# 1.10.4 Shorezone Subelement

#### Overview

Shorezone is a Subelement of the 1987 Regional Plan, but it is not a Threshold program area. This will remain the same in the Regional Plan Update. The shorezone of Lake Tahoe is of both local and national significance. The scenic quality of the shoreline is enhanced by a diversity of views that range from sandy beaches to isolated coves, rocky shorelines, and steep cliffs.

The shorezone, composed of the nearshore, foreshore, and backshore, is where the water meets the land. It is a dynamic place physically, biologically, and socially. It is naturally sensitive to both human and environmental pressure, yet it can be very resilient. In fact, the shorezone is dependent, to a degree, on certain natural disturbance factors to achieve a dynamic equilibrium.

Where the water meets the land is the focus of the majority of summer recreational activities in the Tahoe Region. Shorezone facilities such as marinas, boat ramps, and piers provide boat access to the water. Private structures in the shorezone provide access to Lake Tahoe for individual occupants of private residences as well as large numbers of Homeowners' or Property Owners' Association members.

Public beaches, whether developed or not, provide beach recreationists with a variety of experiences that meet their varied expectations. The shorezone accommodates sailors, water skiers, yachters, jet skiers, kayakers, canoeists, swimmers, anglers, walkers, sunbathers, and photographers. Regionally, it is also crucial for the survival of osprey, bald eagles, waterfowl, and Tahoe Yellow Cress (a sensitive plan that grows nowhere else except the shores of Lake Tahoe).

The shorezone is also the primary point at which pollutants from the land enter the waters of the Lake. Development practices in this zone are most likely to have an immediate effect on water quality if Best Management Practices (BMPs) are not implemented or are inadequate.

Finally, the shorezone is where the greatest majority of in-lake spawning occurs. Although the lake is a very large body of water, the appropriate substrate for most fish is only found in a narrow band within less than one third of the shorezone area.

Given the complexity and importance of shorezone functions, the Shorezone Subelement of the Regional Plan Update must provide guidance for managing this unique resource. Critical issues and impacts associated with development and use of the shorezone are addressed so that adequate measures are implemented to protect the Lake. The current goals and implementation strategies, including the recent adoption of the updated Shorezone Ordinances, are described below and will be identical for all alternatives.

## Alternative 1

### Summary

In October 2008, the TRPA Governing Board adopted significant changes to the shorezone ordinances. Prior to the updated ordinances, TRPA regulations prohibited the construction of new piers and shorezone structures in areas of the Lake defined as prime fish habitat. The updates lifted this prohibition. In order to continue to provide appropriate protection of the shorezone resource. TRPA also adopted new shorezone development standards. On the California side of the Lake, however, the Lahontan Regional Water Quality Control Board maintains its prohibition of new piers and shorezone structures in prime fish habitat, and this standard still governs there.

The direction provided in the Shorezone Subelement supports the attainment and maintenance of other threshold resources such as Water Quality, Soils, Stream Environment Zone, Recreation, Vegetation, Scenic Resources, and Community Design.

#### **Goals and Policies**

The one goal and 15 policies of the Shorezone Subelement provide management direction on shorezone structure development and placement, protection of the unique ecosystems and natural resources of the shorezone, public access to the lake, and the recreational use of the lake. These goals and policies are further implemented through the TRPA Code of Ordinances (Chapters 50-56) and Plan Area Statements and are further explained below.

## Implementation Measures

Regulations regarding shorezone management are primarily presented in the Shorezone Provisions of the Code Chapters 50 (The Shorezone), 51 (Permissible Uses & Accessory Structures), 52 (Allocation of Shorezone Development), 53 (Shorezone Project Review), 54 (Project Findings and Development Standards), and Appendix A of Chapter 54 (Shorezone Best Management Practices). Management provisions for shorezone include minimizing disturbance and establishment of the following:

- location, placement, and size standards for new piers and buoys
- standards for repair, modification, and expansion of existing shorezone structures
- the requirement for implementation of shorezone BMPs
- the requirement to implement mitigation for scenic impacts in the shorezone and the shoreland (defined in the Code as 300 feet landward of high water)
- a scenic mitigation fund for scenic restoration projects
- a mitigation fund to improve public access

In addition to those listed above, other management provisions in the Code that affect the shorezone include Chapters 79 (Fisheries), which establishes the requirement for boat inspections and boat ramp closures to ensure that aquatic invasive species are not inadvertently introduced into the Lake's ecosystem. Other plans and programs that directly affect the shorezone include the implementation of the Blue Boating program and the shorezone adaptive management program.

The goal of the updated amendments is to limit shorezone development to a level that would have minimal environmental impact. The method of achieving this is the implementation of up-front environmental protection features including the phasing-in of development, making approvals contingent upon meeting specific environmental protection and mitigation targets, and the design of new structures that promotes attainment and maintenance of Thresholds.

The key components of the updated Shorezone Ordinances are detailed below:

- Total number of new piers allowed for public-use is limited to a maximum of 10.
   New private-use piers are limited to five annually. A performance-based review system would be used in allocating pier development each year with preference given to multiple-use pier applications that retire the greatest amount of linear lake frontage from shorezone development.
- Adoption of updated pier design standards to minimize adverse impacts on scenic quality. Emphasis is put on visible mass and establishment of a maximum cap for single use and multi-use piers. In addition, the mass of pier structures is required to be mitigated at 1:1 for attainment units and 1:1.5 for non-attainment units. The mitigation would be applied in the shorezone before the shoreland.
- Adoption of standards for density criteria that limit the maximum number of piers based on the shorezone landscape character type within a given scenic unit.
- Implementation of a Lake Tahoe Public Access Fund that mitigates adverse impacts to recreation and public access associated with construction of piers.
- Recognition of existing buoys based on the presentation of a valid permit issued by federal or state agencies with appropriate jurisdiction
- Adoption of a streamlined buoy permitting process and an annual buoy fee allocates revenue among various programs for compliance, monitoring, and scenic mitigation.
- Requirement that buoy floats and chains be inspected and maintained to prevent loss or damage to boats. Owners must provide proof of inspection and maintenance.
- Prohibition of any new public or private breakwaters, jetties, rock crib piers, or sheet pile piers.
- Prohibition of fence construction below the high-water line (unless findings can be made that clearly demonstrate a public health and safety benefit).
- Creation of Shorezone Preservation Areas to protect large portions of pristine shoreline from future development to the maximum extent possible.
- Creation of a boat pollution reduction program called the Blue Boating Program.
   The program is intended to provide early mitigation to address the environmental impacts associated with increased boating in Lake Tahoe and will require that engines be tuned to Tahoe's elevation.
- Creation and expansion of a program to intercept, reduce, and/or eliminate the incidence of exotic (non-native) aquatic plant, invertebrate, and fish species.
- Establishment of a 7-mph speed limit in Emerald Bay to reduce the incidence and concentration of polycyclic aromatic hydrocarbons and other hydrocarbons which are fuel oxygenates formed by combustion motors.

## Alternatives 2, 3 and 4

Because the Shorezone Ordinances were so recently adopted and represent the Agency's best measures to protect shorezone resources, there are no changes proposed to the Goals, Policies, and Implementation Measures. Furthermore, there are no differences between the "no action" and the "action" alternatives.

