



# Lake Tahoe Shoreline Plan

## Policies Under Consideration

V7

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Table of Contents

Concepts Under Consideration..... 1

Moorings ..... 1

Buoys ..... 2

Piers ..... 5

Floating (Swim) Platforms ..... 13

Boat Ramps ..... 13

Marinas ..... 14

Dredging ..... 17

Overnight Anchoring ..... 17

No Wake Zone ..... 17

Concessions ..... 18

Non-motorized Boating ..... 19

Personal Watercraft ..... 19

Other Structures ..... 20

Low Lake Level Adaptation ..... 20

Tolerance Districts and Permissible Uses ..... 21

Public Trust Easement in CA ..... 21

Other Lakes (Fallen Leaf and Cascades) ..... 21

Tahoe Keys ..... 21

Green Infrastructure ..... 22

Environmental Improvement ..... 22

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## Concepts Under Consideration

The Shoreline Steering Committee has developed these concepts under consideration as preliminary consensus and the basis for progress. The Steering Committee will incorporate feedback from the public and the TRPA Governing Board and Regional Plan Implementation Committee to refine these concepts and develop the final package of recommendations.

### Moorings

#### Applicability

- A mooring could be a buoy, a boat slip, or a boatlift.

#### Moorings per Littoral Parcel

- Each littoral parcel can have two moorings at any one time. Littoral parcels would be allowed three permanent anchor blocks, but can only have 2 moorings at one time. The purpose of the three permanent anchor blocks is to avoid disrupting the lake bottom to relocate moorings.

#### Mooring of Motorized Boats

- No motorized boats may dock on the beach in fish spawning habitat.

#### Boat Slips

- No new private boat slips would be allowed except for public facilities and marinas.
- Marinas and public agencies could relocate boat slips if tied to environmental improvement.
- Adding boat slips or buoys at marinas and public agencies would constitute a project and go through a standard review process.
- Marinas and public agencies could exchange boat slips and buoys within their existing facilities and within their designated allocation for new buoys or boat slips. For existing facilities, moving from a buoy to boat slip would require a project application.

## Mooring Conversions

### Marine Railways

- Serviceable marine railways may convert to a buoy or boat slip, but not a pier.

## Buoys

### Enforcement

- Establish and implement a joint TRPA/State program of buoy compliance.
- Develop memoranda of agreement with the States and TRPA as a mechanism to facilitate enforcement.
- Recognize that 2008 funding may be available for future enforcement.

### Allocation of Potential New Buoys

- 1,430 additional buoys would be eligible for future permitting in addition to the buoys counted during the 2016 boating season.<sup>1</sup> Note, in order to give public land managers and marinas flexibility to choose a variety of mooring layouts, buoys may be changed to boat slips.
- Initially, TRPA will release 800 new buoys at the onset of implementation to be permitted.
- The remaining 630 new buoys would be placed in a reserve pool available for all potential owners at the onset of the program and to meet the Plan goals of low lake level adaptation, shifting some availability to the public and environmental improvement.
  - 330 of the 630 buoys would be reserved for marinas.
- Public agencies will also be provided an allotment from the reserve pool and could utilize a portion or all of this allotment as slips.
- Associations will be allowed to apply for new buoys in buoy fields. In the first five years of Shoreline Plan implementation, associations that have buoys for 50% or more of the applicable housing units are not eligible to apply for new buoys. For associations that are able to apply in the first five years, the request for new buoys can be up to a 20% increase of the total number of existing TRPA-legally-permitted moorings (buoys and slips) per year. These associations can submit one application to combine the five years. The total number of association moorings cannot exceed the

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<sup>1</sup> The environmental analysis will consider a total number of buoys of 6,316. This number is drawn from the 2008 program. The 2016 buoy survey identified 4,886 permitted and unpermitted buoys. In 2008, TRPA received 4,412 buoy applications (3,421 were approved with another 981 pending).

number of units, must comply with placement safety standards, and be within the grid system.

- Through an adaptive management review process, allocation of all buoys, including the reserve pool and allocation to associations, would first be revisited the year after the Threshold Evaluation Report is released. Future evaluation of buoy allocations would occur at least every 8 years thereafter.
- Once the mooring cap is reached, TRPA may consider allowing the trading and selling of mooring allocations between private property owners.

## Buoy Permitting

- First call, invite all TRPA permittees, both approved and pending, to come in to TRPA to review their buoy permits and rectify any outstanding permit conditions.
- Second call, TRPA will open up to new buoy applications.
- TRPA will only issue permanent buoy permits. No seasonal buoy permits will be issued.

## Buoys not within a Buoy Field

### Design Standards

- Buoys per littoral parcel
  - Up to two buoys allowed per single-family littoral parcel, as long as dimensional criteria such as setbacks are met. For constricted parcels that are unable to meet setback or spacing requirements, TRPA may adjust projection lines on a case-by-case basis.
- Location
  - Buoys may be located up to 600 feet waterward from elevation 6,220 feet measured horizontally.
  - Buoys must be located 20 feet from adjacent property boundaries and at least 50 feet from all legally existing buoys.
- Buoys within cove environments with interfering projection lines
  - Cove environment allows only 1 buoy per littoral parcel if applicant is not eligible based on projection lines. TRPA may adjust projection lines on a case-by-case basis.
  - Use same off-shore distance (located up to 600 feet waterward from elevation 6,220 feet) and proximity requirements (at least 50 feet from all legally existing buoys) for buoys.

## Legally Existing

- Recognition of existing buoys
  - For littoral parcels with existing buoys, TRPA would recognize buoys based on presentation of (a) a valid buoy permit issued by a federal or state agency with appropriate jurisdiction (i.e., USACE, California State Lands, or Nevada State Lands) or (b) clear evidence of the existence of the buoy(s) prior to 1972.
    - Up to 3 buoys allowed (approximately 61 parcels) for littoral lots  $\geq$  50 feet in width.
    - Up to 2 buoys allowed for littoral parcels  $<$  50 feet in width.
  - For non-littoral parcels, buoys placed prior to 1972 would be recognized only after the applicant has received authorization from the applicable California or Nevada state agency with jurisdiction at Lake Tahoe.
  - Recognized buoys would be required to conform to the location standards for new buoys described above, unless re-location that may be required would create unnecessary additional environmental impacts, and the existing buoy location does not unreasonably interfere with buoys being located by adjacent property owners. In any case, buoys must be located at least 50 feet from any other buoy or structure.

## Buoy Fields (including marinas)

### Design Standards

- Buoy fields should be designed in a grid using the same setback and spacing standards as for buoys (20 feet from adjacent property boundaries and at least 50 feet from all legally existing buoys) but may deviate from these standards based on site specific conditions including neighboring uses and structures, State agency compliance, Coast Guard consultation, navigation, substrate including obstacles, and bathymetry.
- All commercial and tourist buoys shall be subject to the same setbacks and grid spacing as homeowner associations or other associational entities.

### Low Lake Level Adaptation

- Provide for additional permanent anchors for low lake adaptation, either lakeward or laterally for legally established buoys. Applicants must consider a plan for the landward row, given that buoy blocks might be exposed when lake levels are low.

## Private Harbors

- Private harbors with inland lagoons associated with homeowner associations on Lake Tahoe include Fleur Du Lac, Elk Point, and Star Harbor.
- Like the Tahoe Keys, the moorage in these inland lagoons will be accounted for in the Shoreline Plan estimates of boat usage on Lake Tahoe. However, due to the small scale of these inland lagoons and lack of an architectural or development review body, their facilities will be subject to the regulations in the TRPA Code of Ordinances.
- Fees and mitigation will be applied consistently to all inland harbors, including the Tahoe Keys Property Owners Association. (Details of the mitigation and fees to be developed.)

## Low Lake Level Adaptation

- Allow private harbors to install permanent buoy anchors as low lake level adaptation strategy as part of a buoy field or in exchange for slips as a low lake level adaptation strategy, or when harbors are inaccessible due to sediment accumulation. Temporary buoys can be installed for up to two consecutive seasons with one renewal allowed as a low lake level adaptation. Temporary buoys cannot be in place for more than four consecutive seasons. Permanent buoys that replace slips will be counted towards the mooring cap.

## Buoys Associated with Concessions

- Concessions should moor motorized watercraft on permitted buoys.
- All buoys used for concessions need to be TRPA permitted legal buoys.

## Piers

### Applicability

- Fish spawning habitat: 2015 updated fish habitat maps using best available data will be adopted as part of the Shoreline Plan. Based on scientific input, the ban on new construction within fish habitat is not scientifically supported and should be lifted. Mitigation in spawning habitat will be required consistent with the environmental thresholds.

## Private Pier Distribution Objectives

This pier proposal aims to harmonize the following objectives:

- Provide a fair and reasonable system of access and fairly distribute access around the lake
- Incentivize and prioritize a system of access for multiple-use facilities
- Provide opportunity for single-parcel piers
- Provide flexibility in the location of water-dependent structures
- Develop a predictable and easy-to-understand system
- Maintain and attain environmental thresholds
  - Cap and distribute new piers geographically
  - Use a “go slow” allocation system
  - Manage and monitor shoreline scenic status (improvements and/or declines)
  - Avoid clustering (especially in Visually Sensitive areas, such as sandy beaches)
  - Reduce overall development potential

## Definitions

- Pier: A fixed or floating structure intended as a landing or mooring for water craft and either extending from the backshore to at least 10 feet beyond the high water elevation line, or extending into Lake Tahoe to a depth of 6,226.1 feet Lake Tahoe Datum (or a functionally similar depth on other lakes in the Region).
- Single-use pier: Also referred to as a Single-Parcel Pier. A pier that serves one littoral parcel (and retires no parcel as part of the application process).
- Multiple-use pier: a pier that serves more than one parcel.
- Multiple-parcel pier: a pier that retires pier development potential through deed restriction on one or more littoral parcels. A multiple-parcel pier may be built to either single- or multiple-use pier design standards.

## Pierhead Line

- TRPA digitized the waterward edge of the pierhead line for all areas around the Lake as depicted on existing hardcopy maps.

## General

- Provide incentives for development of multiple-use piers in lieu of single-use piers.
- For all littoral parcels served with a multiple-use pier, pier development potential must be retired through deed restriction for all but the pier-developed parcel. This would apply to both adjacent and non-adjacent parcels regardless of the number of owners.



## Incentives for Multiple-Use Piers

- TRPA will prioritize applications for piers based on the number of parcels served.
- The following additional incentives for multiple-use piers may be allowed:
  - additional length for catwalks;
  - one boat lift per littoral parcel, up to a maximum of four per multiple-use pier;
  - flexibility in pierhead design to accommodate multiple users; and
  - increased visual mass dependent upon number of parcels.
- Water depth or substrate slope will not be a required design standard for multiple-use piers.

## Eligibility Restrictions

- Littoral parcel is defined as a parcel that has fee ownership to high water.
- All private littoral parcels are eligible for a pier – including those which have access to a homeowners association pier – if the applicant meets the following criteria:
  - The parcel must not have an existing pier,
  - The parcel must not otherwise be deed restricted for a pier.
  - Structures cannot be located in stream mouth protection zones.
  - The parcel cannot be located within Shorezone Preservation Areas. Exceptions, subject to environmental review, possible for public piers.
  - Shoreline width is greater than or equal to 45 feet and therefore would meet side setback requirements.
  - Littoral property owners who have access to a homeowners association pier are eligible to apply for a multiple-parcel pier.
    - If the pier only serves one residential parcel (i.e. single-use design standards apply) then the applicant must retire development potential on 1 parcel to qualify, and if located in a Visually Sensitive area, the applicant must retire at least 2 parcels with at least one of the two in the same segment.
- Public drinking water intakes: within ¼ mile of water intakes, water purveyors will be notified and consulted on project conditions.

## Allocation and Distribution of Potential New Piers

### Allocation

- 10 public piers would be available for permitting.

- 128 private piers would be available for permitting over the life of the program contingent on threshold attainment, retiring pier development potential, or other access enhancements.
- Initially, TRPA would release 96 of the 128 piers to be permitted over a 16-year period.
- Up to 12 piers would be permitted every two years with any remaining balance rolling over to subsequent years (i.e. if 10 piers permitted in years 1 and 2, then 14 piers (12 + 2) would be available in years 3 and 4).
- The release of additional piers after the initial 16-year period would be contingent upon the number of parcels that retire future pier development potential. TRPA would release three new piers for every 8 parcels that retire future pier development.
- The 128 piers would be allocated 20 percent to single-parcel piers and 80 percent to multiple-parcel piers (those that retire development potential).
- Opportunities for single-parcel piers will be front-loaded, that is, more allocated in the early years to address pent-up demand and to allow multiple-use piers to organize, and then reduced in later allotments
- TRPA will review the implementation of the pier allocation plan, including monitoring the geographic distribution of new piers along with an evaluation of pier availability, under both the Threshold Evaluation process (every 4 years) and an eight-year pier and buoy permitting activity report.

## Distribution

- In Visually Sensitive areas, only multiple-parcel piers would be allowed.
- The 128 new private piers would be distributed around Lake Tahoe based on geographic divisions. Pier development within Visually Sensitive areas would be limited based on the percentage of Visually Sensitive shoreline within each quadrant as listed below:
  - California: 86 new piers (67% of 128)
    - Placer Quadrant: 58 new piers (67% of 86)
      - Up to 7 new piers (13% of 58) may be located within Visually Sensitive areas.
    - El Dorado Quadrant: 28 new piers (33% of 86)
      - Up to 6 new piers (22% of 28) may be located within Visually Sensitive areas.
  - Nevada: 42 new piers (33% of 128)
    - Washoe Quadrant: 21 new piers (50% of 42)
      - Up to 3 new piers (14% of 21) may be located within Visually Sensitive areas.
    - Douglas/Carson Quadrant: 21 new piers (50% of 42)

- Up to 3 new piers (18% of 21) may be located within Visually Sensitive areas.

## Prioritization of Permit Applications

- Permit applications for new piers would be collected annually by TRPA.
- If TRPA receives more single-parcel pier proposals than allotted in any given two-year allocation period, the single-parcel piers would be distributed by lottery.
- Multiple-parcel piers would be prioritized based on the following order:
  - Proposals that retire the most pier development potential (i.e. parcels) within the same scenic character type within the same scenic unit.
  - Proposals that retire the most pier development potential.
  - Piers located in less sensitive scenic character types (i.e. Visually Dominated is less sensitive than Visually Modified which is less sensitive than Visually Sensitive).
  - If a parcel has access to a homeowners association pier, it would have last priority in permitting.
- Permit applications that are not accepted after TRPA's permit prioritization assessment will be denied.

## Scenic BMPs

- For new piers: TRPA will require an initial 21 contrast rating (this is the baseline requirement) as part of the pier application. Following permit submittal, applicants would have 6 months to increase their contrast rating to 25 as part of project mitigation. TRPA will exempt property owners from the 25 contrast rating if it is not feasible to achieve 25.

## Multiple-use Design Standards

### Applicability

- Piers that serve more than one primary residence on one parcel or multiple parcels with primary residences may comply with multiple-use pier design standards.
- For single parcels that serve multiple units, including multi-family housing, condos, and home owners associations, the applicable pier design standards are listed below, based on the number of units served. In all such cases, only one boat lift would be allowed.
  - For 1-2 units, single-use design standards apply.
  - For 3-4 units, multiple use design standards apply with visual mass limited to 400 square feet.

- For 5-20 units, multiple use design standards apply with visual mass limited to 460 square feet.
- For more than 20 units, multiple use design standards apply with visual mass limited to 520 square feet.
- Piers that serve a single primary residence with multiple vacant littoral parcels must comply with single-use pier design standards but shall qualify for application priority and be drawn from the multiple-parcel allocation pool.

## Design Standards

- Length: The landward side of the pier catwalk can extend to elevation 6,219 feet or 30 feet waterward of the pierhead line, whichever is more limiting.
- Width: 15 feet wide, not including catwalks
- Multiple-use piers can have flexibility in the design of the pierhead to accommodate multiple users.
- Catwalks: 3 feet wide and length is dependent upon number of parcels:
  - If two parcels, then catwalks may be up to 30 feet long.
  - If more than two parcels, then catwalks may be up to 45 feet long.
- Boat lifts: One boat lift per littoral parcel allowed, up to a maximum of four per multiple-use pier.
- Visual mass
  - For 2 littoral parcels, visual mass would be limited to 400 square feet
  - For 3 littoral parcels, visual mass would be limited to 460 square feet
  - For 4 or more littoral parcels, visual mass would be limited to 520 square feet
- Boat and boat lift visual mass would not be included in the visual mass limitation; however, applicants would have to mitigate for boat and boat lift visual mass as part of the project.
- Similar to boats and boat lifts, pier railings, which are needed to meet safety requirements, are not included in the visual mass limitation; however, applicants would have to mitigate the visual mass as part of the project.

## Single-Use Design Standards

- Orientation: piers shall be constructed perpendicular to the shoreline.
- Length: new or existing piers may extend to elevation 6,219 feet or the pierhead line, whichever is more limiting. If an applicant needs additional pier length for functionality, TRPA standards would allow up to an additional 15 feet waterward of the pier headline if the drop in substrate

within the additional 15 feet is a minimum of 6 inches (minimum of 3 percent).

- Width: maximum width equals 10 feet.
- Visual mass: limited to 220 square feet for the pier, which includes catwalks up to 3 feet wide and 30 feet in length. The 220 square feet would not include visual mass of a boat and boat lift, but additional visual mass of a boat lift with a boat would still need to be mitigated.
- Location: A new pier should be located at least 40 feet from any other pier, measured from the pier head. Side setbacks for piers should be at least 20 feet for new piers and 5 feet for existing piers.
- Catwalks up to 3' in width and boatlifts are allowed.

## Public Piers

- TRPA will evaluate public pier design on a case-by-case basis. Therefore, design standards for public piers are not proposed.
- Public piers may not be used as permanent moorage.

## Commercial and Tourist Accommodation Piers

- A commercial use may be eligible for a new pier if the upland use is also commercial.
- A tourist accommodation use may be eligible for a new pier only if the upland use also includes a commercial use.
- For eligible piers that are open to the public, piers may be designed to multiple-use standards for 4 or more littoral parcels.
- For eligible piers that are not open to the public, piers may be designed to single-use design standards.
- Applications for new piers associated with commercial or tourist accommodation uses will be prioritized as part of the annual pier application and allotment process.

## Pier Relocation and Transfer

- Pier relocation is the replacement of an existing pier with a new pier in a different location on the same parcel. Pier transfer is the replacement of an existing pier with a new pier on a different parcel.
- Relocating and transferring piers to less sensitive areas is in the best interest of meeting the environmental thresholds.
- Piers may be relocated or transferred within the same scenic unit or to another scenic unit in attainment, but cannot transfer to another scenic unit that is out of attainment.
- Relocated and transferred piers should meet all location and design criteria for a new pier.

- TRPA will encourage pier owners to relocate piers away from stream mouths through project-specific incentives including but not limited to offering multiple-use design standards consistent with a 2-parcel pier or providing upland scenic credits.
- Boat lifts from the sending parcel may be relocated to the receiving parcel, regardless of the number of buoys already located on the receiving parcel. In any case, the total number of moorings on Lake Tahoe would not be increased based on a transferred pier.
- When a pier is transferred, the old pier should be fully removed and the area restored. The sending parcel should be deed-restricted from developing a future pier.
- For pier transfers, both the sending and receiving parcels should meet scenic BMP requirements for new piers.

## Pier Conversion

- Existing boat ramps may be converted to a pier. These piers would not be counted within the pier allocation.

## Expansions of Existing Piers

- Existing piers that conform to location and design standards may be expanded to the extent allowed for new piers.
- Existing piers that do not conform to location and design standards may not be expanded unless:
  - the expansion is limited to an existing boat house and does not increase the functional capacity of the pier;
  - the effect of the expansion is to increase contrast rating of the structure; and
  - the expansion is the absolute minimum necessary to accomplish the scenic quality improvement.

## Modification of Existing Pier Structures

- TRPA shall carry forward the In-Kind Code provisions developed under the 2008 Plan into the new Shoreline Plan.
- Existing pier structures that do not conform to location and design standards may be modified if the modification:
  - results in a material environmental benefit;
  - brings the structure into greater compliance with location and design standards; and
  - does not increase the degree of nonconformance with any location and design standard.

## Mitigation

### Priority Location

- Scenic mitigation and improvement should first occur when possible: 1) on the parcel in the shorezone; 2) on the parcel in the upland area; 3) within the unit on the shorezone; 4) within the unit in the upland; and then 5) in another non-attainment unit.

### Scenic Mitigation

- Scenic mitigation for new piers increases with scenic sensitivity of the developing parcel's location.
  - For Visually Dominated areas, the scenic mitigation ratio is 1:1.5.
  - For Visually Modified areas, the scenic mitigation ratio is 1:2.0.
  - For Visually Sensitive areas, the scenic mitigation ratio is 1:3.0.

### Fish Habitat Mitigation

- Consistent with the environmental thresholds, mitigation of fish habitat (for feeding / escape cover and spawning) is 1:1.

### Scenic Credit Program

- TRPA will allow banking of visible mass in the shorezone and shoreland.
- Private parcels, public parcels and marinas are eligible to participate.
- Improvement can occur anywhere on the parcel or in the unit.
- Credit always stays with the parcel.

## Floating (Swim) Platforms

- Floating platforms should be allowed and tied to a permanent anchor.
- Floating platforms are not moorings; however, they must be connected to an anchor in lieu of a buoy.
- Floating platforms should not exceed 10 x 10 feet.
- Motorized boats cannot be moored to floating platforms.

## Boat Ramps

- During periods of low lake levels, encourage non-motorized boaters to use boat ramps that are not functional for motorized boats.
- The existing six public boat ramps may be relocated to sites better suited to accommodate low lake level.
- Up to two new public boat ramps may be developed.

- Any new public boat ramps should be located in areas that promote geographic distribution of lake access in association with clustered development and transportation hubs.
- New ramp locations should also exhibit shoreline conditions that are well suited (e.g. depth, bathymetry) to accommodate access during periods of Phase 2 low lake levels of 6,220 feet.
- Where feasible, marinas and other public ramps may extend ramps to be operational during periods of low lake levels.

## Marinas

### Applicability

- The Shoreline Plan process could facilitate environmentally beneficial redevelopment at marinas in lieu of Marina Master Plans.
- The types of improvements that marina operators anticipate varies based on a number of factors specific to marina location, including access to navigable water, services provided, and desired reconfiguration or expansion at marinas that may or may not involve additional moorings.
- Marinas may begin planning and implementing for Phase 2 lake levels before such levels are realized.

### Permit Streamlining and Environmental Review

- Each marina project would be subject to environmental review, but depending upon the level of disturbance and scale of project, it could be approved at the staff or hearings officer level. Projects requiring an EIS would require review and approval by APC and the Governing Board.
- To avoid multiple permit applications, applications for marina projects are encouraged to be comprehensive in that they should include a phasing plan that includes both short term and long term environmental improvements, low lake level adaptation strategies, and plans for adding additional capacity.

### Mooring Allocation<sup>2</sup>

- TRPA will set aside 330 buoy allocations for use at marinas.
- Boat slips would be interchangeable with buoys for allocation purposes.
- Additional buoys or slips may be allocated if a proposed project meets all requirements of the respective permitting agencies and complies with the "Clean Marina" certification program with additional elements that are

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<sup>2</sup> See Buoys for further discussion of buoy allocation lake-wide.



Tahoe-specific integrated into the program, including an aquatic invasive species management plan.

- Such compliance would be required prior to permitting any reconfiguration or expansion.
- Marinas should also include some additional elements such as the environmental improvements shown in the list below.
  - Demonstrate flow improvements/reduction of AIS habitat conditions and/or reduced need for dredging.
  - Contribute to existing AIS control efforts (lake wide).
  - Provide a boating rental and operations fleet that meets EPA and/or CARB standards, including electric boats.
  - Install an electric charging station for boats.
  - Provide boater education of 600' no wake zone, boater safety, and clean boating practices.
  - Provide public access to marina fueling and/or pump out stations.
  - Install stormwater BMPs that treat volume above existing TRPA and, if in CA, Lahontan RWCQB requirements.
  - Provide additional scenic improvements, such as rack or storage screening.
  - Provide boat ramps for public use. If a ramp is not functional for motorized boating due to low lake level conditions, provide access for non-motorized boaters.
  - Provide dedicated parking for non-motorized boaters.
  - Demonstrate a low lake level capacity improvement.
  - Provide non-motorized boat storage for public.
  - Install an electric charging station for cars.
  - Reduce on-site coverage.
  - Receive Lake Friendly Business Certification.
- Marinas that have demonstrated past performance in environmental improvements could receive additional consideration for additional buoys or boat slips.
- Buoy or boat slip allocations could be used immediately or phased over time consistent with the project application.
- Marina piers may not be used as permanent moorage.

## Low Lake Level Adaptation

- Marinas may begin planning and implementing for Phase 2 (elevation 6,220 feet) lake levels before such levels are realized.

## Additional Capacity

- Marinas could add capacity or make other provisions to accommodate private property owners who cannot access private moorings during low lake level conditions.

## Floating Structures

- Marinas would be allowed to use temporary floating structures to provide access for boats when lake levels fall below 6,225 feet.<sup>3</sup> Such structures should be removed when the lake levels rise above 6,225 feet for a period of six consecutive months.

## Pier Extension

- Flexibility in pier design at marinas would be allowed based on site-specific navigation and environmental considerations. Longer piers may help to alleviate the need for dredging, but could have navigation and scenic impacts.
- Marina pier extensions shall be reviewed on a case-by-case basis and subject to the following:
  - A marina pier must serve the public.
  - A marina pier extension must not negatively impact safe navigation.
  - All impacts of a marina pier extension must be appropriately mitigated.
  - A marina pier may be extended 15 feet waterward if the drop in substrate within the additional 15 feet is a minimum of 6 inches (minimum of 3 percent). Additional extensions may be allowed if the average slope in the area being extended is a minimum of 3 percent. However, the total length of a marina pier may not exceed 1,000 feet.
- A marina pier extension for the purposes of facilitating waterborne transit shall be considered only with the review of a waterborne transit plan or project.

## Design Standards

### Buoy Fields

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<sup>3</sup> Both TRPA and California State Lands Commission will explore new permits and leases, respectively, that can accommodate marina flexibility for taking these structures in and out of the water.

- Marina buoy fields must comply with the same standards as other buoy fields (see Buoys) although marina buoy fields may extend further. waterward than other fields if consistent with existing permits and leases.
- Marina buoy fields could include additional rows of lakeward anchors to accommodate low lake level adaptation, but the number of buoys must stay the same.

## Dredging

- New dredging would only be allowed at marinas, the five essential public health and safety facilities, and public boat ramps where previously approved uses exist, provided all environmental impacts are addressed and can be appropriately mitigated.
- New dredging at public boat ramps may be allowed if increased functionality of the ramp can be demonstrated.
- TRPA will adopt a conformance standard consistent with the Army Corps of Engineers 404 federal standard for new dredging (non-degradation). Applicants will also need to comply with each state's 401 permit requirements.
- Maintenance dredging would continue to be allowed.

## Overnight Anchoring

- Watercraft moored overnight shall be moored to legally existing buoys, boatlifts, slips, berths, boat hoists or other watercraft storage facilities, except for the following:
  - Mooring of construction watercraft for purposes of and use during TRPA-authorized construction activities,
  - Mooring of public service watercraft for health and safety purposes, or
  - Mooring of watercraft for occasional overnight purposes, limited for up to 72 hours within a 2-week period

## No Wake Zone

- The no wake zone will be maintained at 600-feet from the water line and speed will continue to be limited to 5 mph, except for within Emerald Bay.
- Within Emerald Bay, all areas will be designated as a no wake zone. Speed would be limited to 5 mph with an exception up to 7 mph for tour boats.

# Concessions

## Applicability

- Concession structures that occur upland of the shorezone will not be regulated through the Shoreline Plan.
- The following general policies and standards apply to both motorized and non-motorized concessions unless specified.

## General

- Concessions would only be permitted as an accessory use for applicants that have a permitted upland commercial or public facility/use and would need to consider upland parking availability.
- TRPA would only issue permanent permits. The permit would specify the number and type of boats, paddleboards, kiosks/ structures, etc. to support the concession.
- All concessions with a valid permit would be considered grandfathered to continue operating under their existing permit conditions. All new concessions would be required to meet the requirements of the Shoreline Plan. TRPA is responsible for enforcement of unauthorized uses.
- Moorings for concessions would be counted toward the buoy cap.
- When allowed, only one watercraft may be moored per buoy or slip. Use of buoy “trains” are not allowed outside of marinas.
- All concessions have to meet BMPs, including fueling best management practices, meeting fire codes, and local jurisdiction permit(s).

## Concessions for Motorized Boat Rentals

- New motorized boat concessions must be associated with a marina.
- Each concession for motorized boating would be allowed 1 watercraft per permitted mooring except for marinas, which may have one string with no more than 12 personal watercraft.

## Design Standards

- Storage racks would be allowed. The location of racks would be above high water wherever possible and provide for maximum access and recreational benefit.

## Non-motorized Boating

### Applicability

The Shoreline Plan recognizes that non-motorized boating is an ever-increasing recreational activity at Lake Tahoe and supports efforts to provide safe access, egress and navigation. The Shoreline Plan will also provide opportunities for facilities to accommodate non-motorized boating activities, including paddle boarding and kayaking. The California Tahoe Conservancy along with the Lake Tahoe Water Trail Association provides a robust boater education and safety program at Lake Tahoe. The U.S. Coast Guard, marinas, and other recreation providers also facilitate boater safety and provide information.

### Safe Navigation Elements of the Shoreline Plan

- Continues the no-wake zone at 600-feet and 5mph speed limit.
- Limits pier length via the designated pierhead line.
- Controls where piers are located, preserving natural areas without piers and distributing piers in areas where piers already exist.
- Creates more space and a buffer for non-motorized access on the landward side of buoy fields by allowing buoy fields to move their landward row of buoys lakeward during low lake levels.

### Use/Access Improvements of the Shoreline Plan

- Provides for storage racks and concessions in the shorezone.
- Supports funding for signage associated with the Water Trail to identify launch sites, landing locations, and other public access points.
- Enhances public boat ramps for non-motorized watercraft to take advantage during periods of low lake when not accessible for motorized boats.
- Upholds environmental thresholds (scenic, water quality, recreation) to ensure a quality recreational experience for all users.

## Personal Watercraft

A personal watercraft is defined as a vessel 13 feet or less in length, propelled by machinery, designed to be operated by a person sitting, standing, or kneeling on the vessel. It is subject to all state, local, and federal regulations governing the operation of powerboats of similar size. It is defined as a “Class A” Inboard Boat.

## Other Structures

### Breakwaters, Jetties, and Rock Crib and Sheet Pile Piers

- No new public or private breakwaters, jetties, rock crib piers, or sheet pile piers (or other structures of this type) would be permitted in the Lake Tahoe Region except as part of a habitat restoration project or as part of a marina environmental improvement project.

## Low Lake Level Adaptation

### Phased Approach

The Shoreline Plan will plan for low lake level adaptation over the next 20 years and recognize the following phases:

- Phase 1: 6223 feet elevation, natural rim. The current legal low used in regional planning.
- Phase 2: 6,220 feet. The Joint Fact-Finding Committee recommended the use of elevation 6,220 feet based on their review of the historic low lake elevation (6,220 feet) and the central tendency in the Bureau of Reclamation Truckee Basin Study<sup>4</sup>. This elevation is considered the low elevation for planning decisions and policy development, intended to accommodate some access during low lake levels.
- Phase 3: Below 6220 feet (“too low to provide for access”). In some years, the lake elevation may drop below a level at which boating and other access can no longer be reasonably provided.

### Direct Access towards Marinas and other Public Ramps

- During periods of Phase 2 low lake levels, direct boats, which need associated structures to safely and effectively launch, to marinas and other public ramps that are operational at such elevations, clustering access near areas with transportation and transit options.
- Support marinas and other public ramps to adapt to be operational during periods of low lake levels to the extent feasible.

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<sup>4</sup> U.S. Department of the Interior, Bureau of Reclamation (2015). Reclamation: Managing Water in the West. Truckee Basin Study, Basin Study Report. August, 2015.

- The Shoreline Plan low lake adaptations will generally plan to accommodate watercraft up to thirty feet in length, which is roughly the average length of boats on the Lake.

## Tolerance Districts and Permissible Uses

- TRPA guides development around the shoreline of Lake Tahoe through the use of eight shorezone tolerance districts that were developed based on an analysis of an areas tolerance or responsiveness to disturbance or change. Within the tolerance districts, TRPA also developed appropriate permissible uses for the shoreline depending upon the level of intensity of development authorized by the designated tolerance district classification. The tolerance districts and associated permissible uses are to be carried forward into the Shoreline Plan.
- The existing code is open to interpretation regarding private access from the backshore to the foreshore (competing clauses in the code in certain Tolerance Districts). Due to topography, such as steep slopes, private access to the backshore should be allowed, but such access should be accomplished in the least impactful way, which might be a footpath or staircase. TRPA would clarify the existing code.

## Public Trust Easement in CA

- TRPA and California State Lands Commission has agreed to draft a memorandum of understanding that would detail a process to coordinate applications for piers which respect the easement and property rights, giving assurance to property owners. The MOU is in development.

## Other Lakes (Fallen Leaf and Cascades)

The existing code on other lakes will continue. The code states that rules for Lake Tahoe shall serve as a guideline for other lakes. TRPA would review each application on a case-by-case basis.

## Tahoe Keys

The 2016 inventory included boating facilities in the Tahoe Keys.

## Applicability

- The Shoreline Plan accounts for the anticipated environmental impacts of the Keys by including Tahoe Keys lagoon structures as part of the 2016 shoreline structure inventory and boating capacity coming from the Keys for the environmental baseline.
- The Lake Tahoe shoreline development standards in the Shoreline Plan would not apply in the Tahoe Keys because the Keys are not part of Lake Tahoe (proper). For example, low lake adaptation policies and standards would not apply in the Keys.
- The highest priority issue to address in the Keys is Aquatic Invasive Species (AIS) management, and TRPA and Lahontan are working actively with the Keys Property Owners Association on developing and implementing an invasive weeds management plan.
- Because the Keys are built out, there is little need to prioritize planning for new development, and any refinements to permit administration for the Keys will likely be taken up after the Shoreline Plan for Lake Tahoe and the Keys AIS Management Plan work is completed.

## Green Infrastructure

- TRPA will allow planning for infrastructure that will support environmental improvement.

## Environmental Improvement

- Environmental improvement projects with a nexus to recreational impacts will be identified and presented as an opportunity to advance expanded recreational access in concert with environmental restoration. Environmental Improvement Program (EIP) implementation that is in alignment with existing EIP programmatic priorities will be part of the established framework. **[In Development]**
- Staff and the Steering Committee are working together to identify the exact mechanisms to link the Shoreline Plan with Aquatic Invasive Species (AIS) and recreation projects.