Chapter 15
PUBLIC HEALTH AND SAFETY

15.1 INTRODUCTION

This chapter identifies the potential environmental impacts on public health and safety that could result from implementation of Alternative 6. Public health and safety are not environmental factors, but it is important for public decision makers to consider how features of the proposed alternatives may affect health and safety issues.

Public health and safety within the Shorezone include numerous elements such as boating safety, personal watercraft safety, emergency access, source water, uniform building code, weather, spatial conflicts, and existing structures. The statistics noted in the DEIS point to a strong increase in boating accident trends. The evidence suggests that the increase results from a total increase in the number of boats in use. The data suggest that little of the increase can be attributed to navigational hazards such as structures; the increasing number of accidents is primarily associated with one watercraft colliding with another, rather than with other structures.

The current regulatory considerations for public health and safety are described in Section 15.1 of the DEIS and are not repeated here. Please refer to the DEIS.

15.2 EXISTING PUBLIC HEALTH AND SAFETY CONDITIONS AND TRENDS

Existing public health and safety conditions for Alternative 6 and public safety trends for Lake Tahoe are the same as those identified for the other alternatives. They are presented in Section 15.2 of the DEIS. Refer to the DEIS.

15.3 SUMMARY OF PROJECT ALTERNATIVES – ALTERNATIVE 6

As discussed in Chapter 2 of the DEIS, the different alternatives would have varied effects on Shorezone development at Lake Tahoe. Section 15.3 of the DEIS and Section 2.2 of this Supplemental DEIS contain a summary of the five originally proposed alternatives. Alternative 6 is summarized below.

ALTERNATIVE 6 – DENSITY-BASED, 230-PIER ALTERNATIVE

Alternative 6 implements a new approach to the authorization of pier construction, based on planned density of piers within specified shoreline types and a limited annual approval rate leading to no more than 220 private and 10 public (230 total) piers within the timeframe of the PATHWAY 2007 Regional Plan update (2027). Up to 10 new private piers may be
approved each year. Under this alternative, all private parcels that do not have an existing pier or deed restrictions related to access to a multi-use pier would be potentially eligible for a pier. Eligibility criteria also require that existing shoreland structures achieve a scenic contrast rating score of 25 or better and that current Best Management Practices (BMPs) are in place, among other provisions. Also, only multi-use piers could be approved in shoreline travel units that have not attained scenic thresholds. Owners of eligible parcels may apply for a new single or multi-use pier, the approval of which would be determined by the length of shoreline retired by the approval (i.e., approval of a pier would retire the parcel or parcels with access to the pier from future eligibility and first priority would be assigned to applications with the greatest length of retired shoreline). All piers must comply with design standards adopted by TRPA to ensure that scenic code requirements and thresholds are met.

Up to two buoys would be allowed on every private littoral parcel, as long as they could meet adjacent property setback, shoreline distance, and separation standards. All buoys must be set back at least 25 feet from the adjacent property line, as measured from the line extended into the water. They must be located no more than 350 feet from the high water shoreline, or within the shorezone area defined by the 6,219-foot contour line on the lakebed where shallow water makes achievement of the 350-foot distance from the high water shoreline impossible. The minimum separation distance between buoys must be 50 feet.

At public marinas, in common areas controlled by homeowners associations (or similar entities), or on public properties where piers are allowed, the buoys must be located within the area defined by the side property setback and shoreline distance standards. The maximum number of buoys would be determined by these dimensions and the minimum separation distance of 50 feet. Also, buoy fields controlled by homeowners associations may not contain more buoys than the number of participating homes in the association.

Only public boat launching ramps could be constructed under Alternative 6. Therefore, they would only be added where public street access to the shoreline is present with shoreland area that is suitable for the launch ramp use and other mitigation (e.g., sewer and water connection).

15.4 STANDARDS OF SIGNIFICANCE

The scientific and analytical basis for the evaluation of the public health and safety impacts of Alternative 6 is the same as that used for the other alternatives and is not repeated here. Refer to Section 15.4 of the DEIS.

15.5 POTENTIAL IMPACTS AND REQUIRED MITIGATION MEASURES

ALTERNATIVE 6 – DENSITY-BASED, 230-PIER ALTERNATIVE

Alternative 6 implements a new approach to the approval and placement of a limited number of new piers, buoys, and boat ramps in association with the timeframe of the PATHWAY 2007 Regional Plan. The approval of new piers would be directed by parcel eligibility and density criteria and would be implemented using a limited annual approval rate of up to 10
new private piers per year. Up to six new public boat ramps and 1,862 new buoys would be constructed. All new facilities would be required to comply with TRPA-adopted design standards to help ensure compliance with code and threshold requirements.

Alternative 6 would eliminate the prohibition on locating Shorezone structures located in prime fish habitat except for variable stream mouth setbacks. In addition, a boat sticker program is included in Alternative 6 that would collect funds in exchange for permitting of boats on the lake; those funds would be used for water quality monitoring for noise, administration, and enforcement activities.

**Significant Public Health and Safety Impacts**

*Impact 15.6.1: Alternative 6 could result in increased boating use and accidents.*

Use projections under Alternative 6 indicate an increase in the total number of annual boat trips from the 2004 estimate of 231,978 to an estimated 296,813 during the life of the Regional Plan update (through 2027). As noted in Section 15.4 of the DEIS, increased boat use would increase accidents, including increasing the risk of serious injury or fatalities. Of the total predicted boat trips in 2027, some of those would be rental craft, which would provide increased opportunities for public education regarding safety issues. The estimated increase in boat use raises the level of concern related to boating accidents and makes the success of existing educational and enforcement programs more fundamental to avoid significant impacts. State and local agencies with enforcement responsibilities would experience greater stresses on their resources sooner under this alternative. It would be necessary to obtain increased funding for public safety programs in order to meet increased enforcement responsibilities.

With the increase in boating activity, spatial conflicts also would increase. This would occur most dramatically closer to public access points (where personal watercraft tend to congregate) and in popular shoreline areas. As spatial conflicts increase throughout the Region, many regular boaters would likely adjust use patterns (time of day and location) to avoid a decreased recreational experience. However, peak weekend periods would continue to experience increased boating density and an increased risk of accident. While these expansions could create increased densities at entrance/exit points, environmental documentation prepared during individual project development is required to consider specific site conditions, identify this risk, and mitigate it if necessary.

To mitigate this potentially significant impact, the following mitigation measure, which was included as Mitigation Measure 15.1.1a in the DEIS, shall be implemented.

**Mitigation Measure 15.6.1a**: To minimize the potential impacts caused by an increase in boating, TRPA shall coordinate with the California Boating and Waterways and Nevada Department of Wildlife to legislate a 600 foot no wake zone on Lake Tahoe with each state. In addition, funds collected as part of the Lake Tahoe boat sticker program included in Alternative 6 will fund additional law enforcement and water quality needs on Lake Tahoe.

Implementation of this mitigation measure would reduce this potential significant impact to a level that is less than significant.
Non-significant Public Health and Safety Impacts

Alternative 6 could result in increased navigation hazards. This alternative would remove the fish prohibition limitations on construction of new and expanded facilities in prime fish habitat for a large portion of the Lake Tahoe shoreline. This would result in new Shorezone facilities in areas currently undeveloped, increasing the reliance on the Code provisions related to navigational hazards to avoid creating significant impacts. Other features of the proposed ordinance would include the scenic point system and required scenic BMPs intended to encourage the smallest new piers possible to meet the need; narrower, shorter piers would create fewer navigational obstacles.

The proposed ordinance would codify the current practice of allowing pier length extensions beyond the pierhead line in certain cases. As these structures can pose increased risk, reliance on the assessment of navigational hazards made by the Army Corps of Engineers prior to project approval would become crucial to avoid significant impacts to public safety. In the past, TRPA and Army Corps staffs have expressed the need to develop Tahoe-specific criteria for pier extensions that meet the statutory requirements of Section 10 of the Rivers and Harbors Act. As project application numbers and boating numbers increase, this need would increase as well. Developing these criteria could assist with the regional efforts at streamlining the project permitting process and would help minimize impacts to public health and safety. As a result, no significant impacts to navigation are expected under this alternative.

Beneficial Public Health and Safety Impacts

No beneficial impacts to public health and safety have been identified under Alternative 6.