

Chapter 54

DEVELOPMENT STANDARDS

LAKEWARD OF HIGH WATER

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54.0 Purpose: The Shorezone Subelement, Conservation Element of the Goals and Policies requires TRPA to regulate the placement of new piers, buoys and other structures in the nearshore and foreshore to avoid degradation of fish habitats, creation of navigation hazards, interference with littoral drift, interference with the attainment of scenic thresholds and other relevant concerns. The Goals and Policies also requires TRPA to conduct studies, as necessary, to determine potential impacts to fish habitats and apply the results of such studies and previous studies on shoreline erosion and shorezone scenic quality in determining the number of, location of, and standards of construction for facilities in the nearshore and foreshore. The Shorezone Subelement indicates that provisions should be made to allow multiple-use piers when such uses are intended to reduce the number of single use piers on adjoining properties. This chapter sets forth standards and provisions in accordance with these policies.

54.1 Applicability: All projects and activities in the nearshore or foreshore of any lake or in lagoons in the Region shall comply with the standards and provisions set forth in this chapter.

- 54.2 Review Of Support Facilities: Whenever review of a structure, use or activity is required pursuant to the terms of this chapter, review shall encompass the structures, uses and activities in the backshore, nearshore, foreshore and on the adjacent littoral parcel to ensure adequacy of all facilities related to the new or expanded structure, use or activity.
- 54.3 Fish Habitat And Spawning Study: TRPA shall prepare a study assessing the impacts resulting from the construction and use of structures, including mooring buoys, on fish habitat and spawning areas in Lake Tahoe and the mouths of its tributaries. The study shall also evaluate and recommend methods for restoring fish habitat.
- 54.3.A Schedule For Completion Of Study: The study required pursuant to this section shall be completed in accordance with the following schedule:
- (1) Funding shall be secured by December 31, 1987. (2) The final report shall be completed by October 31, 1989.
- 54.3.B Reconsideration of Location Standards: within 90 days of a determination by TRPA that funding will not be secured by December 31, 1987 or the report completed by October 31, 1989, but not later than January 24, 1990, TRPA shall reconsider the standards set forth in Subsection 54.3.A(2) and (3) for piers, in Subparagraph 54.5.A(2) for boat ramps, in Subparagraph 56.A(2) for mooring buoys, and in subparagraph 54.7.A(2) for floating docks and platforms.
- 54.4 Piers: Where otherwise allowed pursuant to Chapters 51 and 52, the placement and design of piers shall conform to the following standards:
- 54.4.A Location Standards: Location standards are:
- (1) A maximum of one pier may be permitted per littoral parcel existing on July 1, 1987.
 - (2) The placement of piers shall be prohibited within 200 feet of the stream inlets of the following creeks and rivers:
 - (a) Third Creek;
 - (b) Incline Creek;
 - (c) Wood Creek;
 - (d) Slaughterhouse Creek;
 - (e) Upper Truckee River;
 - (f) Taylor Creek;
 - (g) Tallac Creek;
 - (h) Cascade Creek;
 - (i) Eagle Creek;
 - (j) Lake Tahoe Tributary at Mouth of Paradise Flat;
 - (k) Lonely Gulch Creek;

- (l) Meeks Creek;
 - (m) General Creek;
 - (n) McKinney Creek;
 - (o) Quail Creek;
 - (p) Madden Creek;
 - (q) Blackwood Creek;
 - (r) Ward Creek;
 - (s) Truckee River;
 - (t) Dollar Creek;
 - (u) Watson Creek;
 - (v) Griff Creek;
 - (w) Baldy Creek; and
 - (x) Snow Creek.
- (3) The placement of piers shall be prohibited in areas identified as "Feeding And/Or Escape Cover Habitat," "Spawning Habitat" or "Areas Targeted For Habitat Restoration" on TRPA's Prime Fish Habitat map, adopted on April 26, 1984 or as amended, except when a boat ramp is removed in conjunction with a new pier application within the same project area and there is a net reduction in habitat disturbance to the areas identified above. When an existing boat ramp is removed to construct a pier, the shorezone use should be considered existing; however, the proposed pier shall be considered a new structure.[§]
- (4) Piers shall not extend beyond lake bottom elevation 6219.0 feet, Lake Tahoe Datum, or beyond the pierhead line, whichever is more limiting. The pierhead line is established as depicted on the TRPA Shorezone Tolerance/Pierhead Line Maps.
- (5) The setback for existing piers shall be five feet and for new piers it shall be 20 feet. Piers shall be placed within the setback lines established by TRPA. TRPA shall establish the setback lines by measuring the applicable distance inward from each property line along the high water line. From this point, a setback line shall be projected lakeward and perpendicular to the tangent of the shoreline. TRPA may adjust angle of projection to compensate for unique circumstances such as a small cove.
- (6) The standards set forth in Subparagraphs (1), (4) and (5), above, may be waived for piers recognized by TRPA as multiple-use pursuant to Section 54.8.

[§] Amended 9/27/00

54.4.B Design And Construction Standards: Design and construction standards are:

- (1) The width of piers shall be a maximum of 10 feet, which shall include all appurtenant structures except for a single low-level boat lift and a single catwalk. A catwalk below the level of the main deck, and not exceeding three feet in width by 45 feet in length, may be permitted. Additional width for a single catwalk may be permitted where TRPA finds it is necessary to facilitate barrier free access but at no time shall the entire width of the pier and catwalk exceed 13 feet. A low level boat lift with forks not exceeding 10 feet in width may be permitted.
- (2) Pier decks shall not extend above elevation 6232.0 feet, Lake Tahoe Datum. Boat lifts, pilings, and handrails and other similar safety devices, shall not extend more than four feet above the pier deck. Pier decks may extend up to elevation 6234.0 feet in limited situations where TRPA finds that the additional height is necessary for safety reasons or that local wave characteristics represent a real threat to the integrity of the structure.
- (3) To permit free circulation of water, piers shall be floating, or shall be built on an open piling foundation, but in no case shall a pier be supported on a foundation that is less than 90 percent open.
- (4) Superstructures shall not be permitted on any lake or lagoon in the Region unless the structure is assured to be removed upon discontinuation of the use or the need for the structure; and it is either:[§]
 - (a) for the purpose of conducting research identified in the Environmental Impact Program or conducting ongoing monitoring of environmental conditions identified in TRPA's monitoring program; the nature of the research or environmental monitoring requires an "over the water" location for data gathering instrumentation and is the minimal size necessary; and no watercraft will be housed in or on the superstructure; or
 - (b) required by a public agency for public health and safety purposes (such as a radio transmitter or a light beacon); by its very nature the superstructure requires an over the water location and is the minimum size necessary; and no watercraft will be housed in or on the superstructure.
- (5) Fueling facilities shall not be permitted on piers located adjacent to littoral parcels on which the primary use is residential.
- (6) The standards set forth in Subparagraph (1), above, may be waived for piers recognized by TRPA as multiple use pursuant to Section 54.8.

[§] Amended 02/25/98

54.5 Boat Ramps: When otherwise allowed pursuant to Chapters 51 and 52, the placement and design of boat ramps shall conform to the following standards:

54.5.A Location Standards: Location standards are:

- (1) A maximum of one boat ramp may be permitted per littoral parcel.
- (2) The placement of boat ramps shall be subject to the prohibitions set forth in Subparagraphs 54.4.A(2) and (3).
- (3) Boat ramps shall be placed only within the area prescribed in Subparagraph 54.4.A(5).
- (4) Boat ramps shall not extend lakeward beyond an elevation of 6219.0 feet, Lake Tahoe Datum, but not to exceed 75 feet in length as measured from high water line except for marine railways, which may be permitted additional length.
- (5) The standards set forth in Subparagraphs (1) and (3), above, may be waived for boat ramps recognized by TRPA as multiple-use pursuant to Section 54.8.

54.5.B Design And Construction Standards: Design and construction standards are:

- (1) Boat ramps shall not exceed 10 feet in width.
- (2) Boat ramps shall be constructed from prefabricated materials. Metal grates or rails are the preferred construction material. Pre-cast concrete shall be permitted only when metal grates are infeasible.
- (3) The standard set forth in Subparagraph (1), above, may be waived for boat ramps recognized by TRPA as multiple-use pursuant to Section 54.8.

54.6 Mooring Buoys: Where otherwise allowed pursuant to Chapters 51 and 52, the placement and design of buoys shall conform to the following standards:

54.6.A Location Standards: Location standards are:

- (1) A maximum of two mooring buoys may be permitted per littoral parcel.
- (2) The placement of mooring buoys shall be subject to the prohibitions set forth in Subparagraphs 54.4.A(2) and (3).
- (3) Mooring buoys shall not be located any further lakeward than necessary to provide for safe mooring, but not to exceed 350 feet lakeward of the high water line.
- (4) Mooring buoys shall be placed within the setback lines established by TRPA. TRPA shall establish the setback lines by measuring 20 feet inward from each property line along the highwater line. From this point, a setback line shall be projected

lakeward and perpendicular to the tangent of the shoreline. TRPA may adjust angle of projection to compensate for unique circumstances such as a small cove.

- (5) Mooring buoys shall display a TRPA Buoy Identification Tag at all times.[§]
- (6) The standards set forth in Subparagraphs (1) and (3) may be waived for mooring buoys recognized by TRPA as multiple-use pursuant to Section 54.8.

54.6.B Design And Construction Standards: Mooring buoys shall comply with the construction specifications set forth in the California Waterway Marking System or as other wise recommended by the U. S. Army Corps of Engineers or Coast Guard.

54.7 Floating Docks And Platforms: Where otherwise allowed pursuant to Chapters 51 and 52, the placement and design of floating docks and platforms shall conform to the following standards:

54.7.A Location Standards: Location standards are:

- (1) A maximum of one floating dock or platform may be permitted per littoral parcel.
- (2) The placement of floating docks or platforms shall be subject to the prohibitions set forth in Sub paragraphs 54.4.A(2) and (3).
- (3) Floating docks and platforms shall not extend beyond lake bottom elevation 6219.0 feet, Lake Tahoe Datum, or beyond the pierhead line, which ever is more limiting.
- (4) Floating docks and platforms shall be placed only within the area prescribed in Subparagraph 54.4.A(5).
- (5) The standards set forth in Subparagraphs (1) and (4), above, may be waived for floating docks and platforms recognized by TRPA as multiple-use pursuant to Section 54.8.

54.7.B Design And Construction Standards: Design and construction standards are:

- (1) Floating docks and platforms shall not exceed an area of 100 square feet or a dimension along any side of 15 feet.
- (2) Floating docks and platforms shall not project more than three feet above the surface of a lake or other body of water.
- (3) Floating docks and platforms attached to a pier shall conform to the standards set forth in Subsection 54.4.B.

[§] Amended 04/24/02

- (4) Superstructures shall not be permitted on floating docks or platforms.
- (5) The standard set forth in Subparagraph (1) above, may be waived for floating docks and platform recognized by TRPA as multiple-use pursuant to Section 54.8.

54.8 Multiple-Use Facilities: Where otherwise allowed pursuant to Chapters 51 and 52, the placement and design of piers, boat ramps, mooring buoys, and floating docks and platforms designed to serve individuals on a multiple- or commercial-use basis shall conform to the following standards. If any such structure is accessory to a marina, the provisions of Section 54.12 also shall apply.

54.8.A Limitations On Single-Use Facilities When Served By Multiple-Use Facilities: No facility shall be approved which is intended for the use of one individual or family and guests if the following circumstances apply:

- (1) Proposed Residential Development: Where the littoral parcel is part of a residential land development which is being developed for use by, or sale or lease, to more than one person or family;
- (2) Existing Residential Development: Where the littoral parcel is held in common ownership by owners of parcels within a residential land development, or by an association representing them, or by a person for use of such owners; or
- (3) Littoral Property Owners Within An Area Of Common Ownership: Where individual lots fronting the shoreline are within a residential land development served by multiple-use facilities, such as described in Subparagraphs (1) and (2) above.

54.8.B Location Standards: Multiple-use facilities shall comply with the location standards set forth in Subsection 54.4.A for piers, Subsection 54.5.A for boat ramps, Subsection 54.6.A for mooring buoys, and Subsection 54.7.A for floating docks and platforms; except that, for facilities recognized by TRPA as multiple-use pursuant to Subsection 54.8.D, the location standards set forth in Subparagraphs 54.4.A(1), (4) and (5), Subparagraphs 54.5.A(1) and (3), Subparagraphs 54.6.A(1) and (3) and Subparagraphs 54.7.A(1) and (4) shall serve as guidelines.

54.8.C Design And Construction Standards: Multiple-use facilities shall comply with the design and construction standards set forth in Subsection 54.4.B for piers, Subsection 54.5.B for boat ramps, Subsection 54.6.B for mooring buoys and Subsection 54.7.B for floating docks and platforms; except that, for facilities recognized by TRPA as multiple-use pursuant to Subsection 54.8.D, the design and construction standards set forth in Subparagraph 54.4.B(1), Subparagraph 54.5.B(1), and Subparagraph 54.7.B(1) shall serve as guidelines.

54.8.D Recognition Of Facilities As Multiple-Use: Facilities recognized by TRPA as multiple-use are subject to the following provisions:

- (1) Deviation From Standards: Deviation from those standards identified in Subsections 54.8.B and 54.8.C as guidelines for

multiple-use facilities, shall be allowed only if TRPA recognizes such facilities as multiple-use. The extent of deviation from the standards shall be approved by TRPA and shall be dependent on:

- (a) The reduction in development potential of shorezone facilities associated with the application such that the facility will be shared by other littoral property owners; and
- (b) The number of people utilizing the facility or the extent to which the facility is available for general public use.

- (2) Reductions In Development Potential: Reductions in development potential shall be established through the recordation by the owner of permanent deed restrictions or other covenants running with the land, reflecting use agreements and development limitations approved by TRPA on the affected properties.

54.9 Safety And Navigation Devices: New safety and navigational structures may be permitted only upon the recommendation of the Army Corps of Engineers or the Coast Guard.

54.10 Structures And Uses In Lagoons And Lakes Other Than Lake Tahoe: All projects and activities permitted by this chapter in the nearshore and foreshore of Lake Tahoe may be permitted by TRPA in lagoons and other lakes in the region pursuant to the permissible use regulations set forth in the plan area in which the project or activity is located. The location, design and construction standards for such structures shall be determined using the standards in this chapter as guidelines. These standards may be established in memorandums of understanding between TRPA and appropriate homeowner associations.

54.11 Jetties, Breakwaters, Rock Cribs And Fences: Jetties, breakwaters, rock cribs and fences may be permitted as follows:

54.11.A Location: Jetties, breakwaters, and rock cribs shall not be permitted in locations where beach erosion or loss of sediment from the shorezone is likely. Fences shall not be permitted lakeward of the high water line of any lake or body of water except to protect the health or 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 and provided such fences are approved by agencies having jurisdiction.

54.11.B Design And Construction Standards: The design, construction and maintenance of jetties, breakwaters and fences shall comply with the following standards:

- (1) Except as provided in Subparagraph 54.11.B(2), jetties and breakwaters shall have openings which allow adequate free circulation of water and sediment.
- (2) No jetty or breakwater shall be a solid or nearly solid structure unless TRPA finds that it will not interfere with littoral processes, cause shoreline erosion, or harm water quality or clarity and;

- (a) The solid or nearly solid jetty or breakwater is a necessary part of a marina for which TRPA has approved a master plan; or
 - (b) The solid or nearly solid jetty or breakwater is necessary to protect the safety of persons using a public boat launching facility.
- (3) The size, number and locations of openings in jetties or breakwaters shall be sufficient to avoid interference with littoral drift, shoreline erosion, harm to underlying land and harm to water quality and clarity.
 - (4) Fences in the nearshore or foreshore shall be at least 90 percent open and shall be maintained to be kept free of debris.
 - (5) Rock and other material for construction of structures permitted under this subsection shall not be obtained within the shorezone or lakezone in the region.

54.11.C Report: In order to provide the information required for the findings for the structures described in Section 54.11 TRPA shall use the procedures set forth for environmental assessments in Chapter 5.

54.12 Marinas: Marinas may be permitted as follows:

54.12.A Location: Where otherwise permitted by this Code, applications for new marinas and major expansions of existing marinas shall include an EIS pursuant to Chapter 5 and a master plan pursuant to Chapter 16. At a minimum, the EIS shall assess potential impacts on beach erosion, prime fish habitat, water quality and clarity. The EIS also shall determine the public need for such facilities.

54.12.B Boat Access: Marinas are encouraged to provide public boat launching facilities. All commercial and tour boat facilities shall be located within a marina facility.

54.12.C Marina Support Facilities: All new marinas and expansions of more than 10 boat slips in existing marinas shall comply with the standards listed below. TRPA may require projects of modifications of existing marinas to comply with these standards as conditions of approval.

- (1) Public restrooms, fueling facilities, chemical fire retardant distribution system, trash receptacles, and pump-out facilities for boat sewage shall be provided at commercial marinas and harbors;
- (2) Boat washing facilities if any, shall be connected to a sewer system or an acceptable alternate shall be provided;
- (3) Gas pumping facilities shall include emergency and standard shut-off systems to avoid gas leakage to the Lake;

- (4) Adequate parking shall be provided to accommodate all uses and activities associated with a marina; and
- (5) Water treatment system for waters contained within marinas shall be provided.

54.12.D Monitoring Information Requirements: Monitoring of water quality, current patterns and intensities, wind patterns, shore alterations, and any other conditions which may be altered by the construction of the marina may be required by TRPA for a reasonable period after completion of the construction. Remedial measures shall be required to mitigate adverse impacts, when necessary.

54.13 Shoreline Protective Structures: Shoreline protective structures may be permitted as follows:

54.13.A Findings: Shoreline protective structures may be approved by TRPA to prevent erosion in the backshore if TRPA makes the following findings:

- (1) Structures in the backshore or environmental threshold values will be enhanced by the construction and maintenance of the protective structures;
- (2) The protection of structures in the backshore or the enhancement of environmental threshold values more than offset the adverse environmental effects of the construction and maintenance of the shore line protective structures;
- (3) Each protective structure has been designed to be sloping and permeable; provided, however, that this finding is not necessary if TRPA concurrently makes the findings required under Subparagraph 54.13.B(1); and
- (4) Each protective structure has been designed so that backshore erosion on adjacent properties will not be accelerated as a result of the erection of the protective structure.

54.13.B Design And Construction Standards: Design and construction standards are:

- (1) Sloping permeable revetments are the preferred design for shoreline protective structures. Bulk heads, gabions and other vertical revetments shall not be permitted unless, in addition to the findings required under Subsection 54.13.A, TRPA finds that:
 - (a) A sloping permeable revetment is not feasible; and
 - (b) The alternative structure will not cause significant erosion or modification of the foreshore.
- (2) Where a shoreline protective structure is necessary, it shall be of sufficient strength and depth to prevent movement of backfill materials into lake waters; and

- (3) Shoreline protective structures shall be constructed of natural materials to blend with the surrounding backshore or, if man-made materials are necessary, will be of earthtone colors.

54.14 Filling And Dredging: Filling and dredging are permitted as follows:

54.14.A Artificial Beach Replenishment: If beaches are to be artificially replenished, only non-organic, chemically and biologically inert material shall be used. The preferred method of beach replenishment is bypass dredging.

54.14.B Filling: There shall be no fill placed in the lakezone or shorezone, except as otherwise associated with approved bypass dredging, shoreline protective structures, or beach replenishment projects, or as otherwise found by TRPA to be beneficial to existing shorezone conditions or water quality and clarity.

54.14.C Dredging: There shall be no removal or materials within the lakezone or shorezone, except at those locations where such removal or rearrangement is found by TRPA to be beneficial to existing shorezone conditions, and water quality and clarity. Maintenance dredging may be permitted where TRPA finds it is necessary to continue an existing use.

54.14.D Temporary Structures in Lieu of Dredging: Where it is found that low lake levels prevent or significantly reduce access to open water recreation and that dredging cannot be permitted pursuant to Subsection 54.14.C., temporary structures that extend beyond lake bottom elevation 6219 feet or the pier headline may be permitted to facilitate lake access. Permits for the temporary use of structures shall be subject to the provisions outlined in Chapter 7, with the exception that the temporary use of a structure may be extended indefinitely provided that TRPA finds that lake levels remain at or below a level that prevents or significantly reduces lake access. The use of temporary structures in conjunction with single use piers shall not be allowed.

54.14.E Disposal Of Dredged Material: Where dredging, other than bypass dredging, is permitted, spoil materials shall not be deposited in the lakezone or shorezone, in wetlands or within the 100 year flood plain of any tributary to a lake except as provided under Subsection 54.14.B.

54.14.F Prohibition of Siltation of Spawning Habitat: No dredging, filling, or other project may be permitted which results in the permanent siltation of spawning habitat. Temporary siltation associated with construction activities may be permitted provided that the spawning area disturbed is subsequently restored within 60 days or before September 15 when the spawning season begins, whichever is sooner.

54.15 Man-made Lagoons And Artificial Islands: Construction of man-made lagoons connected to any lake in the Region and artificial islands is prohibited.

54.16 Motorized Watercraft: The operation of motorized watercraft shall be subject to the following standards except that operation of watercraft for the protection of public health and safety shall be exempt from the standards.

- 54.16.A No Wake Zone: The creation of a wake or speeds in excess of 5 MPH by motorized watercraft within 600 feet of the waterline of Lake Tahoe shall be prohibited.
- 54.16.B Prohibition of Motorized Watercraft on the Tributaries of the Region: The operation of motorized watercraft on the tributaries of the Region, exclusive of other lakes in the Region, shall be prohibited. The prohibition shall commence at a line across the mouth of the tributary representing an extension of the existing water line across the mouth.