Chapter 7
RECREATION

7-1. INTRODUCTION

For more than 100 years, Lake Tahoe and the Region surrounding it have been recognized as one of the nation’s major scenic attractions. When the completion of the Central Pacific Railroad ended the freight wagon business, many innkeepers moved to the shoreline of Lake Tahoe. They could provide accommodations in boarding houses for seasonal workers and for vacationing families who were beginning to discover the pleasures of summer in the mountains. It was only a half-day’s ride from the hot dry hills of Nevada’s Virginia City to the Lake; and Californians, especially from San Francisco, were also beginning to consider Tahoe a summer vacation site. Additionally, many wealthy Easterners, who had discovered the natural wonders of the West, included Tahoe in their vacation plans (Strong, 1984).

Early accommodations for these visitors included travel around the Region by boat, often steamship, and boarding at small, exclusive lakeside resorts throughout the Region. By the 1870s, road transportation near the shore linked many small resort communities, although a road allowing a complete auto circuit around the lake was not completed until many years later. During the first half of this century, as transportation to the Region became more convenient and Americans enjoyed more leisure time, accommodations for less wealthy visitors began to develop.

Today, residents and visitors alike recognize the wide variety of outdoor recreational activities in the Tahoe Basin. Lake Tahoe is attractive to swimmers, boaters, water skiers, fishermen and sightseers. The value of the recreational experience associated with any of these and other uses depends on maintaining the quality of the Region’s natural environment.

The bi-state TRPA Compact recognized that the Tahoe Region’s economy is largely and historically based on its recreational resources; therefore, established preservation of recreational opportunities as one of the primary objectives of the Regional Plan (TRPA, 1971).

This chapter presents a description of the existing conditions with respect to recreation in the Shorezone area and identifies the potential environmental impacts on recreation that could result from each of the five alternatives. For the purpose of this recreation discussion, it should be noted that Tahoe’s recreationists and the various types of recreation in which they participate are not homogeneous. Many of these forms of recreation create conflicts between users. Most notable are conflicts between noisy and quiet forms of recreation, such as off-highway vehicle use and hiking, personal watercraft use and drift fishing, and jet boats and nature study along the shoreline. The potential for conflict may increase as more residents and visitors seek solitude at the same time as new forms of mechanized recreation are introduced, and more people become users of Tahoe’s recreation opportunities.
REGULATORY Considerations

Tahoe Regional Planning Agency

Thresholds
In many ways, TRPA’s Recreation threshold is different from the other environmental threshold carrying capacities. The recreation threshold does not set numerical standards but rather encourages acquisition of lands and development of facilities for additional recreation opportunities. The recreation thresholds are policy statements endorsed by the Governing Board and do not lend themselves to simple quantification or linkage to particular numerical measurements.

The first outdoor recreation threshold standard is a two-part policy statement to preserve and enhance high quality recreation and provides additional access to high quality lands for low-density recreation.

- The first part concerns the perceptual experience on the part of the recreationist. Since 1991, this has been measured through user satisfaction surveys.
- The second part of the threshold encourages providing additional physical access to the Shorezone and other undeveloped lands which, if they are not disturbed and have some level of intrinsic natural resource value, could be considered high quality. This part of the threshold can be measured through changes to the supply of lands available to the general public for recreation.

The second outdoor recreation threshold standard is intended to ensure that a fair share of the Region’s outdoor recreation capacity is available to the general public.

Based on information in the 1996 Threshold Evaluation, the threshold remains in attainment insofar as recreation projects can be developed within the existing resource capacities. Furthermore, an overwhelming majority of additional recreation facilities are available to the general public.

Environmental Improvement Program
The EIP is an integrated improvement program designed to accelerate achievement of environmental threshold carrying capacities (ETCC) established for the Lake Tahoe Region. It is designed to accomplish, maintain, or exceed multiple environmental goals through an integrated pro-active approach. It is also a partnership program by which TRPA fulfills its mission to “... Lead the cooperative effort to preserve, protect and enhance the unique natural and human environment of the Lake Tahoe Region.”

The EIP describes projects, programs, studies, and regulatory amendments. It also provides schedules and budgets for all items that need to be implemented to achieve environmental thresholds and the goals of the Regional Plan.

TRPA staff originally developed the EIP projects that implement the Outdoor Recreation thresholds following the 1996 Threshold Evaluation. The Evaluation contained a generalized list of additional recreation improvements and projects that would be necessary to attain the thresholds throughout the Region. The EIP’s recreation projects list originated from existing plans (e.g., adopted community plans and master plans) and from TRPA’s 5-Year List of Additional Recreation Facilities. As the Region’s recreation planning is incomplete in many respects, staff acknowledges the list needs additional refinement to meet the full intent of the EIP.
Goals and Policies
The Regional Plan includes a Recreation Element as part of the Goals and Policies. Two policies recognize the need for improved boat access to Lake Tahoe. Goal #2, Policy #3, of the Developed Recreation Subelement states, "Public Boat Launching Facilities shall be expanded, where appropriate and when consistent with environmental constraints." Secondly, Goal #2, Policy #4, of the same Subelement states, "Private marinas shall be encouraged to provide public boat launching facilities."

Within the Recreation Element of the Goals and Policies differing types of recreation categories are described based upon activity type and level of facility development. The three recreation categories of dispersed, developed, and urban are described below, particularly as they relate to Shorezone activities.

Dispersed Recreation
Dispersed forms of recreation require little or no developed facilities. The quality of the activity depends on preserving the attractiveness of the use areas and managing the resource base to be consistent with its environmental capabilities. Dispersed recreation includes activities such as: hiking, jogging, primitive camping, nature study, fishing, cross country skiing, rafting, kayaking, and swimming. The diversity in landscape forms within the Shorezone of Lake Tahoe and other lakes in the Region lend themselves to a wide variety of opportunities for dispersed recreation. In order to encourage these activities, a need exists to acquire and maintain Shorezone access from upland properties and from the water along the shoreline.

Goal #2 of the Dispersed Recreation Subelement states that:

"Numerous opportunities exist in the Tahoe Basin to provide varied and quality recreational experiences. High-quality recreational opportunities often depend on limiting conflicts between uses and ensuring that uses are compatible with affected resources."

Policy #3 of this goal speaks specifically to Shorezone issues and states, "Nearshore/foreshore structures should be appropriately located to minimize impacts to recreational boating and top line fishing." Because the nearshore of Lake Tahoe has such favorable habitat conditions for fisheries, fish congregate in this area, thus providing opportunities for recreational fishing. To the extent feasible, buoys and other nearshore structures in areas of prime fish habitats should be located to provide for safe navigation through this zone. (TRPA, 1986)

Developed Recreation
Goal #1 of the Developed Recreation Subelement of the Goals and Policies mandates TRPA to provide a fair share of the total basin capacity for outdoor recreation. This goal speaks specifically to the need to reserve Regional capacity for recreation-oriented types of development. Regional capacity includes water supply, land coverage, roadway capacity, and air and water quality. In addition, public roads and transportation systems should be managed to provide service to outdoor recreation areas. Policy #1 under this goal recognizes existing resources reserved for recreational use, such as sewage capacity, and ensures such commitments are not lost or diverted to interests other than recreation. To assist this purpose, TRPA developed a Person At One Time (PAOT) system modeled somewhat after the U.S. Forest Service PAOT system. TRPA saw a need for additional developed outdoor recreation facilities capable of accommodating a total of 6,114 PAOTs in overnight facilities, 6,761 PAOTs in summer day use facilities, and 12,400 PAOTs in winter day use facilities (Goals and Policies, Recreation Element, 1986).
Of the above-cited 6,761 PAOTs for summer day use facilities, TRPA has reserved a minimum of 2,000 PAOTs for expansions of marinas and boat launching facilities. Marina facilities must complete an approved master plan to expand and use PAOT capacity. (An exception exists to allow a one-time addition of ten new boat slips or ten new buoys.)

Additional summer day use capacity shall be subject to PAOT allocations as follows:

1) Uses subject to summer day use PAOT allocation include marinas and boat launching facilities, rural sports, golf courses, visitor information centers, and off-road vehicle courses.

2) Recreation centers, participant sport facilities, sport assembly, beach recreation, and day use areas, operated by the states’ Departments of Parks and Recreation or by federal agencies or their permittees shall be subject to summer day use PAOT allocations.

3) Shorezone uses requiring summer day use PAOT allocations include tour boat operation and those portions of beach recreation, commercial boating, or water-oriented outdoor recreation concessions, which provide additional outdoor recreation capacity.

Urban Recreation
Urban recreation includes youth and sports-oriented forms of outdoor and indoor recreation in urban areas. This Subelement of the Recreation Element takes into consideration the more specialized recreational needs of the Tahoe resident, whose needs should be considered apart from the more general demands of the tourist. Urban recreational facilities include: softball and baseball fields, tennis courts, health and athletic clubs, and soccer fields. Very few urban recreational facilities exist in the Shorezone.

TRPA Code of Ordinances
The Code contains many chapters that regulate development of recreational facilities associated with the Shorezone. Chapter 18 (Permissible Uses) sets forth allowable recreation uses for land areas within the Region; Chapter 51 (Permissible Uses and Accessory Structures in the Shorezone and Lakezone) directs allowable recreation uses specific to the Shorezone. Chapter 20 (Land Coverage Standards) allows land coverage and disturbance in low capability areas for certain public outdoor recreational facilities, as does Chapter 55 (Development Standards in the Backshore). Chapter 22 (Height Standards) allows additional height for structures in project areas that provide public access to Lake Tahoe. Chapter 23 (Noise Standards) sets maximum allowable noise levels for watercraft. Chapter 33 (Allocation of Development) regulates the rate and distribution of additional recreation.

Plan Area Statements and PAOTs
Relevant Plan Area Statements are used to establish recreational capacity for some uses in the Shorezone by geographical area. In addition to establishing the list of permissible uses for that particular geographic area, each PAS may specify the amount of additional recreational capacity subject to Summer Day-Use PAOT allocations permissible within the Plan Area. Additional recreational capacity beyond the amount specified in the PAS may be drawn from PAOT pools reserved for summer day uses or overnight uses. Allocations are to be consistent with targets set forth in Chapter 33 of the Code. Additionally, Plan Areas contain permissible uses for what the Shorezone Tolerance Districts. These tolerance districts establish management strategies and development restrictions with respect to eight distinct types of districts.
Federal Agencies

U.S. Forest Service
The U.S. Forest Services-Lake Tahoe Basin Management Unit (LTBMU) encompasses portions of four national forests and offers the largest and widest diversity of outdoor recreational opportunities in the Region. National forests are managed on a multiple-use, sustained yield basis for production of forage, wildlife, wood, fish, water, and outdoor recreation. Wilderness management, as well as protection of forest areas containing historic, scenic, geologic, ecologic, or other special qualities, are all inherent in forest service management policies. Within the Tahoe Region, the Forest Plan adopted in 1988 to guide decisions in recreational issues, binds the LTBMU. Unique to this Forest Plan is the emphasis on watershed, wildlife and fisheries restoration, and outdoor recreation with a de-emphasis on grazing and timber production. (LTBMU has no allowable sale quantity target of timber production primarily for commercial purposes. This should not be confused with timber that is sold as a consequence of resource management activities.) The mission statement for the LTBMU states that the environment of this national treasure shall be managed, protected and enhanced for the people.

The LTBMU owns a number of land holdings used by recreationists along the shoreline of Lake Tahoe as well as other lakes in the Region. They are the largest landowner in the Region (approximately 75 percent of the total land area) and as such, provide numerous opportunities for outdoor recreation. Many shoreline parcels are included in their holdings such as: Round Hill Resort, Marina, and Beach; Nevada beach and campground; Camp Richardson Resort and Beach (Anchorage marina is private); Zephyr Cove Resort beach and marina; Pope Beach; Kiva Beach; Baldwin Beach; Meeks Bay Marina and beach; and Kaspian Beach; among many others, including a very long uninterrupted stretch of shoreline on the east shore Concessionaires operate at all of the highly developed USFS lakefront parcels.

U.S. Army Corps of Engineers
The U.S. Army Corps of Engineers (Corps) is responsible for planning, constructing, and operating water control, flood protection, navigation, and beach erosion projects throughout the United States. Specific statutory responsibility for the activities related to water quality, erosion, and public safety are described in other sections of this document. The Corps is also authorized to construct and operate recreational facilities at these project sites, although none exists in this Region. At Lake Tahoe, the Corps has jurisdiction below 6229.1'.

State Agencies

California Department of Fish and Game
Fish and Game (CDFG) has as its mission to manage California’s diverse fish, wildlife (game and non-game), and plant resources, and the habitats upon which they depend. These resources are managed for their ecological value and for public use and enjoyment. In the past, the CDFG had primary responsibility for hunting and fishing. Now, non-consumptive wildlife recreation, such as bird watching, photography, sketching, and painting is increasing in importance as the number of California’s hunters and anglers decrease. The CDFG is responsible for issuing streambed alteration permits in California for any project that will or potentially could disturb streambed or lakebed substrates. For each project CDFG reviews, they determine potential impacts to fish habitat and impacts to recreational access for top-line trolling.

California Department of Parks and Recreation
Parks and Recreation (CDPR) defines its mission as follows: “... provide for the health, inspiration, and education of the people of California by helping to preserve the state’s...
extraordinary biological diversity, protecting its most valued natural and cultural resources, and providing opportunities for high-quality recreational experiences based on those resources” (State of California, 1994). CDPR manages the California State Park System. The largest State Park holdings along the shoreline of Lake Tahoe include Emerald Bay, D.L. Bliss, and Sugar Pine Point State Parks. Two State Park facilities, Tahoe State Recreation Area in Tahoe City and Kings Beach Recreation Area, offer more developed lake access. Additionally, CDPR owns several lake front parcels managed for a variety of recreational uses by the Tahoe City Public Utility District.

California State Lands Commission
The CSLC is responsible for leasing sovereign lands on the California side of Lake Tahoe. The California Supreme Court in State of California v. Superior Court (Lyon (1981) 29 Cal. 3d 210 and State of California v. Superior Curt (Fogerty) 29 Cal. 3d 240 held that the area lying between the high and low marks of non-tidal navigable waters is subject to a public trust easement for commerce, navigation, fishing, recreation and preservation. The high and low water marks for the California side of the Lake have been established as elevations 6228.75 feet and 6223 feet Lake Tahoe datum. Any activities involving the State's sovereign lands in Lake Tahoe below 6223 require a lease from CSLC. The CSLC is involved with the protection of California's rare and endangered wildlife and plant species as described in other sections of this document, and for ensuring compliance with the California Environmental Quality Act (CEQA).

California Tahoe Conservancy
The CTC implements a mandate that, among other things, seeks to increase public access to the natural recreational opportunities of the Region. In the past 20 years, the CTC has acquired and developed many lake access parcels, including highly visible park developments in Kings Beach and Carnelian Bay. Acquisitions in Tahoe Vista resulted in removal of dilapidated structures and site restoration for more passive lake access. The CTC also owns shoreline property operated for other recreational purposes by the North Tahoe Public Utility District. The CTC recently acquired the Barton Meadow parcels, which include one Shorezone parcel equaling almost 82 acres through which the Upper Truckee River winds its way to the Lake. CTC is collaborating with other agencies on a major restoration project involving the Upper Truckee River.

Nevada Division of State Lands
The Division of State Lands (State Lands) requires applications for structures lakeward of high water, 6229.1', although the state claims ownership of Lake Tahoe lakeward of 6,223', Lake Tahoe Datum (NRS 321.595). State Lands do not make environmental quality findings for the projects they review, or for their issuance of lease agreements. State Lands requests comments from the Nevada Division of Wildlife regarding impacts to recreational access and fish habitat resulting from Shorezone leases. State Lands also maintains the public trust on the Nevada side for submerged land below 6223' Lake Tahoe Datum.

Nevada Division of State Parks
State Parks in Nevada manages the Lake Tahoe Nevada State Park with two park units along the shores of Lake Tahoe, Sand Harbor and the Cave Rock boat launching facility. The Sand Harbor Unit offers boat launching facilities, beach recreation, and cultural events during the summer months. The Cave Rock boat launching facility is used for year-round launchings and shoreline fishing. In addition, the Spooner Lake unit provides day-use recreational opportunities including passive access to Spooner and Marlette Lakes.

Nevada Division of Wildlife
The NDOW is the agency on the Nevada side of Lake Tahoe with the responsibility of managing the fisheries and wildlife resources and the habitats on which these species
depend. In addition, NDOW is also responsible for boating and safety on navigable waters in the state. NDOW protects boaters from navigational obstacles and protects the recreational angler’s boating access along the shoreline of Lake Tahoe. NDOW is a reviewing and commenting agency but has no regulatory authority related to permits for construction in hazards to navigation within the waters of Lake Tahoe.

Local Jurisdictions

The City of South Lake Tahoe, along with the Tahoe City Public Utility District, North Tahoe Public Utility District and the Incline Village General Improvement District administer recreation departments. These local jurisdictions manage several beaches, lakeside parks, and boat launch facilities.

7-2. EXISTING RECREATION CONDITIONS AND TRENDS

EXISTING CONDITIONS

Recreation Surveys

In the summer of 2000 (August through Labor Day), TRPA and the Tahoe Coalition of Recreation Providers (TCORP) conducted a recreation user preference survey. The survey provided a profile of recreation use in the Lake Tahoe Basin (including, but not limited to, activity patterns and perceptions of and preferences for recreation in the Region). The survey also provided qualitative focus group research providing additional insight into respondent perceptions of the recreation experience and associated land management issues.

The TRPA survey found that the bulk of the respondents fell into the middle age category, that is those in the 35-44 and 45-54 age groups. This corresponded to research conducted by the Lake Tahoe Visitors Authority (LTVA) between 1989 and 1992 that saw the overall median age of visitors to the Region steadily increase since 1988 to 43.6 years of age during the summer of 1992. Because the cost of housing and/or lodging and transportation within and to resorts areas is typically high, income levels in destination resort communities are also quite high. The TRPA survey found that a majority of respondents came from income categories that exceeded $50,000 annually in household income (TRPA 2001). The vast majority of recreation users surveyed was Caucasian/white. Ethnic diversity among Region recreation users was found most likely to derive from those of Hispanic ancestry—either Mexican-Americans or other Hispanic. Only 3.4 percent of those surveyed were Asian-American or Pacific Island ancestry, and African-Americans and American Indians comprised only a small proportion of respondents (TRPA 2001).

Additional user information from the survey included:

- **Visitor Origin:** The bulk of visitors to the Region (67 percent) originate from California; 16 percent of visitors come from Nevada; 5 percent from other far western states; and 1.8 percent arrived from Canada, European, and Asian countries.

- **Overnight Length of Stay:** Overnight recreation users averaged stays of 4.6 nights in the Region. A significant number of overnight visitors (28.9 percent) stayed for one or two nights. Nearly 47.7 percent of visitors stayed in the Region for a 3 to 6 night period.

- **Transportation Modes:** Among non-resident users, the personal vehicle remained the primary mode of transportation with 87.4 percent using no alternate mode of transportation during their stay. The most mentioned alternate mode of transportation was the resort shuttle system.
Recreation Activity Participation Rates
The 2000 survey found that among respondents, beach activities (76 percent) had the greatest proportion of participation compared to other listed summer season recreation activities. Following beach use, a majority of those surveyed indicated participation in walking (73 percent), trail hiking (63 percent), swimming (62 percent), and sightseeing (51 percent). Trail hiking in particular had an especially high level of response, though this includes hiking along local trails as well as backcountry use (TRPA 2001).

One-third of the respondents in the survey also mentioned a second tier of popular activities that included bicycling on paved trails (44 percent), shopping (42 percent), driving for pleasure (37 percent), picnicking (36 percent), and bicycling on unpaved surfaces (32 percent). The survey found that at least one-quarter also mentioned that they attended cultural attractions and cultural events (28 percent and 25 percent), participated in power boating (28 percent), nature study (28 percent), gaming (27 percent), or canoeing, kayaking, and rafting (26 percent and 25 percent). With the exception of off road bicycling and paddle sports, the grouping reflected a segment of recreation users that is oriented to somewhat more developed activities compared to the outdoor “adventure” segment. In addition, driving for pleasure was a frequently mentioned activity and may in part be associated with the sightseeing response. This popular activity certainly contributes to the region’s traffic congestion issues.

Recreation Conditions
In the survey, respondents rated the importance of certain recreation attributes on a scale of 1 to 5, with 4 and 5 being somewhat or very important. Beach quality was the most important attribute on the scale, with 94 percent of respondents identifying this attribute. It should be noted that the survey was a sample of summer users, so it is somewhat slanted toward summer-related attributes compared to other seasonal preferences. Following beach issues were a range of other general concerns related to the conditions at recreation destinations such as recreation site maintenance (89 percent), traffic congestion (88 percent), security and safety (87 percent), the level of crowding (86 percent), costs (83 percent), and the attitudes of recreation area staff (81 percent). Of somewhat less importance was the quality of day use and picnic areas (70 percent) and campgrounds (66 percent) (TRPA 2001).

Recreation Facilities
The TRPA survey indicated that access to beach areas (91 percent of respondents) combined with forest access (87 percent of respondents) indicated that access is generally perceived as a critical recreation consideration when addressing physical features. The survey also noted that access might be considered in the context of crowding and traffic congestion issues as well. Access to forest area was the most positive element of the Lake Tahoe recreation experience with 83 percent of respondents giving forest access a “4” or “5” rating. A second tier of experiences also received a majority of positive ratings, including beach access (67 percent), town pedestrian areas (66 percent), nature and wildlife viewing areas (61 percent), and the availability of day use areas (58 percent) (TRPA 2001).

Within the conditions category of the survey, the most highly rated recreation experiences at Lake Tahoe were the quality of the Region’s beaches (74 percent), the attitude of staff at parks and recreation areas (73 percent), and security (71 percent). A second cluster of recreation attributes that received majority ratings included the quality of day use areas (61 percent), the quality of campgrounds (60 percent), and the cost or value of regional recreation (59 percent) (TRPA 2001).

Lake Tahoe and the surrounding lands provide numerous opportunities to recreate for both the resident and visitor. Within the Shorezone of Lake Tahoe, these opportunities abound
but are often concentrated. This concentration of differing recreational activities often creates user conflicts. No significant expansions have occurred at any of the marinas, boat launches, or campgrounds since the Goals and Policies were adopted in 1986. At that time, campground and boat launching facilities were at capacity during a major portion of the summer season. Surveys taken at that time, looking at Region-wide recreation demand and existing use, demonstrated the need for more campgrounds, boat launching facilities, and beach areas.

Table 7-1 summarizes the conclusions of the TRPA 2001 Threshold Evaluation relative to the status of the recreation threshold.

<table>
<thead>
<tr>
<th>Threshold</th>
<th>2001 Threshold Status</th>
<th>2001 Attainment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-quality recreation experience¹ (R-1)</td>
<td>In the past fifteen years, Tahoe recreation providers have conducted consistent surveys of recreation users to monitor user perception of recreation quality, relative satisfaction levels with facilities and programs, and recreation activities, on a Regional basis. Additional land acquisition for low-density recreational use, developed and urban recreation facility improvements, and development of dispersed recreation amenities has been monitored by TRPA in cooperation with appropriate agencies.</td>
<td>Non-attainment</td>
</tr>
<tr>
<td>Capacity available to the general public¹ (R-2)</td>
<td>TRPA monitors the status of resource capacities through maintenance of cumulative accounts pursuant to Chapter 32. In the past 15 years, additional recreation opportunities have been developed in the region. Most additional opportunities have not been allocated PAOTs due, in large part, to the limited definition of PAOT allocations and lack of resources in the recreation program.</td>
<td>Attainment</td>
</tr>
</tbody>
</table>

¹Directly related to Shorezone.

Public Access

The bowl shape of the Region immediately surrounding Lake Tahoe focuses attention inward toward the lakeshores, and the limited publicly owned and accessible lakeshore lands have concentrated public recreational development and use into localized areas. Successful dispersal of public use into less heavily used areas will depend largely upon public acquisition of additional lakefront properties and public education of less known areas, which can withstand additional visitation. The pattern of land ownership and development is such that the most heavily populated areas have the least lakeshore available for public use. At major highway points where visitors have their first view of the Lake, little public land is available; so the recreation visitor has great difficulty in getting to the Lake and enjoying it. In 1971, about 18 percent of the 75 miles of Lake shoreline was publicly owned. This consisted of 8 miles belonging to the State of California and 5.5 miles in the National Forest (TRPA and USFS, 1971). Because of additional acquisitions of littoral parcels in the past 20 years, the percent of public ownership along the shoreline of Lake Tahoe has increased to 46.2 percent (TRPA GIS, April 2001). However compared to public ownership for the Region (approximately 85 percent), wide discrepancy exists.
Public Access by Water and Land

The States of California and Nevada hold in public trust the submerged lands below 6223. In addition, when the lands below 6229.1 in Nevada and 6228.75 in California are submerged, the public has the right to navigate over these lands. Both states are similar in their management of the Trust lands when one is in a boat.

There is a very marked difference between the two states when it comes to accessing the Lake on “unwetted” (when the Lake is below 6229 and above 6223) lands. On the California side of Lake Tahoe, lands between the low and high water marks of 6223 feet Lake Tahoe datum, and 6228.75 feet Lake Tahoe datum, are owned by their littoral owners (owners of land adjacent to the shoreline). This ownership is subject to a public trust easement held by the State of California for commerce, navigation, fishing, recreation and preservation. Additionally, where any governmental body in California authorizes an activity in an area subject to the public trust easement, the activity must be consistent with that public trust. On the Nevada side, there is no public trust easement; so as long as the foreshore (the area between high and low water) remains above the water level, there is no public lateral access.

When a structure is built in the Lake or extends farther into the Lake, public access to the Shorezone may be decreased for some user groups. (This decreased access also applies to other lakes in the Region, most notably Fallen Leaf Lake.) As a result, users in small skiffs, canoes, kayaks, etc., are forced to travel further out in the Lake, creating a serious safety concern for these boaters during some conditions. Lake Tahoe often experiences summertime afternoon winds that can increase from dead calm to small-craft-warning magnitude within 20 minutes or less. Small boats are more vulnerable to accident further out in the Lake during these conditions and are slower to evacuate the water when conditions turn dangerous.

In some sections of Lake Tahoe's shoreline, the density and/or length of piers is such that very little, if any, obstruction to access exists (e.g., east shore, Crystal Point, Emerald Bay). However, in sections with pier densities in excess of one pier every 100 feet (e.g., Rubicon/Meeks Bay, Cedar Flat, portions of Carnelian Bay and Agate Bay) access is significantly restricted.

Not unlike access along the shoreline by water, access to the Shorezone by land can be and is impeded by structures within the Shorezone. Although TRPA design standards currently do not allow rock crib piers, a number of these structures have been built around the Lake in the past. Not only do these pose an impediment to littoral processes in some areas of the Shorezone, they also block passage for pedestrians along the beach below elevation 6228.75 on the California side. The common practice of removing rock and cobble down to the sandy substrate and relocating the rock and cobble to beneath the pier essentially creates rock crib piers, also impeding access along the beach. Another common practice is the storage of "beach toys" beneath piers. Kayaks, canoes, dinghies, jet skis, beach furniture, etc., can be found during the summer season stored beneath piers, creating an obstruction to foot traffic along the beach. Breakwaters, sloping rock revetments, and other such shoreline structures also physically impede lateral pedestrian through-access along the Shorezone of Lake Tahoe and other lakes on the California side.

Fences pose another barrier to public access. Fences extending from the backshore to below the high water line exist between public and private properties as well as between two private parcels. Many fences are extended lakeward during low water conditions and remain submerged at higher lake levels, creating navigational hazards. The TRPA Code states in subsection 54.11.A, “...fences shall not be permitted lakeward of the high water line of any...”
lake or body of water except to protect the health and safety of the general public or to protect property located adjacent to areas of public access to any such lake or body of water from trespass..." Neither the Corps nor CSLC have provisions that would allow for approval of fences below high water because they impede access and navigation along the shore.

“No Trespassing” signs constitute a less obvious, non-physical, barrier to access. During low water conditions, some private property owners place such signs below high water (on the California side this is within the public easement), facing public beaches or public access points. Additionally, a number of upland access points (trails) have “No Trespassing” signs posted that lead to publically owned beaches. TRPA's inventory noted several public parcels with small piers that had signs posted. (Generally, these parcels are not well known and are sandwiched between private residential parcels.) The presence of these signs indicates a growing conflict between the desire for privacy of landowners and the desire for public access to the Lake for upland residents and visitors.

Public access and use of public beaches depends on weather conditions, Lake levels, and regulatory structures such as season of operation and parking fees. Some beach users park in outlying areas and walk to the beach (in part to avoid parking fees), or take bicycles or public transit to access these beach facilities. In general, physical access to many public beach areas has improved with the improvement of bicycle and transit facilities. However, non-physical barriers are still prevalent.

Public access to beaches is limited in some areas by the limited season of operations of USFS beaches. Community Plans (CPs) in Douglas County and the City of South Lake Tahoe identify extending the season of operation into the temperate fall period as a critical element in meeting the recreational goals in the CPs, as well as the Regional goals.

Table 7-2 and Figures 7-1 identify the location of public and limited access beaches. Limited access beaches include those areas that provide access for only a specific portion of the public. While these areas exhibit restrictions, they do serve to reduce demand on other public facilities.

The public also gains access to the Shorezone and to the Lake itself through boat launching and marina/mooring opportunities. These facilities are sensitive to changes in Lake levels, significantly reducing their ability to meet public needs during low water conditions when many ramps and slips are left dry. During periods of low water, TRPA’s Code of Ordinances allows facilities with a history of legal dredging activity to install temporary structure extensions in order to reach navigable waters in lieu of dredging. No major expansions of public launching or marina capacity have occurred under the 1987 Regional Plan. This is due in part to expensive and time consuming Marina Master Plan development, which includes an EIS, and also to upland limitations for support facilities such as parking. Table 7-3 and Figure 7-2 identify marinas and boat-launching facilities open to the public at Lake Tahoe.
### Table 7-2. Public Beaches and Access Points at Lake Tahoe

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<thead>
<tr>
<th>#</th>
<th>Beach Name</th>
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<th>Beach Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tahoe Beach/Ski Club (City of South Lake Tahoe public easement)</td>
<td>24</td>
<td>Lake Forest (TCPUD)</td>
</tr>
<tr>
<td>2</td>
<td>Timber Cove Lodge (CSLT public easement)</td>
<td>25</td>
<td>Skylandia (CA State Park)</td>
</tr>
<tr>
<td>3</td>
<td>El Dorado Beach (CSLT)</td>
<td>26</td>
<td>Garwood’s Pier (Pier deed restricted public)</td>
</tr>
<tr>
<td>4</td>
<td>Regan Beach (CSLT)</td>
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<td>Carnelian Bay West (CTC)</td>
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<td>Barton Property (CTC)</td>
<td>28</td>
<td>Carnelian Bay East (CTC)</td>
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<td>6</td>
<td>Cove East (CTC)</td>
<td>29</td>
<td>Sandy Beach</td>
</tr>
<tr>
<td>7</td>
<td>Pope Beach (USFS)</td>
<td>30</td>
<td>Tahoe Vista Recreation Area</td>
</tr>
<tr>
<td>8</td>
<td>Camp Richardson (USFS)</td>
<td>31</td>
<td>Moon Dunes (NTPUD)</td>
</tr>
<tr>
<td>9</td>
<td>Tallac Historic Site (USFS)</td>
<td>32</td>
<td>Steamer’s Beach</td>
</tr>
<tr>
<td>10</td>
<td>Taylor and Kiva Beach (USFS)</td>
<td>33</td>
<td>North Tahoe Beach Club</td>
</tr>
<tr>
<td>11</td>
<td>Baldwin Beach (USFS)</td>
<td>34</td>
<td>Secline (NTPUD)</td>
</tr>
<tr>
<td>12</td>
<td>Eagle Point Campground (CA State Park)</td>
<td>35</td>
<td>North Tahoe Conference Center</td>
</tr>
<tr>
<td>13</td>
<td>Vikingsholm (CA State Park)</td>
<td>36</td>
<td>Kings Beach Park (California)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37</td>
<td>Speedboat Beach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38</td>
<td>Gonowabie Pier (NV State Lands)</td>
</tr>
<tr>
<td>14</td>
<td>Emerald Bay Boat Camp (CA State Park)</td>
<td>39</td>
<td>Burnt Cedar Park* (IVGID)</td>
</tr>
<tr>
<td>15</td>
<td>DL Bliss State Park (CA State Park)</td>
<td>40</td>
<td>Incline Beach/Ski Beach* (IVGID)</td>
</tr>
<tr>
<td>16</td>
<td>Meeks Bay (USFS)</td>
<td>41</td>
<td>Hidden Beach (Nevada)</td>
</tr>
<tr>
<td>17</td>
<td>Sugar Pine Point State Park (California)</td>
<td>42</td>
<td>Sand Harbor Beach (Nevada)</td>
</tr>
<tr>
<td></td>
<td>Lakeside Park (Placer County)</td>
<td>43</td>
<td>Thunderbird Lodge Cove (USFS)</td>
</tr>
<tr>
<td>18</td>
<td>Kaspian (USFS)</td>
<td>44</td>
<td>Secret Harbor (USFS)</td>
</tr>
<tr>
<td>19</td>
<td>Elizabeth Park (TCPUD)</td>
<td>45</td>
<td>Skunk Harbor (USFS)</td>
</tr>
<tr>
<td>20</td>
<td>William Kent (USFS)</td>
<td>46</td>
<td>Zephyr Cove Beach (USFS)</td>
</tr>
<tr>
<td>21</td>
<td>Commons Beach (TCPUD)</td>
<td>47</td>
<td>Round Hill Pines (USFS)</td>
</tr>
<tr>
<td>22</td>
<td>Motamadi Pier (deed restricted public)</td>
<td>48</td>
<td>Nevada Beach (USFS)</td>
</tr>
<tr>
<td>23</td>
<td>Klausen Property</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Numbers refer to notations on Figure 7-1.
Source: TRPA 2004

### Table 7-3. Marina and Boat Launching Facilities Open to the Public at Lake Tahoe

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>#</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lakeside Marina</td>
<td>11</td>
<td>Tahoe City Marina</td>
</tr>
<tr>
<td>2</td>
<td>Ski Run Marina</td>
<td>12</td>
<td>Lake Forest Boat Ramp</td>
</tr>
<tr>
<td>3</td>
<td>Timber Cove Marina</td>
<td>13</td>
<td>Sierra Boat Company</td>
</tr>
<tr>
<td>4</td>
<td>El Dorado Boat Ramp</td>
<td>14</td>
<td>National Avenue Ramp</td>
</tr>
<tr>
<td>5</td>
<td>Tahoe Keys Marina</td>
<td>15</td>
<td>North Tahoe Marina</td>
</tr>
<tr>
<td>6</td>
<td>Anchorage Marina</td>
<td>16</td>
<td>Sand Harbor Boat Ramp</td>
</tr>
<tr>
<td>7</td>
<td>Meeks Bay Marina</td>
<td>17</td>
<td>Cave Rock Boat Ramp</td>
</tr>
<tr>
<td>8</td>
<td>Obexer's Marina</td>
<td>18</td>
<td>Zephyr Cove Marina</td>
</tr>
<tr>
<td>9</td>
<td>Homewood Marina</td>
<td>19</td>
<td>Round Hill Pines Resort/Marina</td>
</tr>
<tr>
<td>10</td>
<td>Sunnyside Marina</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Numbers refer to notations on Figure 7-2.
Source: TRPA 2004
Figure 7-1
Public Beaches and Access Points at Lake Tahoe
Lake Tahoe Shorezone Ordinance Amendments EIS
Figure 7-2
Marinas and Boat Launching Facilities
Open to the Public at Lake Tahoe

Ramps & Marinas
1 LAKESIDE MARINA
2 SKI RUN MARINA
3 TIMBER COVE MARINA
4 EL DORADO RAMP
5 TAHOE KEYS MARINA
6 ANCHORAGE MARINA
7 MEEKS BAY MARINA
8 OBEXERS MARINA
9 HOMewood MARINA
10 SUNNYSIDE MARINA
11 TAHOE CITY MARINA
12 LAKE FOREST RAMP
13 SIERRA BOAT CO. MARINA
14 NATIONAL AVE. RAMP
15 NORTH TAHOE MARINA
16 KINGS BEACH RAMP
17 SAND HARBOR RAMP
18 CAVE ROCK RAMP
19 ZEPHYR COVE MARINA
20 ROUND HILL PINES MARINA

Lake Tahoe Shorezone Ordinance Amendments EIS
1:150,000

0 0.5 1 1.5 2 2.5 3 3.5 4
Miles
Recreational Conflicts

Recreation users of the Shorezone and lakezone of Lake Tahoe and other lakes and lagoons of the region have expectations of what their experience should provide. Whether the recreation user is a local resident or a visitor to the Region their expectations cover a broad range of experiences. From top line fishing at sunrise on water as smooth as glass to a jet ski ride at 50 mph to a game of beach volleyball to a day spent in quiet solitude on a beach somewhere along the east shore of Lake Tahoe, these are among just a few of the many activities recreation users are expecting to experience. The meeting of these expectations is a recreation threshold goal and the subject of user surveys conducted by both public agency and the private sector marketing Tahoe’s recreation opportunities.

Use Conflicts

Conflicts can arise among differing recreation user groups, especially when competing for the same resource. Conflicts in the Shorezone can occur between the use of motorized watercrafts and non-motorized uses, such as recreational activities that occur on the beach and the shoreline. The recent rise in personal watercraft use has created the most notable conflict. Personal watercraft (PWC) is a popular form of boating, representing an attractive way to access Lake Tahoe, particularly for younger users. These craft, however, have a potential to impact the quality of the onshore recreational experience (e.g. sunbathing, hiking, swimming, etc.) due to noise frequencies and patterns of use produced by personal watercraft. The conflict between these watercraft and other boaters is also a concern, expressed in part by the California state ban on PWC operation that includes jumping the wake produced by larger boats.

A survey conducted on behalf of the California Department of Parks and Recreation throughout California indicates that beach recreation is the predominant activity in which the recreating public participates. The survey asked respondents to note the number of days per year of participation in 42 activities. The survey found 69.4 percent of the respondents participated in beach activities for one or more days, whereas 19.5 percent participated in power boating. Although not all beach users seek a solitary experience, beach activity that includes conversation, reading, and nature watching requires a lower background noise level.

TRPA’s 2000 Recreation User Preference Survey found that 80% of respondents that identified themselves as visitors take part in beach activities, while 71% of residents responded that they too enjoy beach activities. The difference in the numbers from the California State Parks survey results is likely due to this survey being focused on Tahoe, whereas the above survey was generic to all of California. Point being: beach activities are a main attraction for summer recreation at Tahoe.

Techniques exist to reduce conflict between competing user groups. One technique includes location and management of recreational facilities to minimize use conflicts and enhance the recreational experiences of all user groups. The 1997 TRPA enactment of a 600-foot no wake zone has resulted in lower noise levels on shore and is an example of this technique. Activities or user groups can be relegated to different areas, or alternatively, to the same area at different times. The Fallen Leaf Lake home owners have had a system in place for years that addresses conflicts among boaters. At the south end of the lake boaters are required to travel in a clockwise pattern creating an oval shape over the south end waters. At the north end of the lake the boaters travel in an oval pattern in a counter-clockwise pattern (Ruth Rich, personal communication).
Access Conflicts

As described previously, public access to Lake Tahoe is limited in many of the most densely populated areas of the Region. In locations where public and private property exists in close proximity, access conflicts often arise. The public is often disrespectful of private property, resulting in unauthorized trespass, litter, and safety concerns. In response, private property owners build fences and post intimidating notices, reducing the legitimate enjoyment of public property and sometimes unlawfully restricting access. The City of South Lake Tahoe, the Tahoe Coalition of Outdoor Recreation Providers (TCORP), and others have attempted to address this issue in some areas by proposing a combination of improved signage and the establishment of permissible access routes.

TRENDS

The Recreation Resource Allocation and Capacity Study (1996a) estimated that in the year 2006/07, recreation demand would increase to 58,386 visits for summer day use (+13.2 percent), 11,941 visits for summer overnight use (+13.7 percent), and 53,526 visits for winter use (+14.1 percent).

In 2002, overnight visitors were the source of about 13.2 million visitor-days in the Lake Tahoe Region. In addition, day travelers made about 4.4 million visits, for a total of about 17.6 million visitor days. Table 7-4 shows the estimated visitor days for both overnight and day trips during 1996-2000, measured in millions. While there are currently no updated projected future visitation rates for the Tahoe Basin, future growth may be limited by available infrastructure to support the growth. However, the population growth projections for the urban areas surrounding the Tahoe Basin (Sacramento Valley and Northern Nevada) would indicate that Tahoe will continue to see increased visitation. TRPA estimates the population inside the Region will grow at about one percent per year. Nearby regions that supply the majority of visitors to Tahoe, however, are growing at increased rates. According to the California Department of Finance Demographic Research Unit, the San Francisco Bay Area and the Sacramento area are growing at a rate of two percent a year. The Nevada State Demographers Office reports the Reno area’s growth rate at 3.2 percent a year.

Whether the increased visitation is primarily by day-trippers or overnight destination vacationers is yet to be determined. Not unlike other major vacation destinations in the US, visitation numbers can be expressed in variable ways and derived from a multitude of sources. There is as yet no industry standard established to compare visitation numbers from destination to destination, season to season or facility to facility. The numbers presented below merely indicate the increasing visitation trend for the Tahoe Basin.

<table>
<thead>
<tr>
<th>Table 7-4. Lake Tahoe Visitor Volume, 1996-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Overnight Visitor Volume</td>
</tr>
<tr>
<td>1996</td>
</tr>
<tr>
<td>1997</td>
</tr>
<tr>
<td>1998</td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>Day Visitor Volume</td>
</tr>
<tr>
<td>1996</td>
</tr>
<tr>
<td>1997</td>
</tr>
<tr>
<td>1998</td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>2000</td>
</tr>
</tbody>
</table>

Source: TRPA Threshold Evaluation, 2001
Other sections of this document report public acquisition, building trends, and boat registration trends, all of which are positive for increased Shorezone use. The downward trend in reported boating use and paid beach use is not consistent with the other trends. The boating use trend of 7 percent annual growth is not reliable as it reflects two studies with different methodologies. This DEIS assumes a much lower 1.5 percent annual boat use increase for projections. The negative beach use trends noted, especially for the California beaches, may reflect the effects of beach pricing policy more than an actual decrease in use. Paid parking promotes walk-ins, alternate parking such as along the highways, higher vehicle passenger loads, and use of free beaches which, in turn, influences the annual counts.

As noted previously, access to public beaches is improving through use of transit and bicycle facilities. This trend is expected to continue as Community Plans and the EIP are implemented. Improved access to the same number of public beaches, however, is not an indicator of threshold attainment. As noted in the 1996 State Route 28 Recreation Traffic Management Plan, increased access to the East Shore beaches will change the character of the beach use and negatively impact the expected recreational experience (Leigh, Scott, and Cleary, 1996). Recreational access management is of primary concern along the East Shore and in Emerald Bay; management strategies under consideration will reduce environmental impacts of present levels of access and are not intended to increase access.

Ultimately, a quality recreational experience at Lake Tahoe relies upon adequate access and providing a positive recreational experience. During congested peak use periods, even if a person eventually finds a usable boat launch or a parking space near the beach, unfortunately the difficulty in getting there has already set the tone for the entire experience; it has been degraded. Expansion of public access to the shores of the Lake is critical to enhancing nearly all of the recreational activities in the Shorezone.

7-3. SUMMARY OF PROJECT ALTERNATIVES

As discussed in Chapter 2 of this EIS, the various alternatives would have varied effects on Shorezone development at Lake Tahoe.

ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

This alternative would continue current practices for the review of Shorezone projects under the existing TRPA Code of Ordinances.

ALTERNATIVE 2 – PROPOSED PROJECT ALTERNATIVE

This alternative would result in revisions to the Shorezone provisions of the Code of Ordinances based on the consensus agreements of the Shorezone Partnership Group, direction from the Shorezone Policy Committee, and TRPA staff revisions for clean up, streamlining, and environmental adequacy. The general goal of this proposal is to assure all littoral parcels are eligible to apply for a pier and sufficient buoys to access the lakes of the Region, that all related impacts would be mitigated, and that all applicable environmental thresholds would be attained. The prohibition on the location of Shorezone structures in prime fish habitat would be eliminated under this alternative. This alternative would also include a new scenic review system and would introduce the concept of private, quasi-public, and public structures to provide the basis for design standards and deviation from those standards.
ALTERNATIVE 3 – NO FISH HABITAT RESTRICTIONS ALTERNATIVE

This alternative would continue all Shorezone provisions of the current TRPA Code, except that the prohibitions on Shorezone structures located in fish habitat areas would be eliminated including stream setbacks. In addition, this alternative would not preclude littoral parcel owners who have the availability of a multiple-use facility from applying for their own private Shorezone structure.

ALTERNATIVE 4 – PUBLIC STRUCTURES ALTERNATIVE

This alternative would remove the prohibition on locating Shorezone structures in prime fish habitat. The prohibition of Shorezone structures within 200 feet of a stream mouth would remain unchanged. However, in order to promote thresholds, this alternative allows new or expanded structures for public facilities (open to the general public) only. No new or expanded private structures are allowed.

ALTERNATIVE 5 – REDUCED DEVELOPMENT ALTERNATIVE

This alternative would prohibit the construction of private single-use Shorezone structures. Under this alternative, only multiple use structures would be permitted and would require a 2:1 structure reduction mitigation for private multiple use and quasi-public structures, and a 1:1 structure reduction mitigation for public multiple use structures.

Table 7-5 below provides a summary of the main project features of the five proposed alternatives and provides an abbreviated overview of their differences. Table 7-6 provides a summary of the overall total buildout numbers for the five alternatives.

<table>
<thead>
<tr>
<th>Table 7-5. Summary of Project Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Features</td>
</tr>
<tr>
<td>Streamlined Review</td>
</tr>
<tr>
<td>New Structures</td>
</tr>
<tr>
<td>Private Structures</td>
</tr>
<tr>
<td>Quasi-Public Structures</td>
</tr>
<tr>
<td>Public Structures</td>
</tr>
<tr>
<td>Repairs/Modifications</td>
</tr>
<tr>
<td>Reduction in Structures</td>
</tr>
</tbody>
</table>
### Table 7-6. Full Buildout Numbers by Alternative

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5 (2:1 Reduction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piers</td>
<td>839*</td>
<td>1,196*</td>
<td>1,399*</td>
<td>788*</td>
<td>732</td>
</tr>
<tr>
<td>Buoys</td>
<td>5,826</td>
<td>8,110</td>
<td>10,462</td>
<td>6,517</td>
<td>4,307</td>
</tr>
<tr>
<td>Ramps</td>
<td>128*</td>
<td>72*</td>
<td>706*</td>
<td>50*</td>
<td>37</td>
</tr>
<tr>
<td>Floating Docks</td>
<td>174</td>
<td>83</td>
<td>1,256</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>Slips</td>
<td>3,019</td>
<td>3019</td>
<td>3,019</td>
<td>2899</td>
<td>2620</td>
</tr>
</tbody>
</table>

Source: TRPA 2004

*Totals do not include new extensions/expansions.

### 7-4. STANDARDS OF SIGNIFICANCE

The recreation threshold, with implementing policies and regulations, presents unique difficulties for environmental analysis. The TRPA Recreation threshold is different than the other environmental threshold carrying capacities. The recreation threshold does not set numerical standards but rather encourages acquisition of lands and development of facilities for additional recreation opportunities. The recreation thresholds are policy statements by the Governing Board and do not lend themselves to simple quantification or linkage to particular numerical measurements.

The threshold seeks to protect the quality and enhance the accessibility of recreational resources that make the Tahoe Region unique, and support its economic activity. Access is an element that can be quantified, targeted, and predicted. The PAOT system of allocation is a tool TRPA uses to address access and capacity questions. However, the threshold also requires attaining and maintaining a quality standard for that access. Quality is a much less precise standard built on visitor expectations of elements such as facility design and maintenance, ease of access, flexibility of recreational choice, cost, and degree of solitude. Actions that enhance the quality for one recreational activity often produce no effects or negative effects on the quality of a different recreational activity.

No evaluation criterion exists today that allows quantitative assessment of predicted changes to recreational quality. However, existing policies and regulations establish a framework for evaluating predicted future changes. These include:

- Violation of the policies of the Recreation Element intended to preserve and enhance the high quality recreational experience, including the preservation of high-quality undeveloped Shorezone and other natural areas;
- Failure to provide additional public access to the Shorezone and high quality undeveloped areas for low density recreational uses, and the loss of public access to the Shorezone and along the Shorezone;
- Failure to minimize the impacts to top line fishing in prime fish habitat; and
- Violation of the TRPA Code of Ordinances.

### Evaluation Criteria

The evaluation of potential impacts to recreation is based on the alternative’s potential to conflict with existing or proposed land uses in the Shorezone area. In this analysis, an alternative is considered to have a significant impact on recreation if it would result in any of the following:
- Modification of existing structures or construction of new structures that impede lateral passage of pedestrians along the Shorezone.
- Modification of existing, and construction of new structures in the Shorezone that impede access or ability to navigate along the Shorezone by motorized or non-motorized watercraft.
- Construction of new structures in prime fish habitat that impact top-line fishing.
- Development of new facilities and increased boat usage resulting in an impact to high quality undeveloped Shorezone areas.
- Loss of existing public access thru upland land use changes.
- Loss of existing public access thru quit claim actions that privatize previously existing public access.
- Non-attainment of threshold standard target for Summer Day Use PAOTs.

**SUMMARY OF POTENTIAL RECREATION IMPACTS AND REQUIRED MITIGATION MEASURES**

The quality of the recreational experience along the shore and on Lake Tahoe is dependent on the ability to access Tahoe’s shores and open waters, and to pursue chosen activity without conflict. All five alternatives will increase boating access to Lake Tahoe, addressing recreational needs in varying degrees for this segment of the recreating population. Meeting this need for the general public is important to achieving the PAOT targets related to the recreation threshold. This section evaluates each alternative's contribution to meeting these targets. However, implementation of any of the alternatives may also create impacts on some recreational activities.

Perhaps peculiar, but important to recognize, is the relativity of the impacts when comparing alternatives. The impacts produced are individually the same for each alternative, with slight variation; however, the severity and the required level of mitigation vary greatly among alternatives. For example, all alternatives affect lateral pedestrian access, but it may be to a greater degree by one alternative than another. This section attempts to analyze the impacts relative to each other. While overall statements of the impacts can be made, it is important to take note of the nuances among the alternatives to identify the, sometimes subtle, differences.

This section examines negative effects on recreation due to impacts associated with the following conditions.

1) Construction of new Shorezone structures leading to reduced access for:
   - boaters along the shoreline;
   - lateral pedestrian access along the shoreline;
   - nearshore navigation for small non-motorized craft; and
   - anglers productive fishing waters.

2) Increased motorized boating use that decreases the quality of the recreational experience for non-motorized boaters and on-shore dispersed recreationists.

3) The creation of obstacles to top line fishing (trolling) from Shorezone structures in prime fish habitat.

4) Non-attainment of Summer Day Use PAOT targets.
A simple numeric comparison between the impacts (number of new structures) of the alternatives can identify the overall severity of impacts relative to each alternative. The mitigation required for impacts may programmatically be the same, but the resources required for implementation vary according to the severity of the impact.

**Construction of New Shorezone Structures Leading to Reduced Access**

Public trust lands and easements are held for the people of the respective states for the purpose of fishing, navigation, swimming, and other water-related recreation. Development of Shorezone structures that extend into the public trust and public easements, reduce lateral access, restrict the public right of travel along public easement areas, and limit Shorezone access.

**Reduced Boat Access to the Shorezone**

Boaters use the water near the shore in different ways, depending on the type of boat and recreational activity. Modification of existing and construction of new structures in the Shorezone may impede access to the near shore water or create use and safety conflicts. Motorized watercrafts have a high degree of maneuverability and can move to deeper water to avoid new or extended piers and buoys without significant safety concerns. Motorized watercraft users often are seeking a higher speed experience and may keep to the deeper water anyway. This will become more pronounced as compliance with the 600-foot no-wake zone improves. While safety may not be the primary concern for motorized watercraft, access to the shoreline remains a concern for this user group.

**Lateral Pedestrian Access Along the Shorezone**

Modifications of existing and construction of new structures that cross public easement or public trust areas in the Shorezone impede lateral passage of pedestrians along the shore. This includes piers, walkways, fences, and improper signage. The California public easement is the area between elevations 6228.75 and 6223’. The Nevada public trust is the area lakeward of 6223’. Public trust lands and easements are held for the people of the respective states for the purpose of fishing, navigation, swimming, and other water-related recreation. Development of Shorezone structures that extend into the public trust and public easements reduce lateral access, restrict the public right of travel along public easement areas, and limit Shorezone access.

As noted previously, "No Trespassing" signs constitute a non-physical barrier to Shorezone access when placed inappropriately in public areas. Lakefront property owners have a legitimate expectation of privacy that can be easily violated, intentionally or unintentionally, by public access. However, the placement of barriers, physical or not, that exclude the public from public places limits Shorezone access, thereby creating a negative impact. This situation is neither unique to nor created by any of the alternatives. It is a current problem that should be addressed regardless of which alternative is considered.

**Nearshore Navigation for Small Non-motorized Craft**

Users of small skiffs, canoes and kayaks typically travel closer to shore and will encounter increased travel difficulty with more and larger Shorezone structures. Pushing these users further out into the Lake increases the spatial conflicts with motorized watercraft and places these boat types in locations with greater danger from wind and waves. Access to the shoreline remains a concern for this user group. The limited access, in turn, impacts the ability of on-shore anglers to access productive offshore fishing waters.

**Obstacles to Top-Line Fishing**

Shorezone structures in prime fish habitat create obstacles to trolling and limit access to the portion of the shoreline most likely to contain fish. This impact occurs in direct proportion to the number and length of piers, and the overall size, density and location of buoy fields.
Generally, piers that extend beyond the pierhead line force anglers away from the shore, into less productive waters. New piers located in areas formerly affected by the prohibition on new Shorezone structures create this same effect. Buoys placed close together, particularly if located in large buoy fields that extend far into the Lake, create sufficient barriers to through travel to also force fishers out of the prime fishing spots, particularly during the boating season when boats occupy the buoys.

**Increased Motorized Boating Use**

This impact is positive for one user group and negative for a larger (majority) user group. Greater access to launching and mooring facilities is a positive aspect for the motorized-boating community. Lake Tahoe’s lack of launching facilities has been well documented and remains the main obstacle for this type of activity. However, increasing the number of motorized watercraft can negatively affect the quality of the recreation experience for those participating in typical beach activities: BBQ, reading, sunbathing, relaxing, swimming, etc. The negative aspect can be related to the noise generated by watercraft, the wakes generated, or sheer mass of numbers in the viewshed from the beach. Additionally, many persons seeking a solitary beach experience are often surprised when reaching the shoreline to find that the beach area is occupied by boaters accessing these areas via the lake, rather than hiking trails. The East Shore area beaches are an example of the competing user groups potentially affecting each other’s experience negatively.

**Upland Land Use Changes That Effect Existing Public Access**

Property values in the Tahoe Region have dramatically increased over the past five years. Lakefront property owners, like any others, seek the highest and best use of their property. As a result, there are lakefront properties that have converted from tourist accommodation uses to residential uses, a private marina open for public use has been converted to a private estate, and a restaurant that was originally an accessory use to a marina is now a private club. Though these properties were already privately owned, they did afford some level of public access to the Shorezone of Lake Tahoe. The loss of this type of public access is difficult to mitigate and in many instances, is not mitigated at all.

**Loss of Public Access to the Shorezone Due to Quit Claims and Lot-line Adjustments**

The loss of public access to the Shorezone via upland parcels, and lateral pedestrian access along the shoreline can be lost unintentionally and, sometimes, intentionally due to the ‘quit claiming’ of public access easements by government agencies, typically the local county or city. Original land subdivision maps, especially in California, parceled out land along the Shorezone when residential property lines were established. The interpretation of the intent of these parcels/easements (sometimes referred to as paper streets) is the subject of much debate between private property owners, the local jurisdictions and the general public. However, the result of the abandonment of these paper streets is not debatable; of concern is the loss of legal public access to, and laterally along, the Shorezone. The adjustment of private property lot lines, typically residential properties, has the same negative effect. Compounding the overall loss of access to the Shorezone is the location of these abandonments. Arguably, the greatest need for public Shorezone areas for recreation are within the urban areas of the Region, precisely the area where these quit-claims are occurring the most. These actions further limit the ability of the general public to access the shoreline of Lake Tahoe.

**Non-attainment of Summer Day Use PAOT Targets**

With the adoption of the Regional Plan package, TRPA established overall targets for PAOTs. The goal was to realize the development of facilities that require PAOTs, thus ensuring that a fair share of the Region’s resources are dedicated to recreation facility development versus commercial, residential or other urban uses. To date, PAOTs have been woefully underutilized; there are many reasons for this. Actions contemplated within
this DEIS that would hinder the allocation of PAOTs would have a negative effect on attainment of the Recreation Threshold; however, “Shorezone PAOTs” (i.e., those Shorezone uses requiring PAOTs) account for only 30 percent of all summer-day use PAOTs. Moreover, the vast majority of summer day-use PAOTs that have been allocated are for Shorezone uses. It is also important to note that private single-use and private multi-use Shorezone structures would not have PAOT allocations. Only Shorezone structures that are available to the general public would gain PAOT allocations. Therefore, in terms of meeting threshold attainment, as measured by PAOT allocations, restrictions on private piers have no effect. That said, the lack of private Shorezone structures may negatively impact public structures due to the increased demand for those structures that otherwise may have been met by private structures. This would likely impact the other recreation threshold standards for public access and high-quality recreation opportunities.

7-5. POTENTIAL RECREATION IMPACTS AND REQUIRE MITIGATION MEASURES

ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

The No Project Alternative would continue to review Shorezone projects under the current Code of Ordinances. This alternative does not allow new Shorezone structures in mapped or field verified prime fish habitats, or within 200 feet of designated spawning streams. The TRPA may permit new structures in marginal fish habitats. The current rules mitigate negative access issues for anglers, whether top-line trolling or fishing from the shoreline.

The evaluation criteria previously described in section 7.4 provides the basis for determining the significance of impacts to recreation. The following impacts have been determined to be significant when evaluated against the specific criteria described.

Although build-out projections indicate that Alternative 1 would result in the second lowest number of new Shorezone structures on the Lake, this alternative is expected to result in impacts to recreation if left unmitigated. Refer to Table 7-5 for the projected number of Shorezone structures under build-out conditions.

Relative to the other four alternatives, the Alternative 1 would result in less severe negative impacts (i.e., is a better alternative) than Alternatives 2, 3 and 5, but posses a greater level of impact than Alternative 4. Due to maintaining the current prohibition on structures in prime fish habitat and the mouths of spawning streams, Alternative 1 is the best alternative in terms of maintaining productive fishing waters free of obstacles for anglers, but overall ranks second in terms of attaining and maintaining the Recreation Threshold.

A dramatic increase in the numbers of motorized watercraft on Lake Tahoe is presumed to degrade the quality of the ‘beach recreation experience’. Relative to the other alternatives, Alternative 1 is in the middle in terms of providing additional regional boat launching capacity. It is unknown how many ‘new boaters’ would emerge under this alternative leading to a degraded beach experience. Additional watercraft launching capacity is a positive for the boating community and meeting the PAOT target for Shorezone structures.

Significant Recreation Impacts

7.1.1 Impact: The No Project Alternative would result in reduced lateral Shorezone pedestrian access.
Under Alternative 1, increased numbers of Shorezone structures, quit claims to public easements/parcels privatizing current public access, and the continuation of private signage and fencing would further reduce lateral pedestrian access along the Shorezone within the public easement and public trust areas. Restricting public access would be contrary to the TRPA Recreation Threshold and the Recreation Element of the Goals and Policies. The potential for reduced Shorezone access for pedestrians would result in a significant impact on recreation and this user group in particular.

To reduce limitations to pedestrian lateral access along the Shorezone, TRPA shall implement the following:

Mitigation Measure 7.1.1a: Pier designs shall be permitted that facilitate rather than impede pedestrian access along the shoreline. This includes maintaining open-pilling piers so that non-motorized watercraft could paddle under structures during low water conditions. TRPA pier design standards shall be amended to facilitate barrier-free design that allows public access past piers and other Shorezone structures. This includes the prohibition of storing recreation and other equipment underneath piers that interfere with pedestrian access.

Mitigation Measure 7.1.1b: TRPA shall develop a sign program, in cooperation with the California State Lands Commission, the Nevada Division of State Lands, and the California Tahoe Conservancy, in addition to all other public Shorezone property owners, which results in the installation of signs at key shoreline access points. The signs shall explain the rights of the public and the private property owner with respect to lateral access along the shoreline of the Lake, and encourage appropriate use of the lateral access. If necessary, TRPA should amend Code Chapter 26, Signs, to regulate signage in the Shorezone, such as “No Trespassing” signs that discourage persons from utilizing public trust lands and private lands containing public easements. The number of signs and the financial impact to the individual agencies is undetermined.

Mitigation Measure 7.1.1c: Fences that extend lakeward of high water, which are not for the protection of the health and welfare of the general public or are not approved by agencies having jurisdiction, shall be retrofitted pursuant to TRPA’s Code of Ordinances. Where retrofit will not remove the impedance to access, fences shall be required to be removed.

Mitigation Measure 7.1.1d: TRPA shall discourage local jurisdictions from abandoning or quitclaiming interests in parcels or easements that could provide public access. TRPA shall amend its Code to require as a condition of approval on any boundary line adjustment or lot consolidation dedication of public access where there is a loss of public access to the Lake and/or lateral access is affected.

7.1.2 Impact: The No-Project Alternative would interfere with non-motorized watercraft navigation.

Obstacles to nearshore non-motorized watercraft navigation are more pronounced during high water conditions when paddlers cannot cross under structures and are forced farther out onto the lake. Additionally, obstacles to nearshore navigation are assumed to be localized to the urban areas (areas with residential and commercial development) with numerous Shorezone structures, whereas long stretches of publicly owned land do not have as many structures that present burdensome obstacles to nearshore navigation. Therefore, this impact is localized to those areas of the shoreline where urban development is occurring and prime fish habitat is not present. The impact to nearshore navigation is significant in the Shorezone immediately adjacent to urban areas outside of prime fish habitat, but is less than significant in non-urbanized, prime fish habitat areas.
To reduce the impacts associated with non-motorized watercraft navigation along the Shorezone, TRPA shall:

Mitigation Measure 7.1.2.a: TRPA shall amend the Code of Ordinances to restrict all Shorezone structures from extending beyond the pier headline when such structures are proposed in urban areas outside of prime fish habitat.

7.1.3 Impact: The No Project Alternative would result in increased motorized-boating and degrade the quality of the beach recreation experience
Under Alternative 1, increased boating numbers may degrade the recreation experience along the Shorezone where public access beaches exist. The Recreation Threshold and Recreation Element of the Goals and Policies require maintaining a high quality experience, placing particular emphasis on the experience found along the undeveloped Shorezone. The impact is created by the noise generated, cumulatively, by motorized watercraft (total number of boats in a region of the lake) and by individual watercraft with large engines that produce high noise levels. The impact can also manifest from non-observance of the 600’ no-wake zone, which is also a safety concern.

To mitigate the regional impact to high quality undeveloped Shorezone due to increased boating on Lake Tahoe, TRPA shall implement the following:

Mitigation Measure 7.1.3a: TRPA shall provide or make available information on the 600 foot no-wake zone regulations and noise regulations pertaining to motorized watercraft at all public launching facilities and concessionaires that provide access to the use of watercraft (whether privately-owned or rented). The current pamphlet does not contain information concerning noise limitations for motorized watercraft. Appropriate information shall be made available to the general public as well as the boating public. The financial impact of this mitigation measure is undetermined.

Mitigation Measure 7.1.3b: TRPA shall encourage the States of Nevada and California to adopt the necessary regulations so that the Nevada Department of Wildlife and California Boating and Waterways can legally assist TRPA in enforcing the 600’ no-wake zone.

Mitigation Measure 7.1.3c: TRPA shall cooperate with the California Tahoe Conservancy, United States Forest Service and other public land acquisition agencies in establishing a mitigation program to implement EIP recreation programs to acquire additional high quality undeveloped Shorezone lands for full public access. A mitigation fee program shall apply to Shorezone permits and solely be used for acquisition of Shorezone property, or EIP projects on Shorezone parcels designed specifically to address the potentially degraded recreation experience due to increased boating activity. The calculation of mitigation fees is as yet undetermined, but assumed to be significant given the high cost of Shorezone parcel acquisition.

Implementation of these mitigation measures would reduce this potentially significant impact to a level that is less than significant.

Non-Significant Recreation Impacts
Nearshore non-motorized navigation would experience a less than significant impact due to the increase in Shorezone structures within non-urban stretches of shoreline and within prime fish habitat.
Beneficial Recreation Impacts

The No Project Alternative would produce the beneficial impact of preserving productive fishing waters free of new obstacles for top-line fishing.

ALTERNATIVE 2 – PROPOSED PROJECT ALTERNATIVE

Alternative 2 would result in the elimination of the prohibition on new Shorezone structures located in prime fish habitat, but stream mouth setbacks would be maintained. The TRPA Code of Ordinances would be revised based on the recommendations from the Shorezone Partnership Group, Shorezone Policy Committee, and TRPA staff. The goal of Alternative 2 is to assure that:

1) Littoral parcel owners have the ability to apply for a pier and sufficient buoys to access Regional Lakes;

2) All impacts can be mitigated; and

3) All applicable environmental thresholds would be attained.

A scenic point system is proposed to limit the size and number of Shorezone structures within a given area. Chapter 2 provides more project description detail for this alternative.

Build-out projections would result in the third-highest number of new Shorezone structures on the Lake of all proposed alternatives; this alternative is expected to result in impacts to recreation if left unmitigated. Refer to Table 7-5 for full build-out numbers.

Relative to the other alternatives, Alternative 2 may increase the severity of the impacts when compared to Alternatives 1, 4 and 5, but less severe than Alternative 3. Overall, Alternative 2 ranks fourth in terms of desirability for recreation threshold attainment and maintenance.

Significant Recreation Impacts

7.2.1 Impact: Alternative 2 would result in new Shorezone structures that will reduce lateral Shorezone pedestrian access.

Under Alternative 2, increased numbers of Shorezone structures, quit claims’ to public easements privatizing current public access, and the continuation of private signage and fencing would further reduce lateral pedestrian access along the Shorezone within the public easement and public trust areas. Restricting public access would be contrary to the TRPA Recreation Threshold and the Recreation Element of the Goals and Policies. The potential for reduced Shorezone access for pedestrians would result in a significant impact on recreation and this user group in particular.

In order to mitigate impacts associated with the loss of lateral pedestrian access, Mitigation Measures 7.1.1a through 7.1.1d presented above for Impact 7.1.1 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

7.2.2 Impact: Alternative 2 would interfere with non-motorized watercraft navigation

Obstacles to nearshore non-motorized watercraft navigation are more pronounced during high water conditions when paddlers cannot cross under structures and are forced farther out onto the lake. Additionally, obstacles to nearshore navigation are assumed to be localized to the urban areas (areas with residential and commercial development) with numerous Shorezone structures, whereas long stretches of publicly owned land do not have
as many structures that present burdensome obstacles to nearshore navigation. This impact is significant and is presumed to be localized to those areas of the shoreline where urban development is occurring.

In order to mitigate the impacts associated with obstacles to non-motorized watercraft navigation along the Shorezone, Mitigation Measure 7.1.2.a presented above shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

7.2.3 Impact: Alternative 2 would create obstacles to top line fishing.
Alternative 2 would result in significant impacts to top-line fishing by allowing Shorezone structures, such as buoy fields, within fish habitat. While structures such as piers may not present the same obstacles as buoy fields do, the locations of individual piers do have the potential to be a significant obstacle to top-line fishing. For this reason, all structures within fish habitat, specifically feed and cover habitat, need to be scrutinized to ensure that they do not increase obstacles to top-line fishing.

To reduce the impacts associated with structures in fish habitat creating obstacles to top-line fishing, TRPA shall require:

Mitigation Measure 7.2.3a: TRPA shall amend the Code of Ordinances to restrict structures, especially buoy fields, within fish habitat, specifically in feed and cover habitat, that would create obstacles to top-line fishing.

Implementation of these mitigation measures would reduce these potentially significant impacts to a level that is less than significant.

7.2.4 Impact: Alternative 2 would result in increased motorized-boating and degrade the quality of the beach recreation experience.
Under Alternative 2, increased boating numbers may degrade the recreation experience along the Shorezone where public access beaches exist. The Recreation Threshold and Recreation Element of the Goals and Policies require maintaining a high quality experience, placing particular emphasis on the experience found along the undeveloped Shorezone. The impact is created by the noise generated, cumulatively, by motorized watercraft (total number of boats in a region of the lake) and by individual watercraft with large engines that produce high noise levels. The impact can also manifest from non-observance of the 600’ no-wake zone, which is also a safety concern.

In order to mitigate the regional impact to high quality undeveloped Shorezone experiences due to increased boating on Lake Tahoe, Mitigation Measures 7.1.3a through 7.1.3c presented above for Impact 7.1.3 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Non-Significant Recreation Impacts
There would be no non-significant impacts on recreation with the Proposed Project Alternative.

Beneficial Recreation Impacts
There would be no beneficial impacts on recreation with the Proposed Project Alternative.
ALTERNATIVE 3 – NO FISH HABITAT RESTRICTIONS ALTERNATIVE

Under Alternative 3, all provisions of the TRPA Code of Ordinances would still apply, although the prohibition on Shorezone structures located in prime fish habitat and stream mouth setbacks would be eliminated. Chapter 2 provides more details concerning this alternative.

Under this alternative, full build-out would result in the highest number of new Shorezone structures on the Lake and is expected to have the greatest impacts to recreation. Alternative 3 represents the maximum buildout number of all Shorezone structures (100 percent). As can be seen by reviewing Table 7-5, Alternative 3 would result in the greatest number of new structures, which in turn would create the greatest number of obstacles for lateral pedestrian access, shoreline navigation for non-motorized boating, and top-line trolling. However, this alternative affords that greatest amount of access to the lake by the general public and private littoral property owners, which in turn poses the greatest risk to the high-quality beach recreation experience, due to the greater amount of boaters on the Lake. Overall, Alternative 3 poses the greatest severity of negative impacts to recreation relative to the other four alternatives.

Significant Recreation Impacts

Impact 7.3.1: Alternative 3 would result in new Shorezone structures that will reduce lateral Shorezone pedestrian access

Under alternative 3, increased numbers of Shorezone structures, quit claim’s to public easements privatizing current public access, and the continuation of private signage and fencing would further reduce lateral pedestrian access along the Shorezone within the public easement and public trust areas. Restricting public access would be contrary to the TRPA Recreation Threshold and the Recreation Element of the Goals and Policies. The potential for reduced Shorezone access for the activities listed above would result in a significant impact on recreation.

In order to mitigate impacts associated with the loss of lateral pedestrian access, Mitigation Measures 7.1.1a through 7.1.1d presented above for Impact 7.1.1 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Impact 7.3.2: Alternative 3 would interfere with non-motorized watercraft navigation

Obstacles to nearshore non-motorized watercraft navigation is more pronounced during high water conditions when paddlers cannot cross under structures and are forced farther out onto the lake. Additionally, obstacles to nearshore navigation are assumed to be localized to the urban areas with numerous Shorezone structures, whereas long stretches of publicly owned land do not possess numerous Shorezone structures that present burdensome obstacles to nearshore navigation. This impact is significant and is presumed to be localized to those areas of the shoreline where urban development is occurring.

In order to mitigate impacts associated with the interference of non-motorized watercraft navigation, Mitigation Measure 7.1.2a presented above for Impact 7.1.2 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Impact 7.3.3: Alternative 3 would create obstacles to top-line fishing

Alternative 3 would result in significant impacts to top-line fishing by allowing Shorezone structures, such as buoy fields within fish habitat. While structures such as piers may not present the same obstacles as buoy fields do, the location of individual piers does have the
potential to be a significant obstacle to top-line fishing. For this reason, all structures within fish habitat, specifically feed and cover habitat, need to be scrutinized to ensure that they do not increase obstacles to top-line fishing.

In order to mitigate impacts associated with the creation of obstacles to top-line fishing, Mitigation Measure 7.2.3a presented above for Impact 7.2.3 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Impact 7.3.4: Alternative 3 would result in increased motorized-boating and degrade the quality of the beach recreation experience.
Under alternative 3, increased boating numbers would degrade the recreation experience along the Shorezone where public access beaches exist. The Recreation Threshold and Recreation Element of the Goals and Policies require maintaining a high quality experience, placing particular emphasis on the experience found along the undeveloped Shorezone.

In order to mitigate impacts on recreation, Mitigation Measures 7.1.3a through 7.1.3c presented above for Impact 7.1.3 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Non-Significant Recreation Impacts
There would be no non-significant impacts on recreation with Alternative 3.

Beneficial Recreation Impacts
There would be no beneficial impacts on recreation with the No Fish Habitat Restrictions Alternative.

ALTERNATIVE 4 – PUBLIC STRUCTURES ONLY ALTERNATIVE

Alternative 4 would remove the prohibition on locating structures in prime fish habitat, but would retain the prohibition within 200 feet of a stream mouth used for fish migration. Only structures that allow general public access would be permitted. Chapter 2 provides more detail about this alternative. Build-out projections indicate that Alternative 4 would allow more new structures than Alternative 1, but fewer than Alternatives 2 and 3. Refer to Table 7-5 for full buildout numbers of new Shorezone structures. This alternative would provide access for the general public, but hinder the ability for private access. This hindrance may have the unintended effect of overwhelming public facilities due to the unavailability of private facilities that may lessen the demand for public facilities.

Overall, Alternative 4 poses the same level of negative impacts as Alternative 1; however, the impact is greater concerning PAOTs (fewer allocated), but is likely the best for access issues concerning maintaining lateral pedestrian Shorezone access, ensuring top-line fishing is free from obstacles, and navigation of non-motorized watercraft is not compromised.

Significant Recreation Impacts
Impact 7.4.1: Alternative 4 would result in new Shorezone structures that will reduce lateral pedestrian access
Under Alternative 4, increased numbers of Shorezone structures, quit claims to public easements privatizing current public access, and the continuation of private signage and fencing would further reduce lateral pedestrian access along the Shorezone within the public easement and public trust areas. Restricting public access would be contrary to the TRPA
Recreation Threshold and the Recreation Element of the Goals and Policies. The potential for reduced Shorezone access for the activities listed above would result in a significant impact on recreation.

In order to mitigate impacts associated with the loss of lateral pedestrian access, Mitigation Measures 7.1.1a through 7.1.1d presented above for Impact 7.1.1 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Impact 7.4.2: Alternative 4 interfere with non-motorized watercraft navigation
Obstacles to nearshore non-motorized watercraft navigation are more pronounced during high water conditions when paddlers cannot cross under structures and are forced farther out onto the lake. Additionally, obstacles to nearshore navigation are assumed to be localized to the urban areas with numerous Shorezone structures, whereas long stretches of publicly owned land do not possess numerous Shorezone structures that present burdensome obstacles to nearshore navigation. This impact is significant and is presumed to be localized to those areas of the shoreline where urban development is occurring.

In order to mitigate impacts associated with the interference of non-motorized watercraft navigation, Mitigation Measure 7.1.2a presented above for Impact 7.1.2 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Impact 7.4.3: Alternative 4 would create obstacles to top-line fishing.
Alternative 4 would result in significant impacts to top-line fishing by allowing Shorezone structures, such as buoy fields within fish habitat. While structures such as piers may not present the same obstacles as buoy fields do, the location of individual piers does have the potential to be a significant obstacle to top-line fishing. For this reason, all structures within fish habitat, specifically feed and cover habitat, need to be scrutinized to ensure that they do not increase obstacles to top-line fishing.

In order to mitigate impacts associated with the creation of obstacles interfering with top-line fishing, Mitigation Measure 7.2.3a presented above for Impact 7.2.3 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Impact 7.4.4: Alternative 4 would result in increased motorized-boating and degrade the quality of the beach recreation experience.
Under this alternative, increased boating numbers would degrade the recreation experience along the Shorezone where public access beaches exist. The Recreation Threshold and Recreation Element of the Goals and Policies requires maintaining a high quality experience, placing particular emphasis on the experience found along the undeveloped Shorezone.

In order to mitigate impacts on recreation, Mitigation Measures 7.1.3a and 7.1.3c presented above for Impact 7.1.3 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Non-Significant Recreation Impacts
There would be no non-significant impacts on recreation with the Public Structures Only Alternative.
**Beneficial Recreation Impacts**

There would be no beneficial impacts on recreation with the Public Structures Only Alternative.

**ALTERNATIVE 5 – REDUCED DEVELOPMENT ALTERNATIVE**

Based on the Fish Study Recommendations, TRPA would remove the prohibition on locating structures in prime fish habitat. However, in order to mitigate existing and additional development this alternative would only allow new private multiple-use structures where there is a net reduction in total permitted structure numbers (2:1 reduction) and new public structures where there is no increase in total permitted structure numbers (1:1 reduction). The Proposed Ordinances for Alternative 2 would be adopted to support the Reduced Development Alternative.

Overall, Alternative 5 would produce less severe impacts compared to Alternatives 2 and 3 but, slightly more severe than alternatives 1 and 4. Alternative 5 would allocate the fewest number of PAOTs, which translates into fewer public launching and mooring facilities. An unintended effect not allocating PAOTs (constructing public launching and mooring facilities) may be overwhelming existing public launching and mooring facilities because the demand for these types of facilities would not be met by private construction and further exacerbated by the requirement to reduce private structures overall.

Alternative 5 would likely lead to the fewest numbers of boats on the Lake due to the lack of launching facility expansion thereby presenting the least impact to the beach recreation experience. Additionally, Alternative 5 would produce the second fewest obstacles to Shorezone access concerning lateral pedestrian Shorezone access, top-line fishing obstacles, and navigation of non-motorized watercraft.

Among all of the alternatives, Alternative 5 ranks in the middle in terms of producing potential negative impacts impeding the attainment and maintenance of the Recreation Threshold.

**Significant Recreation Impacts**

**Impact 7.5.1:** Alternative 5 would result in new Shorezone structures that will reduce lateral Shorezone pedestrian access.

Under this alternative, increased numbers of Shorezone structures, quit claim’s to public easements privatizing current public access, and the continuation of private signage and fencing would further reduce lateral pedestrian access along the Shorezone within the public easement and public trust areas. Restricting public access would be contrary to the TRPA Recreation Threshold and the Recreation Element of the Goals and Policies. The potential for reduced Shorezone access for the activities listed above would result in a significant impact on recreation.

In order to mitigate impacts associated with the loss of lateral pedestrian access, Mitigation Measures 7.1.1a through 7.1.1d presented above for Impact 7.1.1 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

**Impact 7.5.2:** Alternative 5 would interfere with non-motorized watercraft navigation.

Obstacles to nearshore non-motorized watercraft navigation is more pronounced during high water conditions when paddlers cannot cross under structures and are forced farther out onto the lake. Additionally, obstacles to nearshore navigation are assumed to be localized to
the urban areas with numerous Shorezone structures, whereas long stretches of publicly owned land do not possess numerous Shorezone structures that present burdensome obstacles to nearshore navigation. This impact is significant and is presumed to be localized to those areas of the shoreline where urban development is occurring.

In order to mitigate impacts associated with the interference of non-motorized watercraft navigation, Mitigation Measure 7.1.2a presented above for Impact 7.1.2 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Impact 7.5.3: Alternative 5 would create obstacles to top-line fishing. Alternative 5 would result in significant impacts to top-line fishing by allowing Shorezone structures, such as buoy fields within fish habitat. While structures such as piers may not present the same obstacles as buoy fields do, the location of individual piers does have the potential to be a significant obstacle to top-line fishing. For this reason, all structures within fish habitat, specifically feed and cover habitat, need to be scrutinized to ensure that they do not increase obstacles to top-line fishing.

In order to mitigate impacts associated with the creation of obstacles interfering with top-line fishing, Mitigation Measure 7.2.3a presented above for Impact 7.2.3 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Impact 7.5.4: Alternative 5 would not allow TRPA to meet the Threshold Standard target of 2,000 Summer Day Use PAOTs allocated to Shorezone structures. Due to this alternative requiring that public Shorezone structures remove one structure for each new structure, resulting in no net increase in capacity, no Summer Day Use PAOTs could be allocated under this alternative. Private structures do not receive PAOT allocations. Other Shorezone uses would still receive PAOT allocations, such as water-oriented outdoor recreation concessions and tour boats, however, the pool of summer day-use PAOTs specifically reserved for marinas and boat launching facilities would not be allocated. This would be in direct violation of the Recreation Threshold standard ensuring that a fair share of the Basins resources are reserved for and used by recreation facility development, measured by PAOT allocations.

Due to the proposed regulations of this alternative resulting in no net increase in public facilities (capacity) and a net reduction in private and quasi-public facilities, there is no feasible mitigation for this alternative. Amendment of the Code of Ordinances to relieve the requirement for the allocation of 2,000 summer day-use PAOTs for launching and marina facilities would not be consistent with the Recreation Element of the Goals and Policies Plan.

Non-Significant Recreation Impacts
There would be no non-significant impacts on recreation with the Reduced Development Alternative.

Beneficial Recreation Impacts
There would be no beneficial impacts on recreation with the Reduced Development Alternative.