Tahoe Area Sierra Club Group

Tahoe Regional Planning Agency
Advisory Planning Commission
128 Market Street
Stateline, NV 89449

June 8, 2015

Subject: Comments on final Tahoe Valley Area Plan and Associated Documents

Dear Chair Teshara and Members of the Advisory Planning Commission:

The Tahoe Area Sierra Club (TASC) appreciates the opportunity to provide comments on the final Tahoe Valley Area Plan and all associated documents ("TVAP package"). The TASC is extremely pleased to see the protection of additional scenic resources, as provided for in the proposed Policy NCR-3.2.[1] However, several key concerns remain in addition to those noted in our comments to the City of South Lake Tahoe (attached and incorporated herein):

- The Conformity Checklist response states, "the TVAP includes policies directing development away from SEZs as well as restoring disturbed SEZs…" However, the TVAP would reduce the amount of land classified as SEZs, and thus reduce the amount of disturbed SEZs targeted for restoration (as well as the area of disturbed SEZs available to provide transfer incentives through restoration).
- Meteorologists continue to warn the public of the likelihood of increased 200-500-year Megaflood storm events as a result of climate change.[2] Now is the time to plan for accommodating more water, not less. The TVAP does not address this property damage issue, and reducing the extent of historical SEZs through the reclassified land capability will likely lead to more coverage on, and less restoration of, streams and drainages important for accommodating larger volumes of water. In addition, restoring a large portion of the historical floodplain will provide significant scenic benefits to the South Y area. In fact, the Prop 1 water bond awarded $15 million to the CTC for grants for watershed protection and restoration projects, such as this.
- Policy ED-1.5[3] encourages private property owners to apply for alternative areawide coverage amendments to increase coverage to 90% in the Town Center Core District. TRPA Code Chapter 13 requires Area Plans to be initiated by specified lead agencies, which include TRPA, local, state, federal, or tribal governments, yet the Policy suggests that individual property owners initiate future area plan amendments. This does not conform to the RPU's requirements. We recommend this policy be removed.

We would be happy to meet with you to discuss these comments and concerns. Please feel free to contact Laurel Ames if you have any questions.

Very truly yours,

Laurel Ames, Chair – Conservation Committee, TASC
(530) 541-5752, laurel@watershednetwork.org

[1] NCR-3.2 -New Scenic Resources: **"**Designate the views of Tahoe Mountain, Monument Peak, and Heavenly Valley as scenic resources.

[2] http://tahoe.ca.gov/wp-content/uploads/2014/06/files/2013_VO/UTR_/Dettinger_Ingram_sciam13.pdf; http://www.tahoeculture.com/events/north-shore-events/arkstorm-impacts-at-lake-tahoe-at-terc-jan-31/; http://meteora.ucsd.edu/cap/pdffiles/ARkStorm_Summit_Handout_Final.pdf

[3] **Policy ED-1.5 – Alternative Land Coverage Management System:** Property owners within the Town Center Core District, in coordination with the City, may develop alternative comprehensive coverage management systems as alternatives to the parcel-level coverage requirements outlined in subsections 30.4.1 and 30.4.2 of the TRPA Code of Ordinances, provided that the alternative system complies with the provisions of subsection 13.5.3.B.1: *Alternative Comprehensive Coverage Management Systems* of the TRPA Code of Ordinances.

Tahoe Area Sierra Club Group

City of South Lake Tahoe
1052 Tata Lane
South Lake Tahoe, CA 96150

June 1, 2015

Subject: Comments on final Tahoe Valley Area Plan and Associated Environmental Documents

Dear Ms. Roverud and Mr. Hitchcock:

The Tahoe Area Sierra Club (TASC) appreciates the opportunity to provide comments on the final Tahoe Valley Area Plan, the final Initial Study/Mitigated Negative Declaration/Initial Environmental Checklist/FONSE, the response to comments, and other associated documents ("TVAP package"). The TASC appreciates staff's time in responding to our comments on the draft documents, as well as the City's focus on improving scenic protections, reducing heights (compared to the 2012 Regional Plan Update), improving design standards, incentivizing the restoration of SEZs and sensitive areas, and distinguishing between different 'districts' within the Area Plan to recognize unique areas. The TASC also thanks staff for revisions made to the Area Plan language in response to several of our comments.

After review of the response to comments and final revisions to the TVAP package, several key concerns remain which TASC does not believe have been addressed, including:

- Concerns regarding the reduction of land designated as stream environment zone (SEZ) per the amended land capability map and methods used;
- The failure to adequately address floodplain protections that will be needed in order to adapt to the anticipated increases in periodic, intense storms;
- The reliance on outdated storm designs in light of climate change and how undersized stormwater facilities may lead to increased pollution in Lake Tahoe; and
- The inclusion of Policy ED-1.5, which encourages private property owners to apply for alternative areawide coverage amendments to increase coverage to 90% in the Town Center Core District (the environmental documentation did not analyze alternative coverage systems).

The TASC also cautions the City against tiering from the RPU EIS, since the document's technical adequacy remains subject to litigation. Detailed comments are attached.

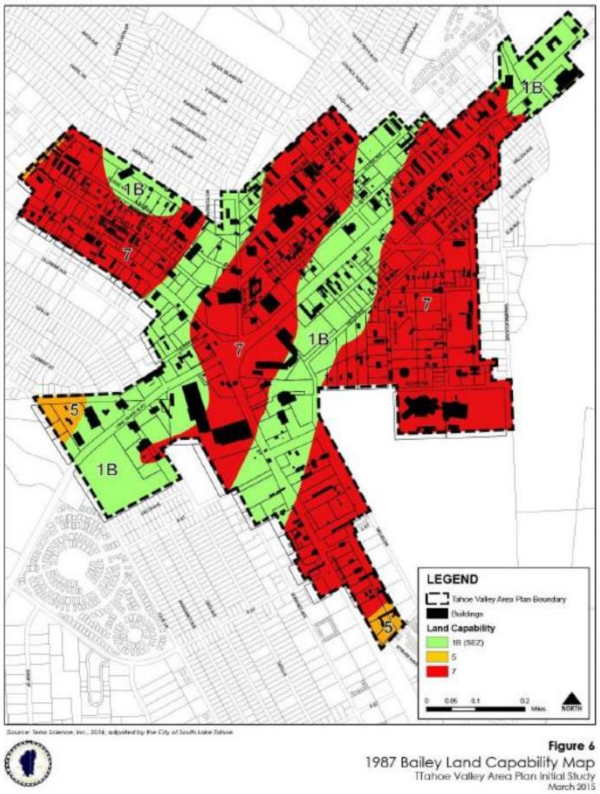
We would be happy to meet with you to discuss these comments and concerns. Please feel free to contact Laurel Ames if you have any questions.

Very truly yours,

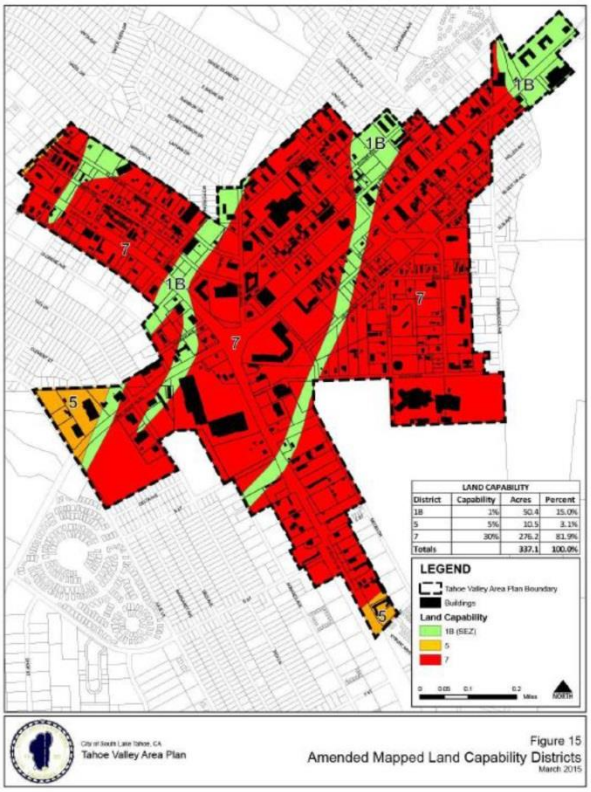
Laurel Ames, Chair – Conservation Committee, TASC
(530) 541-5752, laurel@watershednetwork.org

Reduction of land designated as stream environment zone (SEZ)

TASC comments on the draft included several concerns with the information being used to support the revised land capability map, which significantly reduces land classified as SEZ compared to the Bailey Land Capability map, as reflected in these two figures:



Bailey Land Capability



"Amended" Land Capability

As noted, TASC has several concerns regarding the study used to propose this amendment:

1. <u>The amended land capability does not include floodplains as identified in the Bailey maps</u>. As noted in comments regarding floodplains, adapting to climate change will involve anticipating and designing for more intense, periodic storms. Floodplains will be important in managing excess stormwater. The revised SEZ map in the Terra Science, Inc. "SEZ Report[1]" does not include historic floodplains. Notably, the report identifies historic SEZ separately from current SEZ (see Table 3, p. 8).

2. <u>TRPA's SEZ threshold standards include a requirement that 25% of the SEZ lands that have been identified as "disturbed, developed, or subdivided" be restored.</u> The threshold does not suggest that disturbed historic SEZ lands be reclassified. In order for the TRPA to make the threshold attainment findings, disturbed SEZs must be restored, not reclassified.

[1] Stream Environment Zone Report for Tahoe Valley Area Plan. June 2014. Prepared by Terra Science, Inc. for the Tahoe Regional Planning Agency and City of South Lake Tahoe.

3. The SEZ report appears to result in a de facto administrative change of land classification. Although the response to comments disagrees, stating that parcel-level verifications will be required for projects in the future, the SEZ report was a joint effort performed by Terra Science, Inc. for the TRPA and the City.[2] It is reasonable to assume that: 1) once classified in the Area Plan as land capability 7 (LC 7), it will be far more likely that any parcel-level land verifications will 'verify' the land as LC 7; and 2) as the SEZ report was prepared for the TRPA and City, any field verification by TRPA per Code Section 30.3 will likely rely on information in the report, which is deemed "more accurate."[3] In essence, reclassification based on a report prepared for TRPA and the City[4] makes it reasonably foreseeable that future land verifications – conducted by TRPA or an approved TRPA-contractor[5] - will conclude lands which were historically SEZ are now LC 7.
    a. The SEZ Report states that: "The field investigation also confirmed that the cross-hatched areas are places where historic SEZ was filled, ditched, or otherwise removed and no longer meet SEZ identification criteria." (p. 9). [Emphasis added]. Areas proposed to be reclassified to land capability 7 include historic SEZs. The response to comments states: *"The Area Plan does not propose any changes to TRPA's man-modified provisions and pursuant to Section 30.3.6; TRPA Land Capability Overlays may be amended through a man-modified process that specific findings can be made…*" (Response to Comment 28 by R. Erlich, p. 30). However, the SEZ report appears to lay out a case for the lands to be changed. TRPA's Code specifies: "*The [man-modified] report shall contain information showing that the land in question was modified by man's placement of fill, dredging, or grading in so substantial a fashion as to generally exhibit the characteristics of a land capability district other than the one depicted for said land on the TRPA Land Capability Overlays."* (Code Section 30.3.6). Since the SEZ Report concludes numerous acres no longer represent characteristics of an SEZ, it appears the case is already made for a man-modified determination.

4. The soil pit locations appear to exclude the general areas that would be reclassified to LC 7. As stated in our draft comments, there are no soil test pits in many of the historical SEZ areas the report concludes no longer qualify as current SEZ when Figures 4 (Figure

[2] As noted in the "Document Information" on the second page of the document.

[3] "The incorporation of the refined SEZ map into the Tahoe Valley Area Plan…acts to provide an accurate reflection the extent and location of SEZ in the plan area." (IS/IEC, p. 98-99).

[4] "CSLT and TRPA intend to supersede the "Bailey Overlay Map" for SEZs with this work product and related materials. This revised SEZ mapping, like the Bailey Overlay maps, would be considered a planning-level tool (albeit highly refined) that represents best available information regarding SEZs within TVAP. Parcel-specific TRPA land capability and SEZ verifications are still required to determine development potential and parcel entitlements." (SEZ Report, p. 1).

[5] "Pursuant to Section 30.3.3 of the TRPA Code of Ordinances, land capability classifications are subject to field verification by TRPA, or a TRPA-Certified Contractor. A verification completed pursuant to this section would supersede the TRPA or Area Plan land capability overlay. Specific parcel Land Capability verifications completed prior to the Area Plan adoption remain valid regardless of the information displayed on the map." (Response to Comment 1. Midkiff).

7 in the TVAP) and 5 are compared. A change as significant as declaring an area no longer qualifies as SEZ should be based on adequate sampling of the subject area.

5. The SEZ Report did not look at hydrologic conditions beyond the TVAP boundaries.[6] The hydrology of the area, including how and where water moves, requires an understanding of the entire watershed. For example, changes in land coverage in this area that are likely to result from the new land classification may have an impact on the movement of stormwater immediately adjacent to the TVAP. This 'bigger picture' assessment should be made prior to proposing changes to the land classification.

We do not believe this reclassification should be done as part of the Area Plan process. Rather, we recommend the land capability remain as identified in the Bailey report.

Individual property owners in the future will retain the right to apply for a land capability challenge or verification. At that time, TRPA and the City will also have the opportunity to assess any proposed projects with regards to impacts on the floodplain and future strategies that may be necessary to adapt to climate change. The blanket change proposed as part of the TVAP will most likely result in a permanent change of these lands from historic SEZs to land capability 7 (LC 7), and chances to restore the flood plain will likely be lost.

Outdated stormwater treatment design:

We appreciate staff's response regarding TASC concerns about the insufficiency of the 20-year, one-hour storm design. However, TASC comments included information and evidence that climate change will result in more intense, periodic storm episodes, resulting in more runoff from individual storm events. The response to comments refers to a report published by Coats et. al.,[7] which in fact also provides evidence of increased flooding events in the Basin. However, the conclusion quoted from the report refers to impacts related to the "annual average runoff," yet our concerns stated: "*Available climate change information has indicated that our precipitation patterns will shift, meaning we will see more rain, less snow, and heavy rains will often come in large, individual storms. This will result in a lot of rain in a short period of time, and as noted by meteorologists, we need to prepare for larger episodic storms…"* (TASC Comments to CSLT, 4/14/2015, p. 15). The annual average runoff does not represent the peak runoff that can occur during these short, higher-intensity events.

In addition, the 20-year, one-hour storm design fails to account for the unique conditions in individual locations throughout the Basin. TASC comments on the draft TVAP package included detailed information from a study that was part of the TRPA-certified Final EIR/S for the Boulder Bay Project, which notes the impacts local variations in soil type, soil moisture, precipitation amounts, storm duration, etc,. can have on stormwater runoff. The referenced study states: *"In order to understand the potential for runoff, and as a result of the transport of fine*

[6] "Terra Science, Inc. did not investigate or describe existing conditions beyond the study area (Figure 1B)." SEZ Report, p. 9.

[7] Coats, Robert, M. Costa-Cabra l, M. Dettinger, J. Reuter, J. Riverson, G. Sahoo, G. Schladow, B. Wolfe. 2010. The Effects of Climate Change on Lake Tahoe with Implications for Hydrology, Loading, and BMP Design. Prepared for Pacific Southwest Research Station, Tahoe Environmental Science Center. Incline Village, NV. (Cited by City in response to Comment 14 by TASC, p. 21).

sediment, nitrogen, and phosphorous, we must model actual data to accommodate the following: Multiple storms back to back; Longer duration storms; The timing of storm events (fall, winter, spring); and the impact of periodic events such as El Nino years." The response to comments does not address this concern, and the TVAP package still fails to analyze the adequacy of the 20-year, one-hour storm design standard.

Further, the Coats et. al. study does note a reduction in the treatment of fine sediments (based on annual averages): "*The simulated results for the Improved Condition show a modest decline in performance for FSP load reductions (i.e. increase in average pollutant load) as a result of climate change*." (p. 71). The TVAP package does not assess how this decline in performance affects the TMDL annual average targets, as well as the performance of BMPs and stormwater facilities during heavy runoff events.

Finally, the Coats et. al. report states the following limitations of the analysis:

> *5.3.4 Limitations of Analysis*
> The following summarizes some of the key limitations of the modeling analysis. Limitations below do not discuss uncertainties associated with the GCM data or downscaling methods applied to the GCM data.
>
> 1. Changes in erosion-based processes were not modeled. The results of the analysis suggest a shift in precipitation patterns will produce more frequent runoff events with higher peak flows relative to historical conditions. Higher peak flows in stormwater runoff could increase erosion in drainage channels and streams, resulting in increased pollutant loading to the lake. In addition, the energy associated with rain falling directly onto soil as opposed to snowmelt is likely to promote erosion The potential effect that increased erosion may have on pollutant loading was not analyzed.
>
> 2. Some management actions affecting pollutant loading may be altered in reaction to climate change and are not characterized in the analysis. For example, a decline in the number of snow storms could potentially decrease the quantity of road abrasives applied for winter safety, which in turn could potentially produce better characteristic runoff concentrations from roads relative to historical conditions. (Coats et. al., 2010, p. 71-72). [Emphasis added]

Not only is it unlikely that BMPs and stormwater facilities based on the 20-year design will adequately capture runoff from more intense periodic storms, but the analysis also failed to consider the increased erosion that may result from such storms. In summary, relying on the metric for annual average runoff does not address the impacts of peak runoff during the more intense storms.

As a result of these technical inadequacies, the TVAP package does not adequately plan for adapting to climate change; runoff from flooding is both a water quality and public safety concern. We request this analysis be performed and the TVAP revised to include stormwater designs that will adequate capture and treat the runoff from 100-year storms, which are expected to occur 'more frequently' and be 'more intense' as a result of climate change.[8]

[8] Per discussion with meteorologists presenting the material in the January 2015 Lahontan Board Packet (link below), including the California Adaptation Planning Guide, Identifying Adaptation Strategies. July 2012. Prepared for California Emergency Management Agency and California Natural Resources Agency. Included in packet at: www.waterboards.ca.gov/lahontan/board_info/agenda/2015/jan/item_13.pdf

Alternative area-wide coverage management:

TASC remains concerned with the inclusion of Policy ED-1.5, which encourages private property owners to apply for alternative areawide coverage amendments to increase coverage to 90% in the Town Center Core District. Although this will require an Area Plan amendment in the future, inclusion of this policy now results in a reasonably foreseeable impact that was not addressed in the environmental documentation. In fact, the City specifically removed an alternative areawide management system from the previous draft of the Tahoe Valley Area Plan so that a full EIR would not be required.[9] As the environmental analysis is supposed to address the impacts of the TVAP – which currently includes this policy – we do not believe this analysis can be delayed until a future project-specific request.

TASC recommends the policy be removed, and note lack of such a policy in the TVAP now would not prevent property owners from proposing such an amendment in the future.

Flooding and Climate Change:

In comments on the draft, TASC provided information regarding forecasted increases in flooding events in Lake Tahoe due to climate change (see comments and references on pages 15-16 of our 4/14/2015 comments). The response to comments states:

> The IS/IEC discusses flood hazards, and notes that a small area of the Tahoe Valley plan area is within Special Flood Hazard Areas designated on the National Flood Insurance Program (NFIP) Flood Insurance Rate Maps. {IS/IEC, p. 156.) This area is located where the Upper Truckee River passes under US Highway. The commenter has submitted no evidence suggesting that the level of the Upper Truckee will rise as a result of climate change, and any potential for climate change impacts to the river levels are speculative. The IS/IEC analysis of impacts in the floodplain is sufficient. (Response to Comment 12 by TASC, p. 20).

However, because it is logical and reasonable to expect rivers and streams to be subject to increased water during flooding events, we did not believe the expectation that this would increase water levels in the Upper Truckee River required extensive explanation and scientific cites. The evidence provided indicates that Tahoe will experience increased flooding events as a result of climate change (as noted in the cited Lahontan Water Board packet on p. 15 of our draft comments). TASC requested that the City take the opportunity to plan for this now by designing an Area Plan with adequate flood plain protection that accounts for the best available science. TASC did not suggest the flood plains be narrowed to only those included on the NFIP map. Rather, TASC provided references to the Bailey report,[10] which identifies SEZs as "marshes, floodplains, meadows, and beaches" – all of which are areas where water can be captured during

[9] "After scoping for the draft EIS/EIR, the City conducted additional public workshops with the City Council and Planning Commission. As a result, certain elements of the proposed Tahoe Valley Area Plan were removed, and the decision was made by TRPA and the City to prepare this IS/IEC. Because the proposed Tahoe Valley Area Plan no longer included an alternative land coverage management system the determination was made that an IS/IEC would be the appropriate environmental review document. On March 16, 2015 the City and TRPA issued a new NOA/NOI to adopt mitigated negative declaration for the project." (TVAP, p. 13).

[10] Robert G. Bailey. 1974. Land Capability Classification of the Lake Tahoe Basin, California-Nevada. USFS and TRPA. 1974.

flooding events.[11] The Bailey Report is based on a Tahoe-specific study, and as noted in the SEZ Report, identified 122.4 acres of SEZ in the Tahoe Valley Area Plan boundaries (p. 8). TRPA's thresholds are based on the Bailey Report, not on the NFIP map. Thus, use of the Bailey map to delineate floodplains would represent the best available science because it is the most specific to the unique conditions within the Tahoe Basin, and the TRPA threshold requirements.

[11] As noted in the Bailey report, "Class 1 land (grey on pocket map) is not suited for development, grazing, or forestry use. It has value for wildlife, recreation, or protection of water supplies. This land class includes mountaintops with little or no soil mantle; very steep mountain slopes with shallow soils; and marshes, floodplains, meadows, and beaches. (Bailey report, p. 22).