



May 12, 2009

Tahoe Regional Planning Agency
P.O. Box 5310
Stateline, NV 89449

RE: Comments on proposed changes to the buoy placement line

Dear Tahoe Regional Planning Agency Staff,

The League to Save Lake Tahoe and Tahoe Area Sierra Club are concerned with the proposal to extend the buoy placement line from 350 feet to 600 feet lakeward of the high water mark (and in the case of Tahoe City, up to 1000 feet) and no limit to how far buoys may be placed in the Lake temporarily during low water years. This decision should be made with tremendous caution and necessitates a full environmental review as the impacts to scenic, recreational, noise, fisheries, and water quality thresholds may be substantial. In addition, there are numerous complex navigation and safety issues that need to be fully analyzed.

Threshold Impacts and Need for adequate environmental analysis

In the May 2009 APC Packet, the staff report claims in the Required Findings for the Ordinance Amendments that "the amendments provide opportunities that do not exist today to comprehensively protect the unique qualities of the shorezone" and that "the amendments are predicted to [have] a positive impact to threshold attainment when compared to the existing situation." However, staff does not provide any explanation or evidence of how these amendments will have positive impacts on the thresholds or better protect the shorezone. Furthermore, in Rationale 2, it is stated that "The EA does not identify thresholds that would be exceeded." Yet, no EA has been performed, only an IEC. The Shorezone Ordinance underwent full EIS review.

In fact, it is our understanding based on past discussions at Governing Board and APC meetings that the original intent for these extensions was not to improve environmental thresholds, but to allow certain parcel owners who do not qualify for buoys under the 350 foot limitation an opportunity to place buoys through this expanded limit by utilizing the pretense of safety issues. It is also our understanding that a homeowners association had offered to fund an Environmental Assessment, but then rescinded when they realized that they might be funding an analysis that would not get them the results that they desired.

In reality, these amendments will likely cause harm to the environmental thresholds. Impacted thresholds include scenic, recreation, noise, fisheries, and water quality. By extending the limit to 600 feet, non-motorized recreationists (kayakers, outrigger canoeists, top line fisherman, windsurfers, kite borders, and swimmers) will now have to navigate around the buoy fields existing within the current 350

feet limit and existing and new buoys spread out to the 600' line, essentially creating a "zig zag" pattern where such recreationists have to meander through multiple (and inconsistent) buoy fields simply to follow Tahoe's shoreline, not only creating further negative impacts, degrading their high-quality recreational experience, but also potentially placing them at greater danger both because of the need to maneuver in the same wake zone with fast moving motorized watercraft and at a greater distance from shoreline rescue. All boaters, as well as beach goers, fishermen, swimmers, and hikers will have their scenic view disrupted with a larger portion of their view-shed interrupted with buoys in the foreground and off in the horizon since private buoys will now be located within a zone nearly double the current legal distance from the high water mark. Looking at how one specific boat type and length looks from angles along the shoreline, as presented in the "Scenic Evaluation" by Packard and Associates, does not suffice. These scenic and recreational impacts are substantial and necessitate a full environmental review.

We are concerned that the intent presented in the APC packet differs from the intent described from conversations with TRPA staff. According to the APC packet it appears that all individual buoys must be located between the 350 foot line and the 600 foot line with the exception of buoys that get moved farther beyond this point in low water level years. However, according to TRPA staff, buoys will be allowed anywhere between the shoreline and the 600 feet lakeward of the high water mark. This discrepancy needs immediate clarification because the impacts to recreation and scenic thresholds are much greater with a 600 foot buoy width versus a 250 foot buoy placement area width. Furthermore, by allowing for an extension of the buoy line, parcels that would have previously been ineligible to have a buoy or multiple buoys due to their proximity to shallow water, lot-line limitations, and buoy placement restrictions (i.e. a 50 foot spacing requirement between other buoys) would now be eligible to place a buoy or buoys. The current and future capacity for buoy placement has been increased dramatically and also has not been disclosed by the TRPA in any of its documentation. These additional buoys will affect the scenic, water quality, air quality, and noise thresholds, as more buoys mean more boats and more associated pollution impacts

The effects of extending a buoy line to 1000 feet in some areas needs thorough examination. This is direct conflict with extending past the no-wake zone and this exception needs much higher level environmental review. This is of particular concern because by establishing this special area now, a precedent is potentially being established for the future in which property owners in other areas may wish to create other "exception" areas.

As the potential for there are significant environmental threshold impacts, the findings cannot be made to certify this proposal.

The buoy line limit extension is an "eleventh hour" amendment that has not undergone adequate environmental analysis and was not analyzed in the FEIS (although recognized in the FEIS as a scenic issue), as explained in the APC packet:

"Buoys up to and beyond 600 feet from shore have been in place at Lake Tahoe for some time. Yet during a review of TRPA scenic threshold monitoring data reports of scenic impacts related to the distance of buoys from shore were not found. The EIS for Lake Tahoe Shorezone Ordinance Amendments indicates that buoy fields were a scenic issue but the issue of their distance from shore was not addressed. The EIS does indicate buoy enforcement to be a scenic issue, but not in the context of distance." (p 99).

The Evaluation also fails to analyze the individual and cumulative impacts of the proposed change on scenic quality when viewed from the Lake looking towards the shore, with special focus on scenic resources. The Evaluation does, however, note the need for such an analysis to be performed:

In cases where boats would be moored within the view limits of recorded a scenic resource, the position of a boat within the scene, including its distance from shore, could potentially affect views of the scenic resource. In such cases, buoy location(s) should be reviewed and adjusted if necessary so that boats moored to the buoys do not interfere with established views of scenic resources. (p 100).

The authors of the Scenic Evaluation have noted several areas that require further analysis and the limited scope of results in their report. The evaluation simply does not substitute for a useful, comprehensive, legally-acceptable environmental review, and the mere use of an environmental checklist is unacceptable. A complete and comprehensive environmental analysis is necessary.

Furthermore, in the skeleton of a checklist that was provided in the May 2009 APC Packet, a number of boxes are checked as "No, with mitigation" under the Scenic Resources, Recreation, yet no mitigation measures are suggested or acknowledged. What type of measures would the TRPA use to effectively mitigate for these impacts? Further, in other areas, "No" has been checked, yet we question whether impacts would occur:

- Land: In reference to section d (exposure of property to geologic hazards) will moving buoys farther out into the lake bring boats closer to fault lines and what will be the consequences of this closure exposure? In section f, the impacts to fisheries, especially spawning areas, needs additional analysis in the 350' to 600' (as well as the 1000') zones.
- Air Quality: All sections of the air quality section are marked "no", yet are motorized boats and/or equipment used when buoys are relocated? Such activities would create air pollution emissions, may impact ambient air quality and may increase the use of diesel fuel (questions 2a, b, and e) [p 77-78]; Also by extending the buoy line, there is the potential as explained above to have more boats utilizing the lake. This increase in boating could affect air quality. Since a typical boat is many orders or magnitude more polluting than a typical private automobile, the impacts are significant, especially in relation to the production of ozone precursors which have a direct adverse impact on human health.
- Water Quality: The extension of the buoy line could increase boating which would have impacts to (e.) Also, (i), was checked as "no," but this needs further examination as boats farther out in the lake may be more susceptible to underwater landslides, seiches, and wave action from storm events (especially fall storm events, which often cause boats to become dislodged from their moorings in the high winds and subsequently sink). In section k, moorings and boats will be placed in much greater proximity to drinking water intakes that serve communities around the lake. The potential for contamination of drinking water increases the closer the pollutant source.
- Wildlife: Although section (d) is marked no, there is a concern that moving buoys will affect fish habitat and areas where buoys lie past the 600 foot mark (such as in Tahoe City), there will be a need to light buoys which may have a negative impact on fish and other aquatic species sensitive to nighttime lighting.
- Noise: Increasing the buoy line may increase the number of boats on the lake which could have impacts to noise, although all sections of the noise section are checked "no impact".
- Light and Glare: All sections under light and glare are checked "no", but as mentioned above, some buoys past the 600 foot mark (such as all those in the Tahoe City exception area) will need

to be lighted (because they are considered navigational hazards) according to the Coast Guard. Therefore, sections a, b, and c, and d should be marked "yes."

- Risk of Upset: (a) and (b) are marked "no," but upon further study, evaluators may find that these need to be marked "yes." For example the risk of leaking hazardous substances may increase by moving boats further out on the Lake. Plus having boats further out on the Lake would make a timely evacuation more difficult.
- Energy: Extending the buoy line allows the possibility of increased boating which would increase the amount of fuel used. Therefore it needs to be examined whether section (a) should be marked "yes."
- Human Health: (a) and (b) are marked "no," but should be marked less because boaters and non-motorized recreationists (as explained below) have lost their "no wake zone" buffer.
- Recreation: section (b) "create additional recreation capacity" is marked "no", but should be marked "yes" because extending the buoy line creates opportunities for property owners who could not previously place buoys to be able to place buoys. Therefore, there will be an increase in capacity for boating and boat moorings, during the duration of the Shorezone Ordinance as well as in the future.
- Findings of Significance: (a), (c) should be marked "yes" for all of the reasons explained above.

The four page document prepared by Tom Packard and Associates entitled An Evaluation of Scenic Consequences Associated with the Distance from Shore of Single-Use Buoys at Lake Tahoe is not a thorough and adequate review of the scenic impacts resulting from the proposed changes.

- The assessment merely examines how one specific boat looks from different angles along a shoreline (a 24' Master Craft ski boat) [page 97]. Yet how does this boat compare to other boats on Lake Tahoe? What are the proportions and sizes of boats on the Lake, and their associated scenic impacts?
- Although the Report is clearly titled an "Evaluation of Scenic Consequences Associated with the Distance from Shore of Single-Use Buoys at Lake Tahoe", TRPA is using this assessment of one boat on one single use buoy as the purported analysis of the cumulative impacts of allowing hundreds to a thousand or more buoys to extend beyond the line. Not only does this fail to consider all boat types on the lake, and scenic impacts from all directions (e.g. on Lake Tahoe looking towards the Shoreline) but it also fails to consider multiple buoys in multiple areas, Lake-wide.
- "Samples" were done in the 'off season' for boating, so as expected, very few boats were attached to buoys. It is therefore impossible to use this information to draw conclusions beyond the very specific views analyzed for the boat type specified in the scenic evaluation.

In the field, live observations of boats moored to buoys were made on April 15 and 16, 2009 at Zephyr Cove, Bijou, El Dorado Beach/South Lake Tahoe Recreation Area, and Camp Richardson. Although large numbers of buoys arranged as buoy fields are found at these locations, only a few boats were moored there on the dates that observations were made. (p 99)

- The few observations taken for north and west shore didn't even include boats attached to the buoys.

Buoy placements at various locations along the west shore and north shore were observed and photographed on April 30, 2009. (p 99).

How can the impacts of boats be analyzed if there aren't any attached?

- A scenic analysis needs to include how the impacts that occur during sunset and sunrise in which boats closer to shore will receive more shade and therefore be less likely to cause glare potentially than boats farther out in the water.

The EIS for the Shorezone Amendments did not analyze the impact that buoy distance from shore has on the scenic threshold. A much more in depth environmental analysis is vital. Furthermore, the analysis did not examine the scenic impacts of moving buoys out to 1000 foot distance in the Tahoe City area.

Wave Inundation and Boat Sinking

The propensity for boats to be more susceptible to sinking due to wave inundation as well as become dislodged from moorings due to wind fetch when moored at far distances needs to be thoroughly examined in an adequate environmental analysis. Boats that are moved farther out into the Lake can become more exposed to fetches of wind and wave swells that move across the lake and lose their shelter from points and coves. Sinking boats create toxic spills and can be detrimental to water quality and fisheries as sunken vessels leak oil, gasoline, and other chemicals into surrounding waters. It is our understanding that dozens of boats were sunk in 1997 alone. Furthermore, with boats located so far away from the shoreline it will be more difficult to save a capsized or swamped vessel and more difficult to recover a sunken boat. The potential for more boats becoming dislodged from their moorings and sinking necessitates a much higher level of environmental review as life and property may be at stake.

Loss of Buffer in the No Wake Zone

Under the current regulation there exists a buffer of 250 feet between buoys legally placed up to the 350 foot buoy line and the end of the 600' No Wake Zone. This new proposal completely eliminates this buffer, creating three potential consequences:

- First, boats, such as wakeboarding boats, would be able to create a large wake directly next to places where boats are moored. These large wakes could have the potential to inundate and sink these moored boats. In addition, boats attached to buoys may drift across the 600 foot mark and outside of the No Wake Zone. This scenario needs to be examined.
- Second, after rowing to their moored vessels, boaters will have to transfer from their dingy to their boat without a buffer which may likely increase the potential for accidents such as people falling out of their boats or capsizing their dingy.
- Third, kayakers and others who wish to navigate their vessels beyond the buoy field will find themselves in an unprotected area immediately after they cross the buoy line. The recreational space has been eliminated where a boater can kayak, canoe, or fish safely beyond the buoy line without the threat of either colliding with a swiftly moving motor boat or getting swamped by the wakes these boats create.
 - o The IEC discusses the issue of impacts to non-motorized recreation. However, the checklist includes a purported 'conclusion' of no impacts ("The conflicts between kayaking and buoys remain the same or become reduced" [p 94]), yet provides no details regarding the source of this 'conclusion'. Not only is any evidence lacking to support such a claim, but there has been no consideration of this impact at all.

Disturbance to Substrate

On pages 64-65, the Packet presents several 'options' for amending the Buoy Line (or making no change). In each case, TRPA discusses the estimated number of buoys that would have to be relocated, appearing to imply that the fewer, the better. We agree that moving buoys and permitting new buoys is expected to cause disturbance. Nonetheless, the previous and current regulations required that buoys are placed within 350' of the high water mark, thus technically these 1100 buoys are currently illegally placed and do not have a right to be there in the first place. The TRPA has yet to analyze the impacts of relocating a buoy on TRPA's thresholds, so there is no way to assess the level of that disturbance. Additionally, what are the short-term impacts of relocating a buoy to within the 350' buoy line versus the long term impacts of keeping a buoy farther out in the lake? What are the impacts on fish habitat? If long term conditions are improved, are there mitigations which can prevent short term impacts from the relocation?

TRPA appears to acknowledge that relocation of buoys is undesirable, yet proposes to allow thousands of new buoys. Changing the Code to reduce relocations in the premise it has impacts while allowing new buoys which will create the same 'undesirable' impacts makes no sense. TRPA must perform an adequate environmental analysis which examines the short- and long-term impacts of relocating buoys on all thresholds. Until then, it is not possible to assess which "Option" best achieves thresholds.

The proposed change could negatively impact fish habitat as many buoys will have to be relocated beyond the 350 foot mark. These buoys that will need to move may cause disturbance both during while being dislodge and again while being placed in their new location. A full assessment needs to be performed in order to understand the effects of this change as well as address the disturbance created from moving buoys back and forth during low and high water years.

Navigational Hazards and Safety

Also, by allowing some buoys, such as in the instance of the Tahoe City area, to move past the standard buoy line during a navigation hazard would be created. As explained by the Coast Guard at the MARCH 2009 APC meeting. In order to mitigate the navigation hazard of buoys located beyond on the standard buoy, these buoys may need to be lighted. This could cause an increase in light pollution, scenic impacts, and detrimental effects to fish and other aquatic organism that are sensitive to light.

Removal of Illegal Buoys First

The May 2009 APC packet states that currently 1,100 hundred buoys are placed beyond the 350 foot line, 300 of which are placed even beyond the 600 foot mark. How many of these 1,100 buoys are legally authorized and how many of them are unauthorized? Why have any of these buoys been allowed to proliferate beyond the 350 foot mark that has been historically required without enforcement? Just because a certain number of parcel owners are currently out compliance with the buoy extension line does not give justification to change the regulation.

Further, the packet states: "Both State Lands Agencies issued leases/permits with conditions that the permittees/leasees were required to conform to other agency's standards and within two years of adoption of the TRPA Shorezone Ordinances to obtain a TRPA permit." (p 46).

TRPA's requirements have always limited buoys to 350'. Thus, legally, all buoys with a State Lands permit/lease should be located within the 350' line. Yet there appears to be a large number of such buoys that exceed this line. This suggests that of those 1,100 buoys that have a State Lands permit/lease, recipients did not follow TRPA's Code as required by State Lands. We question making such buoys eligible to qualify as 'existing legal buoys', and therefore why provide any provisions for relocating a buoy which was placed illegally?

TRPA must examine how many buoys issued a permit or lease by one of the noted agencies were placed beyond the line legally required by TRPA. The impacts of no action, relocation and removal of such buoys must be adequately analyzed before it is possible to assess which actions best achieve thresholds.

Summary

We strongly oppose the extension of the buoy line as this action has the potential to cause substantial negative impacts to TRPA mandated thresholds and we insist that a full environmental analysis of the impacts of all possible alternatives is conducted.

We appreciate the opportunity to provide comments and if you are in need of further information please contact the undersigned.

Thank you.

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