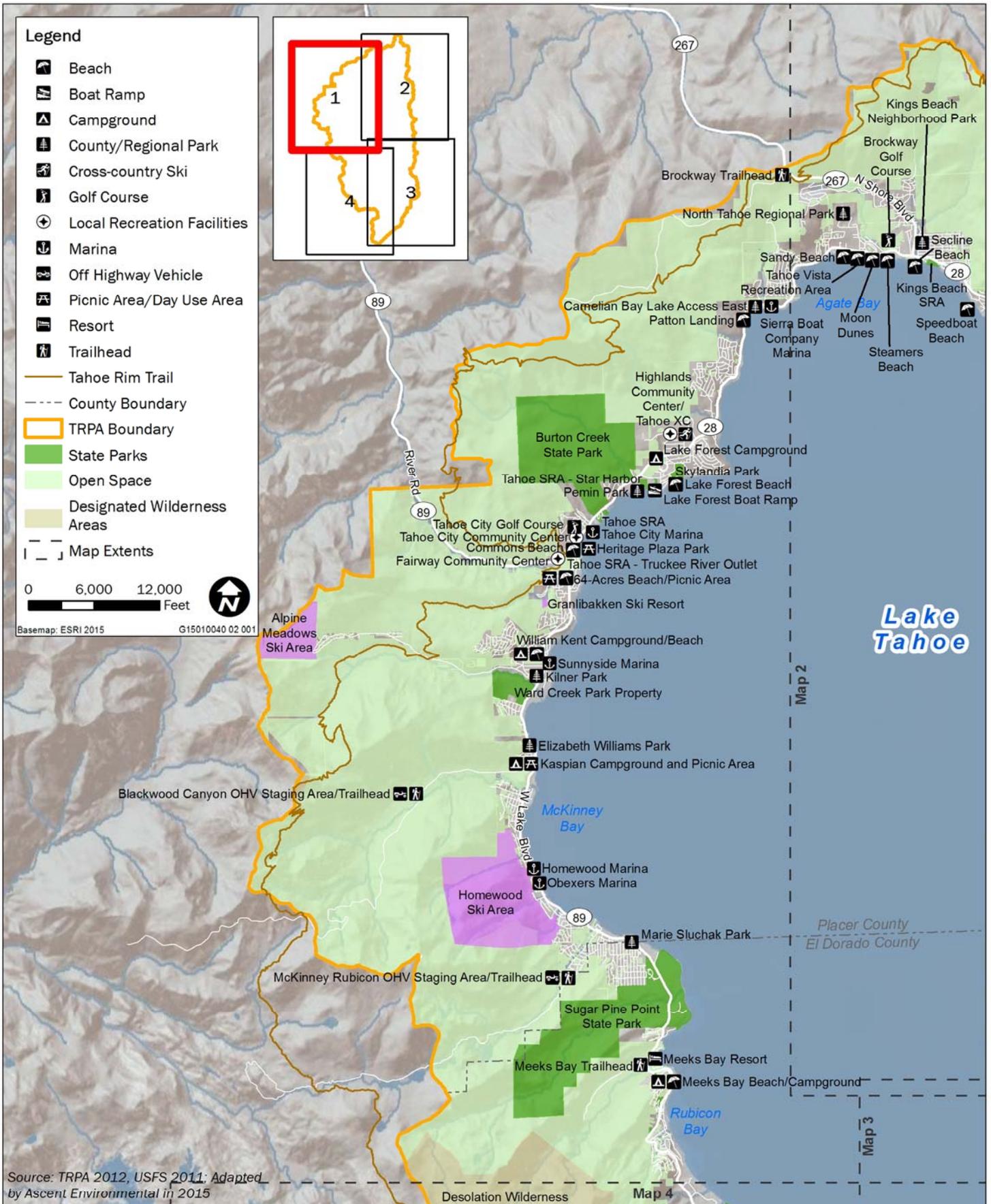


Figure 11.1 – Existing Recreation Facilities, Map 1

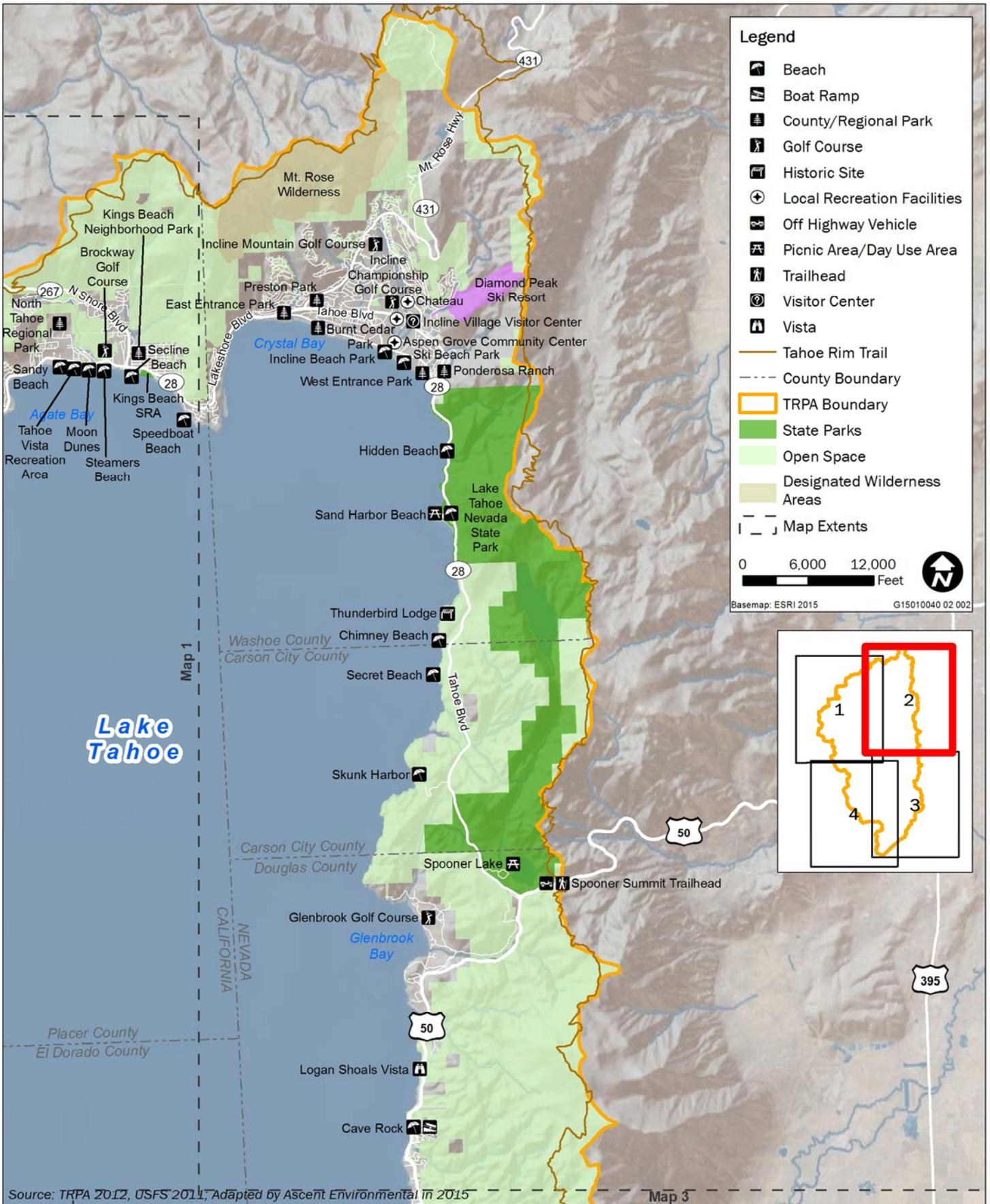


Figure 11.2 – Existing Recreation Facilities, Map 2

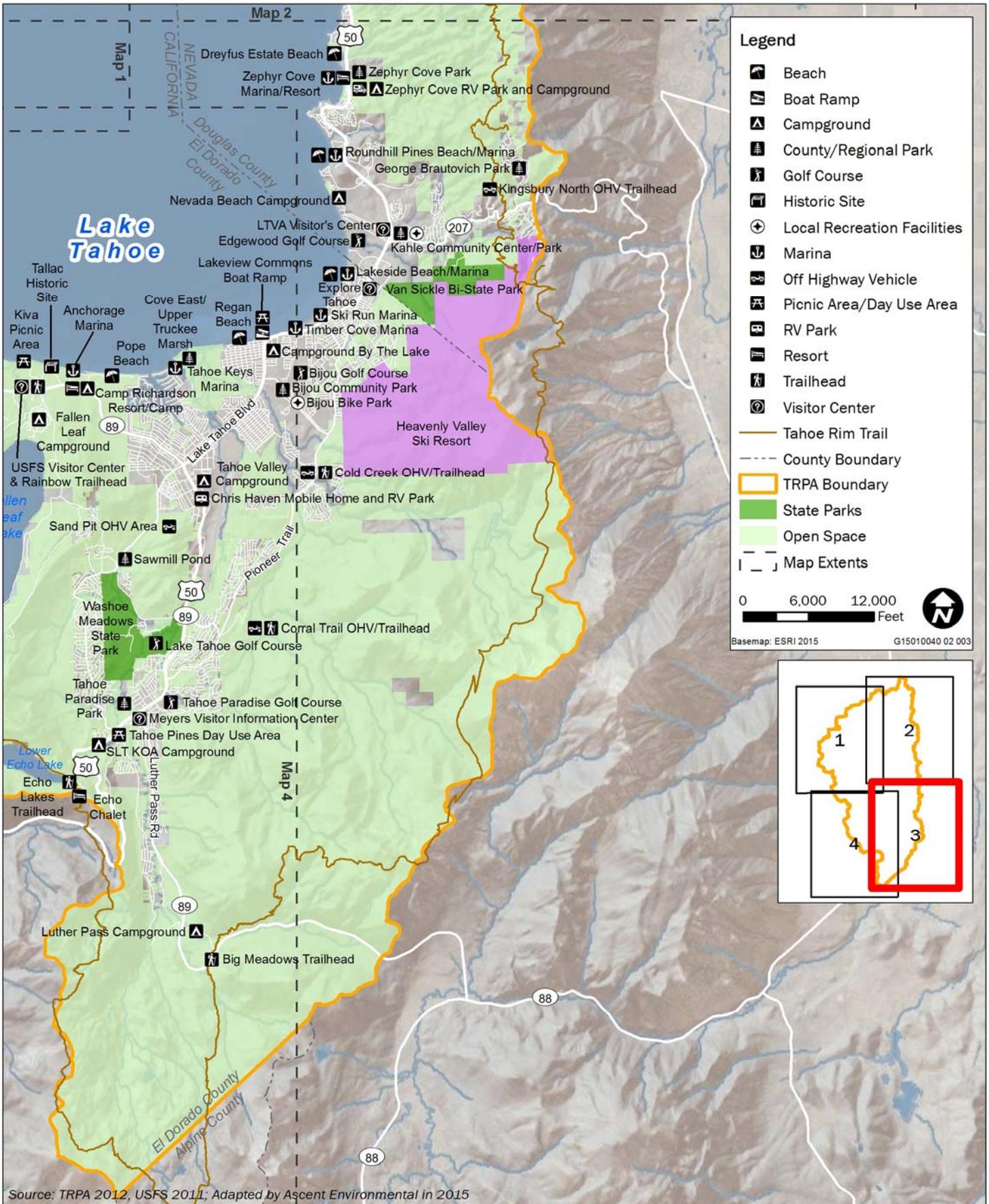


Figure 11.3 – Existing Recreation Facilities, Map 3

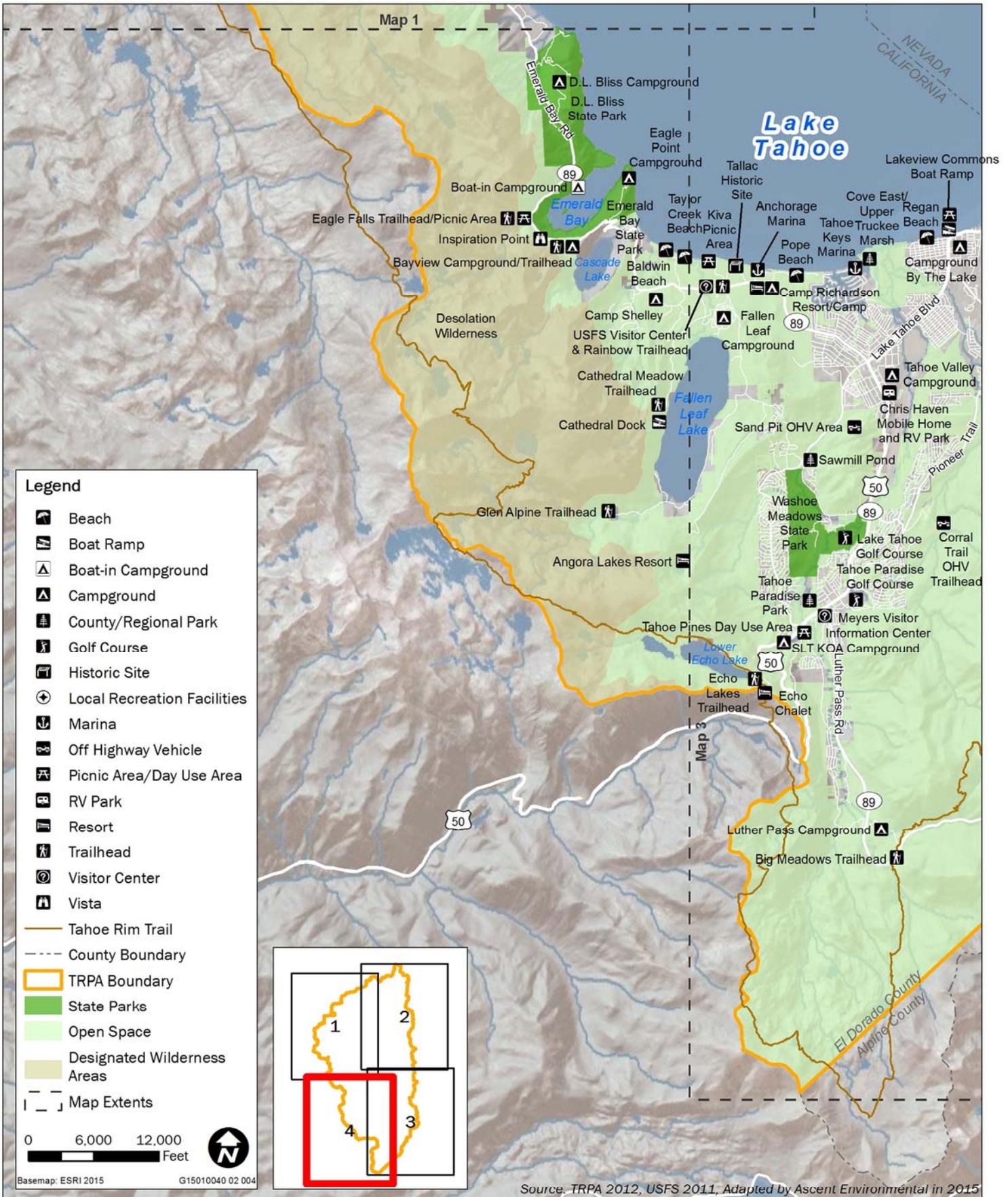


Figure 11.4 – Existing Recreation Facilities, Map 4

Chapter 11 Recreation References

- Beryl, Morgan. Associate Transportation Planner. Tahoe Regional Planning Agency, Stateline, NV. November 15, 2016—email to Jessica Mitchell of Ascent Environmental regarding updates on the amount of bicycle and pedestrian facilities in the Tahoe Basin since 2010.
- Fessler, Morgan. Director of Operations. Tahoe Rim Trail Association, Stateline, NV. November 19, 2015—email to Jessica Mitchell of Ascent Environmental regarding updates on the amount new trails and trail improvements TRTA has completed since 2011.
- Joell, Kevin. Trails Director. Tahoe Area Mountain Biking Association. November 16—email to Jessica Mitchell of Ascent Environmental regarding updates on the amount new trails and trail improvements TAMBA has helped complete since 2011.
- Lake Tahoe Water Trail. 2015. Lake Tahoe Water Trail – About. Available at <http://laketahoewatertrail.org/about/>. Accessed November 20, 2015.
- MIG, Inc. 2014. South Lake Tahoe Parks, Trails and Recreation Master Plan.
- NLTRA. North Lake Tahoe Resort Association. 2014. North Lake Tahoe Resort Association Visitor Research Summary, Summer 2014. Prepared by RRC Associates, Inc.
- Prior, Kevin. Chief Administrative Officer. California Tahoe Conservancy. November 18, 2015—email to Jessica Mitchell of Ascent Environmental regarding updates on the amount of land and parcels CTC has acquired since 2011.
- Quinn, Jacob. Trails Engineer. U.S. Forest Service, Lake Tahoe Basin Management Unit. November 30, 2015 – email to Jessica Mitchell of Ascent Environmental regarding U.S. Forest Service Trail accomplishments since the 2011 Threshold Evaluation.
- Stewart, Brenda. State Land Agent. Nevada Division of State Lands. November 23, 2015—email to Jessica Mitchell of Ascent Environmental regarding updates on the amount of land and parcels Nevada State Lands has acquired since 2011.
- SMG. Strategic Marketing Group. 2011. Lake Tahoe Visitors Authority South Shore Intercept Survey, Winter 2011.
- Survey Gizmo. 2012 (September). TCPUD Resident Trail Surveys.
- TCPUD. Tahoe City Public Utility District. 2015 (September). Tahoe City Public Utility District Bike Trail Annual Survey – Summary Report 2015.
- _____. 2014 (October). Tahoe City Public Utility District Bike Trail Survey Results.
- _____. 2011. Tahoe City Public Utility District Bike Trail Survey Results.
- TMPO. Tahoe Metropolitan Planning Organization. 2015. Draft Active Transportation Plan Community Outreach Report.
- TRPA. Tahoe Regional Planning Agency. 2015a. Lake Tahoe EIP Project Tracker database. Available <https://eip.laketahoeinfo.org/>. Accessed November 16, 2015.
- _____. 2012a. 2011 Threshold Evaluation Report.
- _____. 2012b. TRPA Goals and Policies, Land Use Element, pg. 2-14
- _____. 2012c. TRPA Code of Ordinances, Section 30.4.6.D.3
- _____. 2012d. TRPA Code of Ordinances, Chapter 13.
- _____. 2012e. TRPA Goals and Policies, Recreation Element, pg. 5-1
- _____. 2012f. TRPA Code of Ordinances, Section 50.9
- _____. 2015b. TRPA GIS parcel database.
- _____. 2015c. TRPA Initial Environmental Checklist, Questions 14, 18, and 19.
- _____. 2009. Taking the environmental improvement program to the next level.
- _____. 1996. 1996 Threshold Evaluation, Appendix A.
- _____. 1991. 1991 Threshold Evaluation, Chapter 7, Recreation.
- _____. 1982. Attachment C to TRPA Resolution 82-11, as amended. Environmental Threshold Carrying Capacities.

- TRT. Tahoe Rim Trail Association. 2015 (March). Connecting Tahoe Rim Trail Users to Transportation Alternatives Study. Prepared by LSC Transportation Consultants. Tahoe City, CA.
- USFS. U.S. Forest Service. 2010a. Visitor Use Report, Lake Tahoe Basin Management Unit, USDA Forest Service Region 5, National Visitor Use Monitoring Data Collected FY 2010. Available http://apps.fs.usda.gov/nfs/nrm/nvum/results/ReportCache/Rnd3_A05019_Master_Report.pdf.
- _____. 2010b. National Visitor Use Monitoring Results, USDA Forest Service, National Summary Report, Data Collected FY 2005 through FY 2009. Available http://www.fs.fed.us/recreation/programs/nvum/nvum_national_summary_fy2009.pdf.
- _____. 2005. Visitor Use Report, Lake Tahoe Basin Management Unit, USDA Forest Service Region 5, National Visitor Use Monitoring Data Collected FY 2005. Available http://apps.fs.usda.gov/nfs/nrm/nvum/results/ReportCache/Rnd2_A05019_Master_Report.pdf.