

TAHOE REGIONAL PLANNING AGENCY (TRPA)  
TAHOE METROPOLITAN PLANNING AGENCY (TMPO)  
AND TRPA COMMITTEE MEETINGS

NOTICE IS HEREBY GIVEN that on **Wednesday, February 23, 2022**, commencing **no earlier than 11:30 a.m., via GoToWebinar**, the **Governing Board** of the Tahoe Regional Planning Agency will conduct its regular meeting. Pursuant to the State of California’s Executive Order No. N-29-20, and Assembly Bill 361, the TRPA meeting will not be physically open to the public and all Governing Board Members will be participating remotely via GoToWebinar. TRPA sincerely appreciates the patience and understanding of everyone concerned as we make accommodations to conduct business using best practices to protect public health. The agenda is attached hereto and made part of this notice.

To participate in any TRPA Governing Board or Committee meetings please go to the Calendar on the [www.trpa.gov](http://www.trpa.gov) homepage and select the link for the current meeting. Members of the public may also choose to listen to the meeting by dialing the phone number and access code posted on our website. For information on how to participate by phone, please see page 4 of this Agenda.

NOTICE IS FURTHER GIVEN that on **Wednesday, February 23, 2022**, commencing at **8:30 a.m., via GoToWebinar**, the **TRPA Operations & Governance Committee** will meet. The agenda will be as follows: **1)** Approval of Agenda; **2)** Approval of Minutes; (**Page 9**) **3)** Recommend approval of January Financials (action); (**Page 37**) **4)** Recommend approval of 2021 Audited Financial Statements (action); (**Page 57**) **5)** Informational briefing on updating TRPA planning software and exploring funding options; (**Page 555**) **6)** Upcoming Topics; **7)** Committee Member Comments; Chair – Aldean, Vice Chair – Gustafson, Cegavske, Hicks, Hill, Hoenigman; **8)** Public Interest Comments

NOTICE IS FURTHER GIVEN that on **Wednesday, February 23, 2022**, commencing **9:30 a.m., via GoToWebinar**, the **TRPA Environmental Improvement, Transportation, & Public Outreach Committee** will meet. The agenda will be as follows: **1)** Approval of Agenda; **2)** Approval of Minutes; (**Page 15**) **3)** Transportation Funding Initiative briefing and possible direction to staff (action); (**Page 557**) **4)** Committee Member Comments; Chair – Lawrence, Vice Chair – Faustinos, Conrad-Saydah, Gustafson, Hill, Novasel, Williamson, Yeates; **5)** Public Interest Comments

NOTICE IS FURTHER GIVEN that on **Wednesday, February 23, 2022**, commencing at **10:30 a.m., via GoToWebinar**, the **TRPA Regional Plan Implementation Committee** will meet. The agenda will be as follows: **1)** Approval of Agenda; **2)** Approval of Minutes; (**Page 29**) **3)** Discussion and possible recommendation of the Bijou/Al Tahoe Community Plan Amendment: Allowable height for public service buildings on parcels owned by the County/City (56-acre Recreation Center Site) (action); (**Page 559**) **4)** Committee Member Comments; Chair – Yeates, Vice Chair – Bruce, Aldean, Friedrich, Gustafson, Hoenigman, Lawrence; **5)** Public Interest Comments

February 16, 2022



Joanne S. Marchetta,  
Executive Director

This agenda has been posted at the TRPA office and at the following locations and/or websites: Post Office, Stateline, NV, North Tahoe Event Center, Kings Beach, CA, IVGID Office, Incline Village, NV, North Lake Tahoe Chamber/Resort Association, Tahoe City, CA, and Lake Tahoe South Shore Chamber of Commerce, Stateline, NV

<b>TAHOE REGIONAL PLANNING AGENCY</b>	
GOVERNING BOARD	
Via GoToWebinar	February 23, 2022
	No earlier than 11:30 a.m.

All items on this agenda are action items unless otherwise noted. Items on the agenda, unless designated for a specific time, may not necessarily be considered in the order in which they appear and may, for good cause, be continued until a later date.

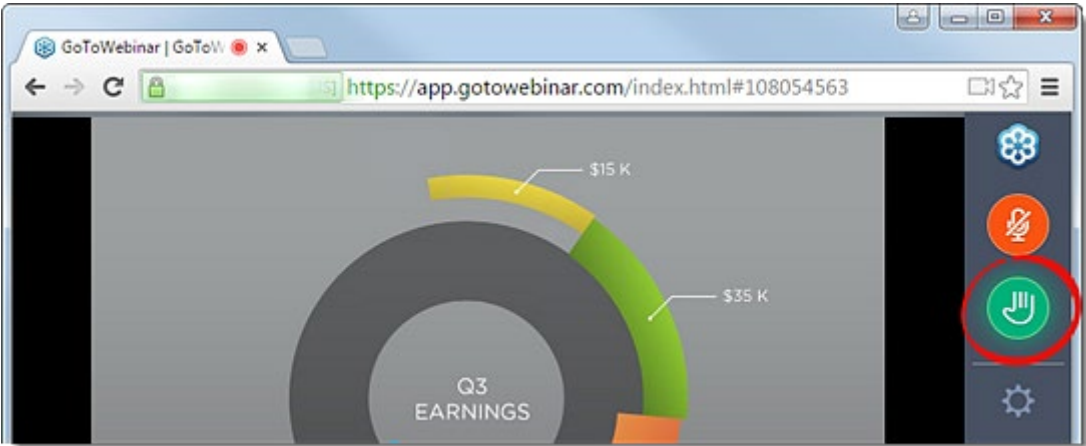
Members of the public may email written public comments to the Clerk to the Board, [mambler@trpa.gov](mailto:mambler@trpa.gov). All public comments should be as brief and concise as possible so that all who wish to participate may do so; testimony should not be repeated. The Chair of the Board shall have the discretion to set appropriate time allotments for individual speakers (3 minutes for individuals and group representatives as well as for the total time allotted to oral public comment for a specific agenda item). No extra time for participants will be permitted by the ceding of time to others. Written comments of any length are always welcome. In the interest of efficient meeting management, the Chairperson reserves the right to limit the duration of each public comment period to a total of 1 hour. All written comments will be included as part of the public record. Public comment will be taken for each appropriate item at the time the agenda item is heard and a general public comment period will be provided at the end of the meeting for all other comments

TRPA will make reasonable efforts to assist and accommodate physically handicapped persons that wish to attend the meeting. Please contact Marja Ambler at (775) 589-5287 if you would like to attend the meeting and are in need of assistance.

The Governing Board agenda and staff reports will be posted at <https://www.trpa.gov/governing-board-documents-february-23-2022/> no later than 7 days prior to the meeting date. Any member of the public with questions prior to the meeting may contact Marja Ambler, [mambler@trpa.gov](mailto:mambler@trpa.gov) or call (775) 589-5287. On meeting day please contact TRPA admin staff at [virtualmeetinghelp@trpa.gov](mailto:virtualmeetinghelp@trpa.gov) or call (775) 588-4547.

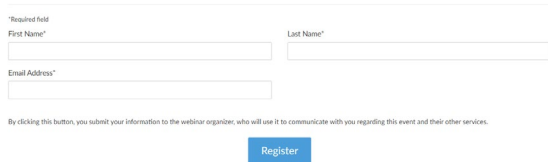
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OR

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<https://support.goto.com/meeting/help/download-now-g2m010002>.
  - The tablet or smartphone app can be found in the app store on your device.
2. Find the link to the meeting at <https://www.trpa.gov/governing-board-documents-february-23-2022/>. Clicking on the GoToWebinar link will open the GoToWebinar app automatically and prompt you to register for the meeting. Please register with your first and last name so that you may be identifiable in the event you would like to make public comment.



3. After registering, you will receive an email with the details of when and how to join the webinar including a direct link as well as a call-in number and access code.

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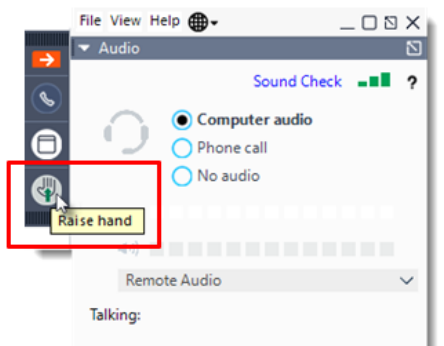
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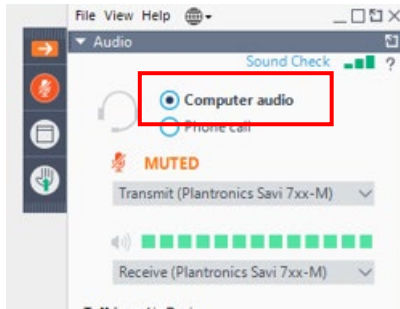
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5. At the appropriate time for public comments, you will be able to "raise your hand" by clicking on the Hand icon located on the tab to the left of your GoToWebinar control panel and a TRPA staff member will unmute you and indicate that you can address the Governing Board.

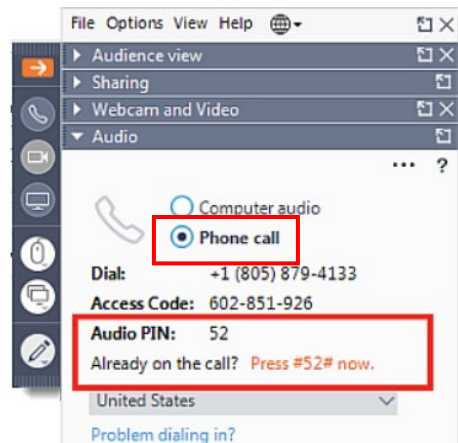


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On the meeting day, if you don't have the ability to use any of the GoToWebinar apps on your computer, smartphone, or tablet, and you would like to make a comment at the Governing Board meeting, TRPA can pre-register you for the webinar and provide you with dial-in instructions and a unique PIN that will identify you. Please contact TRPA admin staff at [virtualmeetinghelp@trpa.gov](mailto:virtualmeetinghelp@trpa.gov) or call (775) 588-4547.

## AGENDA

- I. CALL TO ORDER AND DETERMINATION OF QUORUM
- II. PLEDGE OF ALLEGIANCE
- III. APPROVAL OF AGENDA
- IV. APPROVAL OF MINUTES *(January 26, 2022 Governing Board Minutes will be in the March 23, 2022 Packet)*
- V. TRPA CONSENT CALENDAR (see Consent Calendar agenda below for specific items)
- VI. PUBLIC HEARINGS
  - A. Forest Health Code Amendments Regarding Mechanical Ground-based Equipment on 30-50% Slopes, Chapter 61 Vegetation and Forest Health-Sections 61.1.6.B. through 61.1.6.D **Action** **Page 241**
  - B. California Department of Parks and Recreation, US Army Corps of Engineers, and TRPA Notice of Preparation for joint Environmental Impact Report/Environmental Impact Statement/Environmental Impact Statement for the Upper Truckee River Floodplain Restoration and Golf Course Reconfiguration Project. Environmental Improvement Program Number 01.02.01.0010, TRPA file number EIPC2022-0001 **Discussion and Public Comment** **Page 363**
  - C. Reconsideration of Agenda Item No. VII.A from the TRPA January 26, 2022 Governing Board Meeting for the Tourist Core Area Plan (TCAP) Amendment: Artisan small scale manufacturing and industrial use in the City of South Lake Tahoe Gateway district **Action** **Page 371**
  - D. Tourist Core Area Plan (TCAP) Amendment: Artisan small scale manufacturing and industrial use in the City of South Lake Tahoe Gateway district **Action** **Page 373**

***(This item will only be heard if Agenda Item No. VI.C passes)***
- VII. PLANNING MATTERS
  - A. Briefing Lake Tahoe Community College on Campus Master Site Plan and Future Projects **Informational Only** **Page 477**
  - B. Update on the Measuring What Matters: Thresholds and Monitoring Update Strategic Initiative **Informational Only** **Page 481**
- VIII. REPORTS
  - A. Executive Director Status Report **Informational Only**
    - 1) 2021 Annual Report **Informational Only** **Page 491**

- B. General Counsel Status Report **Informational Only**
- IX. GOVERNING BOARD MEMBER REPORTS
- X. COMMITTEE REPORTS
  - A. Local Government & Housing Committee **Report**
  - B. Legal Committee **Report**
  - C. Operations & Governance Committee **Report**
  - D. Environmental Improvement, Transportation, & Public Outreach Committee **Report**
  - E. Forest Health and Wildfire Committee **Report**
  - F. Regional Plan Implementation Committee **Report**
- XI. PUBLIC INTEREST COMMENTS
 

Any member of the public wishing to address the Governing Board on any item listed or not listed on the agenda including items on the Consent Calendar may do so at this time. TRPA encourages public comment on items on the agenda to be presented at the time those agenda items are heard. Individuals or groups commenting on items listed on the agenda will be permitted to comment either at this time or when the matter is heard, but not both. The Governing Board is prohibited by law from taking immediate action on or discussing issues raised by the public that are not listed on this agenda.
- XII. ADJOURNMENT

### TRPA CONSENT CALENDAR

<u>Item</u>	<u>Action Requested</u>
1. January Financials	<b>Approval</b> <u>Page 37</u>
2. 2021 Audited Financial Statements	<b>Approval</b> <u>Page 57</u>
3. Lake Tahoe Community College: Remodel for Efficiency and Science Modernization Project, One College Drive, South Lake Tahoe, California, Assessor’s Parcel Number 025-041-010, TRPA File Number ERSP2020-2105	<b>Approval</b> <u>Page 179</u>

The consent calendar items are expected to be routine and non-controversial. They will be acted upon by the Board at one time without discussion. The special use determinations will be removed from the calendar at the request of any member of the public and taken up separately. If any Board member or noticed affected property owner requests that an item be removed from the calendar, it will be taken up separately in the appropriate agenda category. Four of the members of the governing body from each State constitute a quorum for the transaction of the business of the agency. The voting procedure shall be as follows: (1) For adopting, amending or repealing environmental threshold carrying capacities, the regional plan, and ordinances, rules and regulations, and for granting variances from the ordinances, rules and regulations, the vote of at least four of the members of each State

agreeing with the vote of at least four members of the other State shall be required to take action. If there is no vote of at least four of the members from one State agreeing with the vote of at least four of the members of the other State on the actions specified in this paragraph, an action of rejection shall be deemed to have been taken. (2) For approving a project, the affirmative vote of at least five members from the State in which the project is located and the affirmative vote of at least nine members of the governing body are required. If at least five members of the governing body from the State in which the project is located and at least nine members of the entire governing body do not vote in favor of the project, upon a motion for approval, an action of rejection shall be deemed to have been taken. A decision by the agency to approve a project shall be supported by a statement of findings, adopted by the agency, which indicates that the project complies with the regional plan and with applicable ordinances, rules and regulations of the agency. (3) For routine business and for directing the agency's staff on litigation and enforcement actions, at least eight members of the governing body must agree to take action. If at least eight votes in favor of such action are not cast, an action of rejection shall be deemed to have been taken.

Article III (g) Public Law 96-551 Tahoe Regional Planning Agency Governing Board Members: Chair, Mark Bruce, Nevada Governor's Appointee; Vice Chair, Cindy Gustafson, Placer County Supervisor Representative; Shelly Aldean, Carson City Supervisor Representative; Barbara Cegavske, Nevada Secretary of State; Belinda Faustinos, California Assembly Speaker's Appointee; John Friedrich, City of South Lake Tahoe Councilmember; A.J. Bud Hicks, Presidential Appointee; Alexis Hill, Washoe County Commissioner; James Lawrence, Nevada Dept. of Conservation & Natural Resources Representative; Sue Novasel, El Dorado County Supervisor; Wesley Rice, Douglas County Commissioner; Hayley Williamson, Nevada At-Large Member; William Yeates, California Senate Rules Committee Appointee; Ashley Conrad-Saydah, California Governor's Appointee; Vince Hoenigman, California Governor's Appointee.





TAHOE REGIONAL PLANNING AGENCY  
OPERATIONS AND GOVERNANCE COMMITTEE

GoToWebinar

January 26, 2022

**Meeting Minutes**

I. CALL TO ORDER AND DETERMINATION OF QUORUM

Chair Ms. Aldean called the meeting to order at 8:30 a.m.

Members present: Mr. Hoenigman, Mrs. Cegavske, Ms. Aldean, Ms. Gustafson, Mr. Hicks

II. APPROVAL OF AGENDA & MINUTES

III. Recommend Approval of December Financials

Mr. Chris Keillor, TRPA Finance Director, provided the presentation. He showed a chart and explained that it shows “no news is good news”. The first chart shows raw numbers on a year to date basis. Grants show negative because we bill grants quarterly. That number will go positive when the grant invoices get in. Planning fees continue to run strong. We’re running well ahead of the three-year average. We’re on track to make the budget. The next chart shows a comparison to budget. We’re about fifty percent. Fees for Service includes not only Current Planning revenue, but also AIS and Shoreline revenue. Both have significant seasonality involved. Current Planning continues operating at the very high level they’ve been operating at for a couple of years now showing the considerable activity going on in the Basin. On the expenditures side, we’re where we want to be in terms of compensation. The contracts stuff always lags. For long-term debt we have two large payments: December and June. For cash flow, the Year to Date is higher primarily due to Current Planning receipts, especially reimbursed fees. The balance of the year is always a downward trend. Spikes are driven by the timing of the California contribution. Everything here is exactly where we want it to be. Mr. Keillor ended his presentation and asked for questions.

Committee Comments & Questions

Ms. Aldean asked if we’re fully staffed and if our new Human Resources Director is here to be introduced.

Mr. Keillor explained that we have two openings at the moment: a Data Modeler, and a Planning Technician. Mr. Keillor then introduced the new HR Director, Angela Atchley, and Ms. Atchley introduced herself to the Committee.

Ms. Cegavske asked Mr. Keillor if the financials will change, and whether he’s concerned about the rent going up.

Mr. Keillor said we’re monitoring the situation closely but are not anticipating any immediate problems.

January 26, 2022

Public Comments & Questions

None.

Mr. Hoenigman made a motion to recommend approval of the November Financials.

Ayes: Ms. Cegavske, Ms. Aldean, Ms. Gustafson, Mr. Hicks, Mr. Hoenigman

**Motion carried.**

- IV. Recommend approval of Amendment No. 2 of the FY 2021/22 Lake Tahoe Transportation Overall Work Program (action)

Michelle Glickert, TRPA Senior Transportation Planner, provided the presentation. Ms. Glickert explained that as a recipient of federal funds, the Transportation team prepares its work program annually identifying all the tasks and the specific budget. The team seeks approval each May, so many of the revenue sources must be estimated based on anticipated carryover funding. Ms. Glickert explained that the budget reconciliation resulted in a \$320,000 discrepancy for FHWA planning funds, a fifteen percent reduction in our budget. The reconciliation is very typical at this time, albeit not usually this high. It gave us an opportunity to refine our staffing budgets. Page 77 of the Board packet has all the full details by work element. We've also posted a redline document on the TRPA Transportation webpage. Each work element was revised with new staffing budgets to reflect a reduced overhead rate. The remainder of the changes required us to move a few tasks around and phase some of the work to ensure there are no impacts to existing contracts. Ms. Glickert then ended her presentation and asked for questions.

Committee Comments & Questions

Ms. Aldean asked about direct versus indirect costs and how they apply to this budget.

Ms. Glickert explained that indirect costs are the staffing budget. Direct costs are things we are under contract with or preparing for.

Public Comments & Questions

None.

Ms. Gustafson made a motion to recommend approval.

Ayes: Mrs. Cegavske, Mr. Hoenigman, Ms. Gustafson, Mr. Hicks, Ms. Aldean

**Motion carried.**

- V. Recommend Approval of Amendment No. 4 to the Tahoe Metropolitan Planning Organization 2021 Federal Transportation Improvement Program (action)

Michelle Glickert, TRPA Senior Transportation Planner, provided the presentation. Ms. Glickert gave background information on the Federal Transportation Improvement Program (FTIP). FTIP implements projects in the Regional Transportation Plan. The 2021 FTIP is the financially constrained four-year programming document for the federal fiscal years 2021-2024. It includes projects that receive federal funds, are regionally significant or require federal action. The programming of projects allows for the authorization of funds and the work to proceed. Ms.

## OPERATIONS AND GOVERNANCE COMMITTEE

January 26, 2022

Glickert explained that an Amendment to the FTIP includes major changes such as a new project or the deletion of a project; or when the change in the project cost is greater than fifty percent of the total project cost; or when there is a revision to the project scope or design. Amendment 4 has two new projects. First, in El Dorado County, the purchase of a vacuum/rodger truck, an air and water quality improvement project funded by mitigation funds (through the TMPO's regional grant program) and County funds as well as TRPA operations and maintenance funds, with a total cost of \$500,000. Second, the National Department of Transportation (NDOT) project to make safety and hydraulic improvements on US Highway 50 with a total cost of \$3,176,000, funded through State funds (Nevada gas tax) and the National Highway Performance Program. It installs an infiltration basin along Highway 50 and a new traffic signal at the intersection of Warrior Way with a pedestrian crossing. It will improve safety for vehicular and pedestrian traffic. The infiltration basin will also improve lake water clarity. Construction will be later this year once school is out and is anticipated to last one season. Ms. Glickert then explained that the public comment period for Amendment 4 began December 21, 2021 and ended January 5, 2022. The Public Hearing was publicized and took place January 5, 2022. TRPA received two comments of support and a recommendation of approval from the Tahoe Transportation Commission (TTC). The next steps for the amendment after today's presentation to the TMPO Governing Board will be bringing it to Caltrans and NDOT, as well as to the Federal Highway Administration, for approval in February of 2022. Ms. Glickert concluded her presentation and asked for questions and comments.

### Committee Comments & Questions

Mr. Hoenigman asked about the timing for the public comment period. He suggested in the future to make public comment period a week before or a week after the holidays in order to increase public participation. Ms. Gustafson concurred with Mr. Hoenigman's point.

Ms. Aldean asked about the infiltration basin. Will it be subterranean? Will it be located on the lake side of the intersection? Ms. Glickert confirmed it will be on the lake side, on the U.S. Forest Service side, and will require only one tree removal. Ms. Glickert said she would relay all comments to the NDOT team to be sure the work will not create a hazard to anyone using that area.

### Public Comments & Questions

Steve Teshara on behalf of the South Shore Chamber of Commerce and the South Shore Transportation Management Association commented to share both groups' strong support of the NDOT project for its improvements to lake water clarity and to vehicular and pedestrian safety.

Ms. Gustafson made a motion to recommend approval.

Ayes: Ms. Gustafson, Mr. Hicks, Mrs. Cegavske, Mr. Hoenigman, Ms. Aldean

**Motion carried.**

## OPERATIONS AND GOVERNANCE COMMITTEE

January 26, 2022

### VI. Quarterly Treasurer's Report

Chris Keillor, TRPA Finance Director, gave the presentation. Mr. Keillor said that the transition of our investment advisory group from Wells Fargo to the Principal Group is the main thing going on right now. That transition is set for February 22<sup>nd</sup>. Bruce Remington (Investment Advisor) and Gaye Borden (Account Manager) will transition to Principal and remain on our account. Mr. Keillor then said TRPA's investments total 31 million. Of that, 16 million is from mitigation funds; six million is securities; two million is in grants; and the balance is reserves and working capital. Most of that money is not usable by TRPA because we are holding it in trust for others. Mr. Keillor then showed a slide showing the type of investments and their maturity. For types of investments, 65% is investment pools; 30% is U.S. government; and 5% is corporate. For maturity, 14% is 1 to 3; and 86% is below 1. Mr. Keillor then showed a chart showing comparison of yields. The Wells Fargo investment pool is shown on a mark-to-market basis. Rising interest rates create an unrealized loss that drives the negative return. We hold to maturity, so we won't experience those losses. On a hold-to-maturity basis, the pool is actually at a positive .98% for the year. Mr. Keillor concluded his presentation and asked for questions.

#### Committee Comments & Questions

None.

#### Public Comments & Questions

None.

### VII. Upcoming Topics

Mr. Keillor, TRPA Finance Director, said that the FY 2021 Independent Auditor's report will be brought to the Committee in February. It will include a report showing details of mitigation funds—revenues when they come in and expenditures when they go out. There is a significant timing difference at TRPA in terms of when we collect and when we disperse mitigation funds, so our reporting on mitigation fees can show a huge surplus for a time, and then a huge negative. Mr. Keillor again announced that Angela Atchley is TRPA's new Human Resources Director. For upcoming topics to be determined, there will be the FY 2023 budget; building repairs and modifications; and the planning software replacement project, for which we're still in the process of looking at bidders and seeing what's available.

#### Public Comments & Questions

None.

### VIII. Committee Member Comments

None.

### IX. Public Interest Comments

None.

OPERATIONS AND GOVERNANCE COMMITTEE

January 26, 2022

X. ADJOURNMENT

Ms. Gustafson made a motion to adjourn.

Chair Ms. Aldean adjourned the meeting at 9:10 a.m.

Respectfully Submitted,

Georgina Balkwell  
Senior Management Assistant  
Current Planning Division

*The above meeting was recorded in its entirety. Anyone wishing to listen to the recording of the above mentioned meeting may find it at <https://www.trpa.gov/meeting-materials/>. In addition, written documents submitted at the meeting are available for review. If you require assistance locating this information, please contact the TRPA at (775) 588-4547 or [virtualmeetinghelp@trpa.gov](mailto:virtualmeetinghelp@trpa.gov).*



TAHOE REGIONAL PLANNING AGENCY  
ENVIRONMENTAL IMPROVEMENT, TRANSPORTATION, &  
PUBLIC OUTREACH COMMITTEE

GoToWebinar

December 15, 2021

**Meeting Minutes**

CALL TO ORDER AND DETERMINATION OF QUORUM

Chair Mr. Lawrence called the meeting to order at 9:45 am.

Members present: Ms. Gustafson, Ms. Hill, Mr. Lawrence, Ms. Williamson, and Mr. Yeates.

Members absent: Ms. Faustinos and Ms. Novasel

I. APPROVAL OF AGENDA

Ms. Regan stated no changes to the agenda.

Mr. Lawrence deemed the agenda approved as posted.

II. APPROVAL OF MINUTES

Mr. Yeates moved to adopt the minutes from the September 22, 2021 EITPO Committee meeting.

Ayes: Ms. Gustafson, Ms. Hill, Mr. Lawrence, Ms. Williamson, and Mr. Yeates.

Nays: None.

**Motion carried.**

III. Transportation Funding Initiative briefing and staff direction (action)

[Agenda Item 3 Transportation Funding Briefing](#)

Ms. Regan, TRPA introduced this item by providing some context and background, before turning over to the RGS Consultants for the main presentation. Rewinding back to April 2021 when the Regional Transportation Plan (RTP) was adopted which was a big decision including elements yet to be considered for the Mobility Mitigation Fee. An element that is being talked about in this committee is a new funding source to invest in transportation. There was agreement to pursue the goal of finding \$20 million annually in new revenue to implement this visionary RTP. Before that, for years TRPA Staff has been working with partners at the Tahoe Transportation District (TTD) in TRPA's role as the Metropolitan Planning Organization (MPO) to bring stakeholders together around a solution or set of solutions that we can move forward in this transportation goal. The two States have taken a lot of leadership in this area over the last several years. A Bi-State consultation on transportation was formed and co-chaired by the Secretary of Natural Resources Wade Crowfoot in California and his counterpart in Nevada, the

Director of Department of Conservation and Natural Resources (DCNR) Brad Crowell. TRPA had a Working Group meeting with those individuals and a group of stakeholders on November 30, 2021. At that meeting the group vetted the Briefing Book, included in the Packet, which laid out a suite of options and potential revenue sources including pros and cons and policy choices embedded in those opportunities. RGS has done the heavy lifting to pull together a series of data points, many of which were prepared through work done by the TTD. Ms. Regan thanks especially Carl Hasty and the TTD board for the partnership undertaken in the last year to get to this point. The heavy work continues over the next couple of months. TRPA has commitments to come together and drive alignment around a set of solutions. At the November 30<sup>th</sup> meeting of the bi-state group, they looked at three working caucuses. Your committee work will be part of that as well as work by the TTD Board. Those committees or caucuses were looking at how we can advance some of these revenue options.

One caucus is local tax opportunities with local governments. Member Gustafson kindly agreed to work with her counterparts on the TTD board and the private TMA representatives representing the private sector to talk through opportunities there. There was a caucus that looked at State and Federal new revenue opportunities. We have a once in a generation infrastructure law that recently passed and there are other opportunities at the Federal and State levels that we can pursue. Secretary Crowfoot and Director Crowell decided to lead that group and they have been looking in the interim. The third group which you'll be hearing from today TTD, Carl Hasty, and TRPA Staff agreed to champion and move forward ideas for innovative regional solutions. Things like zonal or cordon pricing, parking management. Those are what we'll be discussing with you today. Bob Spencer and Josh Metz at RGS have been doing incredible work. Bob will walk the committee through the presentation and then we're happy to take questions to keep the ball rolling as we get closer to alignment on a set of solutions to benefit the Basin for generations to come.

Bob Spencer of RGS presents. He starts by summarizing the Briefing Book. He reminds the committee that RGS is available for one-on-one conversations if anyone would like more background about how they've arrived at these conclusions and proposals. For a high-level review picking up where Ms. Regan ended her introduction, TRPA adopted a \$2.4 billion RTP which has about a \$400 million piece that needs to come from newly identified revenues - about \$20 million per year over 20 years. There are some policy drivers right now that are really lighting a fire for TTD and TRPA to come together on a funding plan to fill that gap. We have Senate Concurrent Resolution 8 which specifically asks the bistate working group to come back with requests to the Nevada State Legislature for funding request for how to address that [gap in funding]. Of course, that could very well be married to a request to the California State Legislature. A response is required in the first quarter of next year so that is the shortest fuse to look at ideas for how to pull together this \$20 million per year funding gap. The third policy driver (RTP being number 1 and the Senate Concurrent Resolution being number 2) is the VMT Threshold that TRPA is on deck to meet over time. To demonstrate progress in meeting that threshold to the California Attorney General (Cal AG), TRPA agreed to demonstrate that it has the funding in place to do that [meet the VMT Threshold] by around the 2024 timeframe. Within the next couple of years, we need to have at least a program for how that revenue will be in place.



Today, as Ms. Regan teed up, Mr. Spencer will talk about one part of that [what the bi-state consultation working group has been discussing] and that's a zonal recreation parking concept. This would be part of a regional funding plan, but it will start in a focused way along several corridors. After the presentation, Mr. Spencer will end on some areas where the staff would really appreciate direction from the committee. Talking about what this program going to look like, what are the design parameters, how does it have to function? It has to be ubiquitous; it has to have a common brand, it will have to pull together multiple partners to give those looking to access Tahoe's beautiful recreation areas a common platform through which to access mobility options. It has to be scalable – we want to be able to work from parking up to transit options and then scale it geographically and apply it to other areas around the Basin. It has to be easy to use with a wayfinding and information platform that's easy to access and follow. Either use of license plate readers or some kind of payment app. The user needs to pay. By that we mean if you're stopping in one of these recreation corridors, which implies you're parking, and initially that may include parking on unregulated state highway shoulders, you're paying. if you're stopping in advance of one of the recreation corridors for example at a park and ride, then you're not paying. If you're driving through the corridor, you're not paying. So, this is a user pay concept where we would integrate, ideally, dynamic pricing where the pricing could go up as congestion increases to try to incentivize behavior to look at transit or other mobility options. This is building on work already being done along Hwy 28.

What are we trying to solve? We're trying to improve safety, there are tremendous safety problems along these corridors during heightened congestion periods. We're trying to enhance recreation access and option; we're trying to make it easier for people to get to these beautiful spots by providing alternatives mode options. And we're trying to address a range of negative visitor impacts including overcrowding, VMT, Environmental impacts, etc. That's what the program is focused on solving. We're proposing to start on the Hwy 28 corridor on the Northeast shore and the Hwy 89 corridor on the Southwest shore. This work is building on a tremendous amount of very good corridor planning that has been going on for the last several years that TTD and TRPA have been doing. There was, if you will, a Master corridor plan that looked at the entire Basin (Slide 12). We have also developed some focused plans that look more precisely what needs to be done in each corridor. Initially the areas outlined in yellow [on slide 12] would represent the initial zones. These zones are all publicly owned to keep the plan simpler to begin with so we're not dealing with private property owners or access for private property. This is purely a program designed for access to recreation. The parking fee would only be applied if the car is parked within the yellow lines; not if someone drives through or parks outside and takes public transit in.

Focusing in on the Emerald Bay area to tee up one of the decisions or area of guidance staff is looking for from the Committee today. Payment can start at a fairly low rate and simply fund operation maintenance on existing parking lots. As you look at the fee rate and the consequent funding plan that you can support with those revenues, you can do more, have greater impacts, and generate greater benefits. At higher fee rates you can move from transit on an hourly basis to transit on a 30-minute basis, you can add additional parking facilities, you can bring in trail connections, and even move to larger capital expenditures like a mobility hub. There's a connection between how much is charged and what can be done with the funds in terms of benefits for recreation access.

The same questions will apply when focusing on the Hwy 28 corridor: what rate do we apply for parking in the corridor in exchange for what level of services, improvements, enhancements, and additional mobility options that can be provided. Staff is looking for guidance from the committee in four main areas:

- 1) Collection enforcement – There is the automated collection approach such as automated license plate readers e.g., transponders in the Bay Area with invoices received by mail. There is also the more traditional on-site collection with a Parkmobile app downloaded to your smartphone or even meters in off street parking areas. Of course, this needs to be coupled with manual enforcement. The question is what kind of look and feel does the committee want for the user.
- 2) Corridor Fee Rate and Funding Plan – What level of rate should be charged in exchange for what level of benefits and how robust the funding plan will be?
- 3) Equity – How can we look at adjusting the fee for income? There are ways to adjust the fee through enrollment ahead of time. What should be done for the local and surrounding communities? Is there a rationale for them to have discounts or not?
- 4) Administration – Should existing authorities be used or should something new be created to administer this program?

Mr. Spencer ends his presentation and turns it back to the committee for discussion.

#### Committee Comments & Questions

Mr. Yeates appreciates Staff's work to narrow down from the conversations in the Bi-State meeting on November 30<sup>th</sup>. Mr. Yeates states the Bi-State group has requested that TRPA come back with how to fund the proposal in terms what could the States or the Feds could contribute which he views as more of a capital thing. He's concerned that if the issue is broken down into these items and respond to what staff is seeking from the committee now, what has already been approved with the VMT update and the connection to the RTP, that he's concerned there wouldn't be any opportunity for new revenue that would be implementing the RTP. The consequences of not meeting VMT is concerning. Doing a pilot program, he believes is appropriate because it's important to show that if these changes are made, the public would actually use whatever is put together. But if all it is the same system, then he's concerned that 1) the public may not use it or 2) that it won't satisfy a challenge, especially from the California Attorney General, that we haven't met our goal here of reducing VMT by changes and implementing our Regional Plan.

Mr. Spencer states that this would be new revenue and that it's estimated in the Briefing Book that roughly \$92 million a year could be generated with this type of parking fee concept in these two corridors.

Mr. Yeates states that that's good but in order to set that up there's need for capital, and he can't imagine that either TTD or TRPA has the revenue to put the parking process together.

Mr. Spencer states that Mr. Yeates is concerned about the up-front costs and Mr. Yeates confirms.

Mr. Yeates states that fundamentally that when the season comes there needs to be shuttles in place and reliable parking with parking passes not even including the Equity issues that need to be worked out. Mr. Yeates asks where is that capital going to come from?

Mr. Spencer responds that yes, there needs to be a phasing and funding plan, including appropriate debt financing to put this into place. One tool there could be through an automated license plate reader, if that's approved, with reliable vehicle counts do a "PPP" Public Private Partnership. One could actually get upfront funding through the private markets that is paid back through those revenues. That would be a tool at TRPA's disposal including frontloading with grants. Mr. Spencer states that Mr. Yeates' point is very well taken and has been discussed. Before any kind of fee goes into place, there needs to be a service available at the same time for people to benefit from to see what they're paying for. Mr. Spencer states that that's something that can be managed and phased over time with a regional funding in place to take care of those capital expenditures.

Mr. Yeates states that he agrees the [capital expenditures] idea needs to at least be in place if not fully fleshed out when we submit something to the Committee. Somehow this up-front funding must have been in place for the East Shore trail when TTD put in the parking meters into the existing lot. Emerald Bay strikes Mr. Yeates as a different challenge because traffic may be stopped, and the public will only be allowed into certain areas on a shuttle system which will require some.

Mr. Spencer clarifies that traffic will not be stopped at Emerald Bay and, in fact, it is desirable to have people continue to park there because the parking fees will generate the revenue.

Mr. Yeates states that if people are going to continue driving and parking legally and illegally up at the top then the issue is how do you incentivize people to be convinced that the better way is to park down below and get out of their car with their things, get on a shuttle, and go have a great time? That is the overall goal of the corridor plan in addition to increased bike trail and foot traffic. If we just operated at peak time with the shuttle system, Mr. Yeates is not confident about the data collection. SR28, he sees a bit differently than Emerald Bay which he believes will be a big deal because of all the negotiations with land owners – Federal and State – and trying to work out the two parking areas at either end. Pilots are the way to go but we need to really think about what the capital costs are as well as the other ways we can do this and how we can be confident about collecting the information needed to show that the public would in fact take advantage of a better system to justify requesting additional funding to complete the process.

Mr. Lawrence agrees with a lot of Mr. Yeates' comments. The challenge of the whole exercise has been "the chicken and the egg." You don't want to start charging people until there's a system in place that they can see and use but you can't get those systems in place until you start generating revenue. Mr. Lawrence understands that these two [Hwy 89 and SR28] were selected as pilot program locations in order to get some momentum going and there's the State/Federal nexus of both corridors. Mr. Lawrence understands from conversations both with Director Crowell and Secretary Crowfoot,

they're on tasks to start identifying some State and Federal funding sources. As was pointed out those typically involve more infrastructure capital outlays but hopefully the timing's right with the different infrastructure packages so, while we couldn't get a parking lot in place in every area of the Basin right away, we could maybe start work in these two corridors. From a Nevada perspective, Mr. Lawrence is on board with getting some satellite lots outside of the Basin and bringing people up but until, again on the Nevada side, we get SR28 totally built out having a satellite lot doesn't make a ton of sense until we have someplace to take them [people who have parked outside of the Basin]. Mr. Lawrence believes looking at these two locations for the pilot programs were two "pretty large bites of the apple" in order to gain momentum as possible funding sources. It doesn't answer the ideal golden ring of one funding source to fund everything, but it does go a long way.

Ms. Regan states that these solutions don't work independently or they're not mutually exclusive. To ground the group looking at those three groups that were identified to work on new revenue, the State and Federal group is looking at new monies largely flowing through these new pieces of legislation to the States that could benefit and serve as capital catalyst money to get these other things going. For example, the State and Federal caucus that Secretary Crowfoot and Director Crowell are leading, are looking at new formula funding, for example, several years ago we were able to realize a larger formula in Federal law for Federal monies coming into the Basin. California does not recognize that formula. They are still looking at the small year-round population, vs. the 200,000+ we were recognized for in Federal law for the Basin. That change alone, which is a very heavy lift, could generate up for \$3 million potentially of additional revenue that could support these other solutions. Ms. Regan points out that Member Gustafson most likely wants to jump in at some of the local government discussions around future tax revenues whether it be sales tax or TOT or new revenues that could support this as well. What we're taking here is that traditional EIP approach; looking at how can the Federal, State, local, and private sources come together to roll up to this \$20 million per year annual target because we are on the hook to achieve this through the State of California Attorney General's office, through the VMT Threshold. What we're hoping today is to get the Committee's feedback on this one component which is very innovative. This would not only raise new revenue and we identified it in the top three revenue generator potentials for the Basin – this zonal pricing concept – and drastically change public outreach by having new shuttles to have people not sitting in traffic but getting them to and into these recreational amenities. Staff wants to get the "basic head nod" from the Committee to pursue this direction with TTD and all of the stakeholders to move into a pilot dimension that could move this further down the road.

Mr. Lawrence states that what he's hearing is that staff is looking to see if there's consensus or perhaps where there's not consensus on moving forward with these proposed pilot programs. Ms. Hill, Ms. Gustafson, and Ms. Williamson are all queued up for questions and Mr. Lawrence states that if Committee members have specific questions on any of the four areas proposed at the end of Mr. Spencer's presentation that we hold on that for a bit until we get a consensus more generally on moving forward.

Ms. Hill states that she thinks this [proposal] has potential and she's excited especially using SR28 as a pilot project she thinks there could be an impact and excitement [from

the public] if it's done right. She's in support and on board to solve the concerns of implementation.

Ms. Gustafson has some general questions. Of the \$9-10 million generated revenue, how does that compare to the costs and what do we anticipate in working with the State Parks and USFS on any fee? If people are paying fees for those sites already and then they're also [paying parking fees], how will that work? In local government or all government we look at unintended consequences, so spillover parking for people trying to avoid the fee and parking just outside [the paid lots] is important to consider, what is the feedback on that? Lastly, a comment, a number a years ago Ms. Gustafson reported to TTD that one of the principals of Sperry Capital lives in Olympic Valley and he's very familiar with the up-front finance, the infrastructure based on a guaranteed stream of revenue and Ms. Gustafson would love to have him come talk to a working group on how that could happen. He's just one of the potential providers but he certainly has a lot of experience with toll roads and cordon pricing throughout the US – Arizona, Colorado, and California. He has up-front financed projects in those States and is very experienced. Ms. Gustafson is happy to share is contact with staff and others to help ensure TRPA can get the infrastructure in place. We need to arrange parking; to pick people up in shuttles they must park somewhere outside of these corridors so making sure we have adequate funds to lease or manage those parking facilities.

Mr. Lawrence also wanted to talk about spillover parking. Incline Village, NV has experienced a lot of that from the East Shore trail. State Parks is a good one to bring up. When we get into the collection system, there may or may not be challenged to have the State Park employees at Sand Harbor collecting the additional fee and then breaking it out. Mr. Lawrence knows from experience in the NV Legislature that they don't like to give up General fund dollars and right now Sand Harbor brings in a fair amount General Fund dollars. That would have to be made whole somehow as part of the process. Mr. Lawrence isn't able to speak to the process of California State Parks although he'd imagine it's a similar situation.

Ms. Williamson is generally supportive of the pilot idea particularly if other Committee members with more experience are as well. She does want to share that she will be looking for if we do go forward with the Pilot, from the perspective of Public Utilities, when pilots are designed it's important to carefully design the data analytics on the backend. She's looking for how the data will come in and that we know what to do with the data and knowing that pivoting can happen based on the data. Anytime something new is rolled out in the Basin, people tend to "freak out" a bit so knowing that this will be done working with the public and that the public knows that we are looking for certain data, gathering it, and that we're able to pivot if and when need be. Examples of data to collect are, is the summer crowd the same as the winter crowd? Does that mean more locals [during those times] or fewer? A license plate reader may be helpful there. The spillover parking issue, the day use factor vs. how many people are staying in the Basin. Ms. Williamson emphasizes that it's important to know what data we're looking for in this pilot and that we're able to take that in real time so that we know where to go with the feedback we receive.

Ms. Hill points out that Washoe County is undergoing an RFQ for a parking and traffic study in Incline Village and she believes the timing of this corridor pilot project should be

coordinated to address the spillover parking. RTC has been undergoing the pilot project with shuttles up from Reno to Incline Village through the busy summer season. Those shuttles were free and with various drop off locations. All three of these things working together are exciting and Ms. Hill is available to help coordinate. Washoe County is also looking at these issues in planning for Incline Village and Crystal Bay.

Mr. Lawrence states that this coordination will be very helpful and the information Ms. Hill obtains from these other studies and projects will be informative to this project. Mr. Lawrence mentions that the Tahoe Fund, largely because of the spillover parking in Incline Village, as dipped their toes in the water and has had some conversations not necessarily on transportation funding but on recognizing that parking is going to be part of the picture and that spillover parking is a problem. They're looking to have some kind of models looking at branded regional parking enforcement program could look at in order to assist some local communities. Mr. Lawrence states that he is hearing there is general consensus on continuing to explore these two pilot project ideas.

Mr. Lawrence continues that there were four more specific areas that staff were looking for guidance from the Committee. [Slide title Initial Guidance].

Ms. Regan points out that the timing to move forward in exploring these pilots couldn't be better with the benefit of the SR28 corridor work to date and the Hwy 89 Corridor plan is full of data and analyzing exactly the kinds of questions we need to answer such as where remote parking could be, timing of shuttles, potential ridership, etc. Ms. Regan points out that we're not only looking at revenue, we're also looking at behavior change. That is one of the most difficult things to change to get people out of their cars. Ideally, we're targeting the VMT reduction as policy objective at the same time where we can enhance revenue. Over time, if we're successful, we may lose revenue because fewer people will be in their cars and more people will be on shuttles. If we can get over that hump and change that behavior, we're talking about millions and millions of cars in these two corridors which is not a sustainable or safe environment. There are a lot of details to work out but we have the benefit of these corridor plans, we have preliminary MOUs [Memorandums of Understanding] with law enforcement, State Parks, and the Forest Service. We have the right folks at the table who are willing to move forward and find solutions that can work. Ms. Regan is pleased to have the Tahoe Fund study brought up by Mr. Lawrence. TRPA has some good information of all the parking issues around the lake, looking at the very limited law enforcement opportunities for staffing to enforce. However we move these pilot programs forward, that's a key segment of our stakeholder base; working with law enforcement in both States.

#### 1) Collection/Enforcement

Mr. Lawrence states that there are a lot of challenges at State Parks collecting fees with backups, fee splitting (AIS had this challenge), and the LTBMU [Lake Tahoe Basin Management Unit] doesn't have the bandwidth. They were actually looking at the State Park folks to issue tickets up and down SR89 even in front of Forest Service land. Mr. Lawrence says, given these known issues, his gut feeling is going with an automated system.

Mr. Yeates agrees Mr. Lawrence in starting with some sort of automated collection

because of the staffing/support for on-site collection. He also notes the queuing factor thinking of the lines to get into Yosemite or Yellowstone as examples. Automated at the parking area similar to the East Shore how TTD has set it up. It's a hassle at times if the machine's not working appropriately but that seems like the best spot because people can get a ticket and move on.

Ms. Gustafson echoes Mr. Yeates' opinions and also speaks to Ms. Williamson's previous point on data collection in order to expand or contract the system as needed.

Mr. Lawrence states there's consensus on doing an automated system. Certainly those details would have to be worked out on what that looks like. Mr. Lawrence wonders if there's an opportunity to combine an automated license plate reader to help combat spillover parking.

Mr. Spencer clarifies that an automated license plate reader would be at either end of the corridor where members of the public have opportunities to pull off and park prior to going through the reader and possibly being subject to the fee. Staff would work out those details and focus particularly on the spillover parking issue.

## 2) Corridor Fee Rate and Funding Plan

Mr. Lawrence remembers that the presentation had talked about a sliding scale and at one end of the scale would be the minimum paying for the maintenance and as the fee rate rises the funding moves more up into operations and more robust transit times as well as building up infrastructure.

Ms. Hill thinks that we do need to find capital from various other sources but getting good public transportation together is how you shift public behaviors. That is also her comment on the equity issues is providing low-cost or free public transit options as a companion piece. How can we partner with localities on the public transportation or even offer incentives.

Ms. Novasel agrees generally with the pilot program and automated collection. She agrees with Ms. Hill on offering free or reduced public transit fares in support of equity. Ms. Novasel does have concerns with parking and how that may impact the communities where the parking is set up. Of course, in the big pictures, we need to get both States to buy into a regional fare program.

Mr. Lawrence states that we're looking at a parking fee to raise additional new revenue. At a minimum, the fee needs to not only capture capital for O&M (operation & maintenance), but it needs to be robust enough to build out a transit system that's going to be frequent enough for people to want to use. Mr. Lawrence doesn't know how that would affect the price of using the transit but it [the parking fee] has to be that high. There are Constitutional prohibitions in Nevada from using fees on roadways for anything other than O&M. This is an opportunity to get that additional revenue beyond O&M in order to build out the infrastructure and put the transit in place and pay for it.

Mr. Yeates states, based on the presentation at the Bi-State meeting on the 30<sup>th</sup>, in California if we're charging a fee for parking but we apply it to some other use the

challenge can be made that it's a tax which requires a 2/3 vote. Whereas, if it's a fee that's a different matter. If it's part of this overall pilot that we're trying to do, the parking fee is supporting the shuttle system and everything we're doing here, then Mr. Yeates agrees with Mr. Lawrence that the fee has to support the shuttles and the public needs to know that this is so much better than getting in line at Camp Richardson and waiting to drive to the top of Emerald Bay the way it happens now on busy summer weekends. Mr. Yeates doesn't know if a shuttle every 30 minutes is frequent enough; people may want to be able to go up every 15 minutes to go back and forth. To me, this is the devil in the details. Number two is a challenge for us to come up with something that we think will drive that behavioral change which we can do by calling it a fee and not get stuck with calling it a tax which is an issue in both states with the prohibition in Nevada and the 2/3 vote requirement in California.

Mr. Spencer states that they are engaging with Legal counsel on these issues to the extent that we go for a more robust program where those driving into the corridors and parking are paying a fee to fund transit that's going to serve those that choose to not [park in the corridor]. We may be in the realm of a tax on the California side and that may need a 2/3 vote. Ideally Basin residents would see the advantage of the program and approve it. That is a question, the line between a parking fee and a transit tax, if you will, is still being worked on. On the Nevada side, they are pursuing some guidance from the Attorney General's office on this question of would this be considered a toll and therefore limited in its use.

Mr. Lawrence states that certainly a lot more work needs to be done on the legal parameters. From a Nevada Legislature perspective, when the options are put in front of them for types of revenue generation, they're going to be asking the legal questions about statutory changes or how it fits in the Constitution. We do need to do a deeper dive including, as Mr. Spencer, how parking on the right of way would be charged.

Ms. Williamson states that the legal questions for her are going to dictate a lot of what can be done here. This is another one of those key pieces that would be helpful to have actual feedback from people who are using the transit system, who interacted with it in anyway, perhaps through a survey on the shuttle itself but somehow to ask where someone is coming from, how long are they in the Basin, was this helpful, if you're parking is the fee exorbitant, do you understand what the fee revenue is paying for, etc. An interaction with people so that the fee feels connected to the behavior changes we're trying to make and so that we're hearing from people – is this helpful, is this fee something you're willing to pay to come up here, is the convenience worth it, is the environmental aspect worth it? If people are willing to pay more because they know that it's helpful to the Lake that would be good to know. Or if it [the fee] is somehow impeding access to the Lake that would also be good to know.

Mr. Lawrence assumes that survey work could be built into the service once it's up and running and perhaps TTD has experience with that already through their work on the East Shore shuttle when it was operating. They may also have feedback from the public from when the parking meters were first turned on. Regarding the parking meters there were positive local reports that the public was understanding. From a resource management perspective it's an ongoing process of adaptive management.



Mr. Hoenigman asks if the National Parks systems have been looked at for example in Muir Woods near San Francisco, there's a parking reservation system because it keeps people from heading out and circling for parking because you've paid ahead for a time slot. It seems to work well and could easily be used across multiple sites. This might be an efficient way to charge for parking in these locations.

Mr. Spencer responds that there are various passes of this type and they're looking at taking this a step further for a greater degree of revenue generation in return for a higher level of direct transit service into the recreation corridors.

Mr. Lawrence states that particularly regarding the reservation system, [Nevada] State Parks are working on getting such a system in place throughout Nevada for overnight camping and building into the day use reservations for Sand Harbor and down at Valley of Fire in Southern Nevada. Mr. Lawrence agrees with Mr. Hoenigman that there is a system in place but there are changes that need to be made with many interlocking pieces to make it fully functional.

Ms. Gustafson agrees with Mr. Lawrence and Mr. Hoenigman on the reservation suggestions. She believes the Tahoe Fund's parking effort is focused on that. We want people to leave their car before they even try to drive to the lots because we have such limited capacity.

Mr. Lawrence states that the consensus on the fee rate and funding plan is that it needs to fund a more robust transit system, not simply cover O&M. How the initial capital is built out remains to be seen but we need to fund a transit system that people will want to use.

### 3) Equitable

Ms. Hill reiterates her comments on the need for an affordable public transit system.

Mr. Yeates states that dealing with Emerald Bay there are campgrounds and state parks along that corridor and the need to balance the parking fee with the fees people are already potentially paying to come to State Parks. People staying overnight need the ability to go through our system and then park at the campsite. To get local support for what we're doing, they need some kind of pass which is a challenge to the Hwy 89 corridor plan; how do we work this out with local traffic vs. pulling off people who want to have a day use experience at Emerald [Bay]. Certainly at the start of this because it's not a full-blown transit system around the Basin, that these pilot programs wouldn't charge locals.

Mr. Spencer asks for Mr. Yeates to clarify that if someone lives in the Basin chooses to visit Emerald Bay by parking within this corridor you're wondering if they would receive a discount.

Mr. Yeates confirms, locals should receive a discount. His initial reaction is not to charge the locals for their use of the area.

Ms. Williamson asks Mr. Yeates if by "locals" he means any homeowner, including

second homeowners? Mr. Yeates states residents or maybe voters? Mr. Yeates states he's trying to not "tick off" full-time residents. Similarly trying to do a sales tax or increase TOT that becomes a problem locally. We've gotten similar feedback in regard to the Mobility Mitigation fee.

Ms. Gustafson states that one of her thoughts on regional revenue when we were exploring a Basin entry fee was having an annual pass that could be purchased ahead of time that could be discounted or free for full-time residents of the Basin. Ms. Gustafson agrees that we do want to be careful of not layering fees on top of each other. If we want measures to pass that the 2/3 requires, we need to have a benefit for locals. Ms. Gustafson doesn't know if fees need to be fully waived for locals because other public sites may be impacted once this is implemented in Emerald Bay.

Mr. Lawrence states that TRPA and all the partners have mostly successfully navigated that fee layering with the EIP funding which also gets complicated that there are Federal dollars that go to the State and the locals, etc. Mr. Lawrence states that his comment is from a political antenna, based on conversations with Douglas County in particular, politically getting the local legislative representatives on board will be critical so there may need to be plans in place in case we can't get to the 2/3 vote.

Mr. Spencer notes that the 2/3 vote would be in-Basin residents only.

Mr. Lawrence isn't 100% convinced based on the open Legal questions especially if we end up needing a legislative change.

#### 4) Overall Administration of Program

Ms. Regan underscored what Ms. Williamson pointed out in terms of data collection with a focus on the mindset shift and changing public behavior. TRPA will be working on robust data collection in coordination with various partners because a change of this magnitude cannot be done in a vacuum which would all be built into the pilot. In addition, we are likely looking at legislative changes at the State levels, we may have local elections triggered, there are many things to be considered but if we can continue moving this train forward that gives us the momentum to start digging into the details. TRPA is not a taxing authority so when we start talking about these things, the community instantly latches on to "tax schemes." We need to be thoughtful about how we engage folks and work alongside our Sustainable Recreation and Tourism initiative that we're kicking off. There will be intersections with stakeholder work in that because a lot of solutions around Sustainable Recreation relate to transportation infrastructure. Ms. Regan assures the Committee that TRPA will be connecting the dots not only in this work but in other work that is planned for next year.

Mr. Lawrence states that there a lot of different opinions on how to raise the revenue but there is consensus on the need to do something as quickly as possible. Operating from that mindset, Mr. Lawrence states that whatever method is the most expeditious and the most effective. If there's existing authorities that we can tap into, thinking largely TTD.

Ms. Gustafson, Ms. Williamson, and Ms. Hill agrees on the need to be expeditious which

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most likely rules out creating a new authority.

Public Comments & Questions

None.

Committee Comments & Questions

None.

IV. COMMITTEE MEMBER COMMENTS

None.

V. PUBLIC INTEREST COMMENTS

None.

VI. ADJOURNMENT

Mr. Yeates moved to adjourn.

Chair Mr. Lawrence adjourned the meeting at 11:10 a.m.

Respectfully Submitted,



Katherine Hangeland  
Paralegal

*The above meeting was recorded in its entirety. Anyone wishing to listen to the recording of the above-mentioned meeting may find it at <https://www.trpa.gov/meeting-materials/>. In addition, written documents submitted at the meeting are available for review. If you require assistance locating this information, please contact the TRPA at (775) 588-4547 or [virtualmeetinghelp@trpa.gov](mailto:virtualmeetinghelp@trpa.gov).*



TAHOE REGIONAL PLANNING AGENCY  
REGIONAL PLAN IMPLEMENTATION COMMITTEE

GoToWebinar

January 26, 2022

**Meeting Minutes**

I. CALL TO ORDER AND DETERMINATION OF QUORUM

Chair Mr. Yeates called the meeting to order at 9:15 a.m.

Members present: Ms. Aldean, Mr. Bruce, Mr. Friedrich, Ms. Gustafson, Mr. Hoenigman, Mr. Lawrence, Mr. Yeates

II. APPROVAL OF AGENDA

Mr. Yeates deemed the agenda approved as posted.

III. APPROVAL OF MINUTES

Ms. Aldean made a motion to approve the December 15, 2021 minutes as presented.

**Motion carried.**

IV. Discussion and possible action/recommendation of the Forest Health Code Language Regarding Mechanical Ground-based Equipment on 30-50% Slopes, Chapter 61 Vegetation and Forest Health-Sections 61.1.6.B. through 61.1.6.D

Mr. Yeates said the Forest Health and Wildfire Committee addressed the substantive issues and the Regional Plan Implementation Committee's role is to ensure that what's in the Code of Ordinances matches what should be done. There was a comment letter received that had concerns with the substance of what is being proposed to the Governing Board.

TRPA staff Dr. McIntyre provided the presentation.

Dr. McIntyre said today's presentation will include the history, background, need for this code amendment, and then review the code amendments and their substance.

The Angora Fire in Lake Tahoe occurred in 2007 which burned approximately 3,100 acres, and over 250 structures were destroyed. From that, they had the Emergency California Nevada Tahoe Basin Fire Commission that was a joint bi-state effort that produced a report of recommendations on policy, implementation, and education regarding vulnerability to fire and forest resilience within the Tahoe basin.

Since that report came out, the Tahoe Fire and Fuels Team and agencies around the Basin have been working to implement those recommendations. One of the final recommendations yet to be implemented is this one around simplifying regulations. The commission recommended that TRPA, the Lahontan Regional Water Quality Control Board, the USDA Forest Service, and other affected

## REGIONAL PLAN IMPLEMENTATION COMMITTEE

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agencies amend their plan and ordinances to allow equipment use on slopes greater than 30 percent based on current and future technology and current forest practices to ensure resource protection.

Chris Anthony from Cal Fire spoke specifically to this recommendation at the September 2021 Governing Board briefing on the Caldor Fire. It is critical for forest resilience and reducing fire risk within the basin. The California Forest Practice Act currently allows for treatment with ground based mechanical equipment above 30 percent and around the country implementers are going above 30 percent with ground based mechanical equipment.

(Slide 5) 2007: Angora Fire Treatment Effectiveness. On the left are areas that were treated that burned, and on the right are areas that were untreated. The Safford et al., produced a paper in 2009 that shows fuel treatments generally performed as designed substantially changed fire behavior and subsequent fire effects to forest vegetation. Exceptions include two treatment units where slope steepness led to lower levels of fuel removal due to local standards for erosion prevention. This shows that treated areas fared much better under the Angora Fire, the areas that weren't specifically on steep slopes due to regulation, did not fare as well.

(Slide 6) 2016: Emerald Fire Treatment Effectiveness. On the left are areas where there was no treatment and then where there was treatment the fire falls to the ground. The area on the right was an area that had been treated before the Emerald Fire. There's still standing live vegetation on the right and on the left the ground is scorched and the trees are gone.

On slopes that are 30 to 50 percent within the basin approximately 61,000 acres or 20 percent of total land fall on slopes 30 to 50 percent. While those could be subject to this code amendment, that does not necessarily mean that all of those slopes will be treated. Many of those slopes are bare open, granite areas, or shrub land and are not going to be treated with ground based mechanical equipment. These acres of 25,300 or 41 percent fall within Wildland Urban Interface (WUI) Defense and WUI zones. Those are the areas that they need to be focusing on in terms of fire risk and forest resilience and ensuring communities are safe. The majority of acres that are 30 to 50 percent slopes fall on federal lands, 47,000 acres or 77 percent.

There is an ecological and economic need. The current Code of Ordinances allows for hand treatment on slopes greater than 30 percent. This is resource intensive and then often more costly. With limited budgets, this means that the dollars that come into the basin for fuel treatment cannot go as far as they might if they were allowed to do ground based mechanical equipment treatment on those slopes. Pile burning is often less ecologically beneficial than those broadcasts slow and low burns where it's going through under the canopy of the trees. Ground based mechanical equipment would allow them to do those kind of low and slow burns. That's not to say that pile burning won't still exist within the basin, but a code amendment would ultimately reduce the number of piles that are on the landscape. This all has implications for the pace and scale of restoration. After the Caldor Fire they now know more than ever that pace and scale restoration and increasing the forest treatments is critical to getting ahead of mega fires coming into the basin.

They engaged with science partners through the Pacific South West Research Station, University of Idaho to assess erosion effects of a variety of restoration treatments on hillslopes and soil types within the Lake Tahoe West landscape and across the entire Lake Tahoe basin. In July 2021, those scientists presented to the Forest Health and wildfire Committee on their initial findings.

Watershed Erosion Prediction Project (WEPP) Report Key Findings: Sediment and phosphorous yield from moderate or high severity fire were significantly more than all thinning scenarios that they modeled within the basin. Additionally, managers would need to apply thinning treatments more

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than 50 times within 60 years to generate erosion that would eliminate any benefits of reducing wildfire severity from moderate to low. That would mean they would need to be treating almost every year for 60 years which is not feasible.

Most sediment yield on slopes between 30 and 50 percent comes from areas covered by shrubs and grasses and not from forested areas. Forested areas are what is being targeted under this code amendment and not shrubs and grasses. Shrubs and grasses would not be treated with ground based mechanical equipment, if anything, they would be broadcast burned. On hillslopes between 30 and 50 percent thinning will increase the risk of erosion, but when thinned hillslopes erode, the sediment yield is no different when compared to an untreated hillslope.

The WEPP report was used to work with Tahoe Fire and Fuels Team members to collaboratively review and craft code language that maintains the environmental protection while allowing for the increased use of ground based mechanical equipment on steeper slopes. She worked with the Nevada Division of Forestry, the Tahoe Resource Conservation District, the USDA Forest Service, and the California Tahoe Conservancy, all key members of the Tahoe Fire and Fuels Team.

There are two main purposes for these proposed Code Amendments: One is clarification and standardization, and the other piece is the expanded treatment opportunities, which is the real meat of these code amendments.

First is the inclusion of over frozen ground tree removal. In previous code amendment iterations, they've included over frozen ground. They wanted to standardize with those previous code updates to include that the removal of trees can occur over snow and frozen ground.

They also wanted to refine equipment definitions. This was to reflect this suite of machinery and technology that's currently available for tree removal. They removed the "All in one process at stump harvesters" because machines are often not all in one. There'll be one machine to harvest and one to remove those materials. It was important to reflect what's actually occurring on the landscape today versus these historical code languages.

Proposed Code Amendments for Expanded Treatment: They refined tables 61.1.6-1 with two refinements. They took out "Tractor roads." Implementers felt that calling it a road was not accurate, they are actually more of a trail. It's just the path that the machine is taking to get up and is not what they think of as a typical road and is not built to road standards. For maximum grade, there still will need to be skidding above 30 percent. That's moving the tree along the ground. It can be fully on the ground or it can be partially suspended on the ground. They need to allow for those skid trails or secondary skid trails, again for where they are dragging the tree are partially dragging the tree. They need that to go up to the 50 percent because it would be doing that type of activity on 30 to 50 percent slopes.

Refinement of Table 61.1.6-4: This replaced TRPA's water break spacing requirements with the California Forest Practice Act water breaks spacing requirements. The California Forest Practice Act allows treatment above 50 percent with ground based mechanical equipment. They used their water break spacing requirements to replace TRPA's. In TRPA's Code of Ordinances there's land capability district and the implementers felt comfortable with replacing the old table with this new table because the estimated hazard reading still takes into consideration, erosion, and all of the different soil types that their land capability district requirements do. This is just replacing that table with this new table from the California Forest Practice Act.

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They also refined Table 61.1.6-4 to allow that ground based mechanical equipment on slopes over 30 percent. The 1a, 1c, or 2 land capability, districts are all above 30 percent. They added the use of ground based equipment and skidding may be used pursuant to 61.1.6.F.1 through 61.1.6.F.5 with approval TRPA.

This is to allow for skidding on 30 to 50 percent slopes. It states “Ground skidding may be permitted on slopes under 30 percent” which was always allowed. Ground skidding on slopes between 30 to 50 percent requires TRPA review and approval to ensure that environmental protective measures, e.g., water breaks, vegetative buffers, slope length limitations and remaining group cover post-treatment for a erodible soil avoidance will be in place to minimize slope erosion.

That language is mimicked for ground based mechanical equipment on 30 to 50 percent slopes. Ground based vehicle systems for removing trees without skidding such as harvester and forest combinations may be used on slopes below 30 percent. On slopes between 30 to 50 percent ground based vehicle systems for tree removal requires TRPA review and approval to ensure that environmental protective measures again, water breaks, vegetative buffers, slope length limitations, etc. will be in place to minimize slope erosion.

Next steps and key points: The Caldor Fire highlighted the critical importance of continuing to get forest treatments and defensible space work done in the basin at a much faster pace and scale. These code amendments came to the Forest Health and Wildfire Committee in November 2021 and are being recommended as is to the Regional Plan Implementation Committee, the Advisory Planning Commission, and the Governing Board. The Tahoe Fire and Fuels Team partners have worked on the Forest Action Plan, which was released in 2019. This plan charts a path forward to collaboratively accelerate landscape restoration and wildfire protection, focusing on three key areas: Technology, capacity and workforce development, and streamlining permitting and planning. The Tahoe Fire and Fuels Team will be meeting in February to discuss how to prioritize funding and the work in the 2022 season. They have an influx of funding for forest treatments and resilience and having these code amendments in place to get that work done will be critical.

These code amendments were analyzed under an expanded checklist and there were findings of no significant impact for all areas. Multiple levels of environmental protection are currently in place for water quality erosion and vegetative management, including our TRPA’s Code of Ordinances, the California and Nevada Forestry Regulations, and the Forest Service Lake Tahoe Basin Management Unit Forest Plan Standards and Guidelines, 2016/17.

Presentation can be found at:

[RPIC-Agenda-Item-No.-3-Forest-Health-Code-Language.pdf](#)

### Committee Comments & Questions

None.

### Public Comments & Questions

Milan Yeates, Community Forestry Program Supervisor, California Tahoe Conservancy is speaking on behalf of the Tahoe Fire and Fuels Team. He commended Dr. McIntyre for an excellent presentation. The partners are in support of this code change, it will be very beneficial to the work that they have planned out over the next several years. The original Blue Ribbon Bi-State Commission was put together by the Governors, Schwarzenegger and Gibbons. The group made 38 findings and 90 recommendations initially and have been working toward those in the last 14 years. One of the 90



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recommendations was the formation of the Tahoe Fire Fuels Team. One of the largest recommendations of that the team is Recommendation 17.J to recommend TRPA, the Lahontan Regional Water Quality Control Board, the USDA Forest Service and other affected agencies amend their plan and ordinances to allow equipment use on slopes greater than 30 percent based on current and future technology and current forest practices to ensure resource protection.

Kacey KC, State Forester Fire Warden, Nevada Division of Forestry said she's in support of increasing the slope from 30 to 50 percent for tree removal with mechanized equipment. The Division of Forestry in their last session went through their statutes and did a similar type of modernization for new equipment and technology. The change from 30 to 50 percent slope brings TRPA's rules into alignment with state statute Nevada, NRS 528 which allows for mechanized equipment use on slopes up to 50 percent if proper erosion control is installed.

Laura Patton, Senior Science Policy Analyst speaking on behalf of the League to Save Lake Tahoe said overall, they'd like to offer their support for this basin wide amendment to allow for ground based mechanical equipment on slopes up to 50 percent under the appropriate circumstances. Should erosion be mitigated and water quality be protected as demonstrated in Dr. McIntyre's excellent presentation. The League understands that approximately 20 percent of the project area for Lake Tahoe West, for example, consists of slopes between 30 and 50 percent and would benefit from this type of ground based mechanical thinning. Any environmental analysis will need to consider the effects of using ground based mechanical equipment within those areas and look at the effects of this code amendment for the entire Lake Tahoe Basin. Considering one of the goals of Lake Tahoe agencies and partners is to increase the pace and scale of restoration and implementing this Code amendment is integral and in line with this goal. Science clearly demonstrates that though thinning scenarios narrowly, increased sediment and phosphorus yields a moderate or high severity fire, like the Caldor Fire, would have larger implications on Water quality and Lake Tahoe's renowned clarity. The League recommended moving forward with this code change amendment.

Steve Teshara, Owner and Principal of Sustainable Community Advocates said his company does a lot of work with the Tahoe Fire Fuels Team. He adds to the comments made and is in support of this set of amendments. Governing Board member Mr. Hicks served on the Blue Ribbon Fire Commission and has a great deal of history and background as to why this is important and timely because an update of the Community Wildfire Protection plan for Lake Tahoe is upcoming. There's quite a bit of funding available and is a good time to be able to make this change.

Scott Lindgren, Fire Chief, Tahoe Douglas Fire Department and acting chair of the Multi-Agency Coordinating Group (MAC) committee for the Tahoe Fire and Fuels Team said he's in support of the proposed amendments. The one thing he would like to add is there's different machinery that can be used. They are pursuing the purchase of a spider excavator that can do things that normal excavators can't and treads lightly on the environment. It walks up the steep slopes like a spider and not like an excavator. It's the type of equipment that they need to be using in the basin to protect the environment. It is going to be a game changer to work on these slopes, rather than just with hand crews.

### Committee Comments & Questions

Mr. Yeates referring to the written public comment submitted prior to the meeting, pointed out that this item simply proposes some changes to the code. There are other provisions in the code, especially Chapter 62, that deals with protection of wildlife habitats and things like that and whether they need to cross-reference that before the item goes before the Governing Board. He believes that the Environmental Analysis is sound and speaks for itself. He added that he was pleased that Mr.

## REGIONAL PLAN IMPLEMENTATION COMMITTEE

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Hicks was willing to chair the Forest Health and Wildfire Committee. The committee used to be more of a forest wildfire committee and is now also focused on forest health and other issues, based on Mr. Hicks experience, and on Dr. McIntyres staff leadership.

Ms. Aldean said that the written comment received prior to the meeting, spoke to the applicability of the Compact, and whether or not we are operating in sync with that Compact. She added that it might be useful for Mr. Marshall to put something on the record in case it becomes an issue later on.

Mr. Marshall said that the recommendation that the committee are considering - to make the finding for no significant impact with regard to the code amendments, is consistent with the Compact, and it is consistent with using an Initial Environmental Checklist to support that finding. In particular, because it is based on the extensive study that Dr. McIntyre referenced, that demonstrates that implementation of this program will not have a significant effect. Mr. Marshall said he was fully confident that the environmental findings that are before the committee for recommendation, are supported, both legally and by the record.

Mr. Lawrence said he thinks this is a tremendously important issue. Almost two decades ago, he joined the State of Nevada and put together their EIP team and worked with our foresters on the huge swath of state land between the Spooner Summit and Incline Village. It became very clear, that given the topography of the basin, we would not be able to totally achieve forest health conditions and reduce catastrophic fire risk, without an amendment for mechanical treatment on steeper slopes. He thinks this is a critically urgent issue and wanted to take this opportunity to appreciate the work of Mr. Hicks, Dr. McIntyre, and the Tahoe Fire and Fuels Team (TFFT) on this issue. Mr. Lawrence said he represents the State of Nevada, he lives in Reno, and has lived in Carson City. He had always felt that the unforested areas of granite and shrub at the higher elevations, provided a sort of a safe buffer from fire in the Basin, to protect Carson and Reno. The Caldor Fire was a wakeup call to the importance of getting the forest into healthy conditions.

Mr. Bruce encouraged everyone to continue to look for new ideas and ways, to stay ahead of these challenges. He thanked the committee and staff for their work on this item. Mr. Yeates added that adaptability is key in light of our global warming issues.

Mr. Hicks said he was pleased to be here today and thanked members for their comments. He said that back when they had the Blue Ribbon Commission, the Angora Fire was a real shock, because it came into Tahoe neighborhoods, destroyed homes, and in the process destroyed lives. Fortunately, no lives were lost, but many people lost their homes and all their belongings. For the commission itself, there was a real awareness of the need to protect the public, to protect property, and to protect lives. Through the commission hearings at that time, they heard from various environmental groups, from the Forest Service, and from Lahontan Water Quality Control Board, to get a full picture of all of the different elements and aspects that have has to be addressed to protect the lake, and the environment, but also to protect lives and property.

Mr. Hicks said that the WEPP Study really tells the story. There are 61,000 acres in the basin that fall within this category, and of that 61,000, almost 26,000 are in the Wildland Urban Interface (WUI). If we need any proof as to the safety risk, look at the Caldor Fire, and look at the fact that fuels thinning worked, to preserve homes, schools, and lives throughout that area. The WEPP study also showed that we would have to do this this treatment 50 times in the next 60 years to equate to the erosion that the lake would suffer. Mr. Hicks said you don't have to be a scientist to understand that when these catastrophic fires burn, it is the most destructive thing that can happen to the environment. He added that this amendment is long overdue, and that he really appreciated the work of the Tahoe Fire and Fuels Team, and TRPA staff.

REGIONAL PLAN IMPLEMENTATION COMMITTEE

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Mr. Friedrich said he echoed Mr. Hicks comments and referred to findings from the League to Save Lake Tahoe, that showed that any incremental impacts from erosion from these prescriptions, are far outweighed by the impacts of catastrophic fire, and the treatments that are required in response to catastrophic fire. He said that 60 miles of dozer line were laid down in response to the Caldor Fire, and asked, “ imagine the impact that would be created in a crisis, as opposed to those that can be planned and minimized with proactive treatments using technology that has a much lighter footprint than it was in the past”. He added that the Forest Health and Wildfire Committee had already reached a strong and unanimous conclusion, and he is prepared to support that conclusion.

Mr. Yeates said he had recently driven up US Highway 50, and found it very sobering to witness the damage, between Twin Bridges and Echo Summit, caused by these mega fires. He said it was also remarkable to see how the Caldor Fire skipped over Highway 89, and shot across the Carson Range, with no homes or structures lost in Christmas Valley, because the fuel reduction and home hardening work that had already been done, allowed the fire workers to effectively fight the fire. He added that this is a testimony of what needs to be done, and he believes these changes are appropriate.

Mr. Friedrich made a motion to recommend approval of the required findings as described in Attachment B, including a finding of no significant effect, for adoption of the Code of Ordinance amendments, as described in the staff summary.

Ayes: Mr. Lawrence, Mr. Hoenigman, Mr. Friedrich, Mr. Bruce, Ms. Aldean, Ms. Gustafson, Mr. Yeates  
**Motion Carried.**

Mr. Friedrich made a motion to recommend adoption of the Ordinance 2022-\_\_\_, amending Ordinance 87-9, to amend the Code of Ordinances as shown in Attachment A.

Ayes: Mr. Lawrence, Mr. Hoenigman, Mr. Friedrich, Mr. Bruce, Ms. Aldean, Ms. Gustafson, Mr. Yeates  
**Motion Carried.**

V. COMMITTEE MEMBER COMMENTS

None.

VI. PUBLIC INTEREST COMMENTS

None.

VII. ADJOURNMENT

Ms. Aldean made a motion to adjourn.

Chair Mr. Yeates adjourned the meeting at 10:04 a.m.

Respectfully Submitted,



Marja Ambler  
Clerk to the Board

REGIONAL PLAN IMPLEMENTATION COMMITTEE

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STAFF REPORT

Date: February 16, 2022

To: TRPA Governing Board

From: TRPA Staff

Subject: January Financial Statements, Fiscal Year 2021/22

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Summary and Staff Recommendation:

We are now seven months, or 58% of the way into the 2022 fiscal year. Permitting activity in Current Planning remains strong and is ahead of prior years' average. Expenditures appear low but reflect the timing of contract payments.

Staff recommends acceptance of the January Financial Statements for Fiscal Year 2022.

Required Motion:

In order to accept the Financial Statements, the Governing Board must make the following motion:

- 1) A motion to accept the January 2021 Financial Statements

In order for the motion to pass, an affirmative vote of any eight Board members is required.

Background:

We have now completed seven months (58%) of the fiscal year. Revenues are at 63% of the annual budget, and expenditures at 41% of budget. Revenues are high because we invoice the State contributions at the beginning of the year. Expenditures normally lag during the early months of the fiscal year due to the timing of contract expenses.

YTD Revenues and Expenses

Revenues are at 63% of budget. We have billed the states for their full contributions. Those funds will be spent down over the balance of the fiscal year. Fees for services are at 60% of budget. This includes Current Planning fees, AIS fees, and Shoreline fees. Current Planning Fees are 34% above the average of the last three years and 12% above last year. Separately, cost reimbursed planning fees and litigation expenses already exceed the year's budget, and Fines and Forfeitures are at 43% of budget. We bill Grants in arrears, at the end of the quarter, so those revenues lag expenditures.

Expenditures are at 41% of budget. Compensation expenses are at 54% of the annual budget, consistent with the timing of payrolls. Contract expenses were only 31% of budget year to date.

We did make the first of two scheduled debt service payments in January, so that is at 66% of budget.

**Tahoe Regional Planning Agency**  
*Fiscal YTD January 2022*

Revenue	Local	Fees	Grants	Total
Fees for Service		2,176,472		2,176,472
Grants	55,763	2,785	2,400,249	2,458,797
State Revenue	7,106,422			7,106,422
Local Revenue				
Rent Revenue		181,234		181,234
Other Revenue	8,111	0		8,111
TRPA Rent Revenue		401,905		401,905
<b>Revenue Total</b>	<b>7,170,296</b>	<b>2,762,396</b>	<b>2,400,249</b>	<b>12,332,941</b>
<b>Expenses</b>				
Compensation	2,480,505	1,016,748	515,672	4,012,925
Contracts	496,231	485,213	2,130,164	3,111,608
Financing	(280)	306,615		306,335
Other	245,119	163,397	30,925	439,440
Rent	410,005	16,817		426,821
A&O/Transfers	(912,154)	618,360	287,818	(5,976)
<b>Expenses Total</b>	<b>2,719,426</b>	<b>2,607,149</b>	<b>2,964,579</b>	<b>8,291,154</b>
<b>Net</b>	<b>4,450,870</b>	<b>155,247</b>	<b>(564,330)</b>	<b>4,041,787</b>

TRPA Balance Sheet

Our balance sheet is strong right now, with a net position of \$12.3M, up \$0.2M from last month. This is normal at this time of year since we have billed the states for their contributions. That money will be spent down over the balance of the fiscal year, and the balance will drop. Net assets increased by a net of \$0.3M, reflecting expenditures net of billings. Liabilities increased by \$0.4M with an increase of \$0.2M in Mitigation Funds and a decrease in current liabilities of \$0.1M.

## Tahoe Regional Planning Agency

*Balance Sheet @1-31-22*

	TRPA	Grants	Trust	Total
<b>Cash &amp; Invest</b>	9,827,059	1,475,078	22,223,191	33,525,328
<b>A/R</b>	113,966	1,343,977	25,017	1,482,960
<b>Current Assets</b>	52,390			52,390
<b>LT Assets</b>	8,972,869			8,972,869
<b>Total Assets</b>	18,966,284	2,819,055	22,248,208	44,033,546

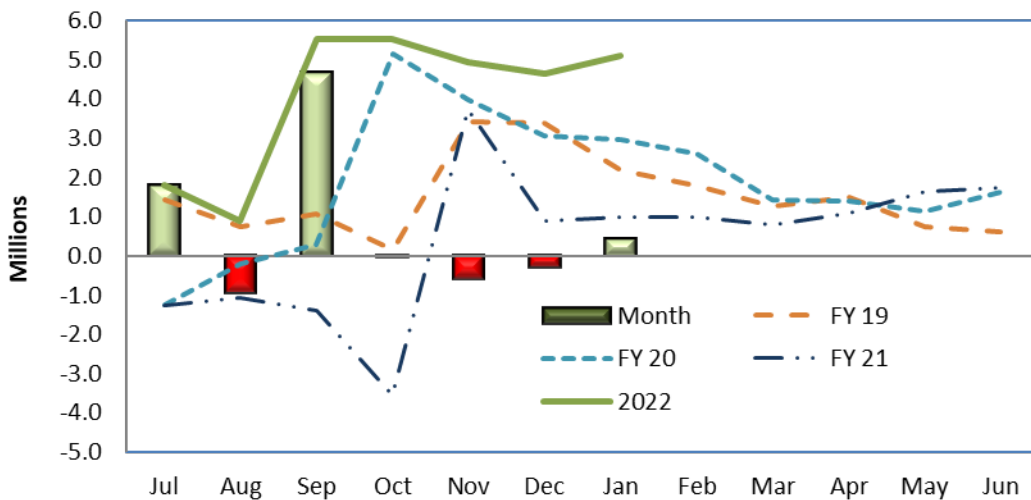
<b>A/P</b>	28,823			28,823
<b>Benefits</b>	879,119			879,119
<b>Deferred Rev</b>	46,879	138,689		185,568
<b>Deposits</b>	495,551	3,845		499,395
<b>LT Debt</b>	8,298,000			8,298,000
<b>Mitigation</b>			15,949,119	15,949,119
<b>Securities</b>			5,940,380	5,940,380
<b>Total Liabilities</b>	9,748,372	142,533	21,889,499	31,780,405

<b>Net Position</b>	9,217,912	2,676,521	358,709	12,253,142
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### Cash Flow

Cash flow was a positive \$0.4M for the month. Cash receipts were \$1.7M and disbursements were \$1.2M. Receipts included \$0.5M from grants and \$1.1M from fees. All expenditures were within budget.

### Monthly/Cumulative Cash Flow



CONSENT CALENDAR ITEM NO. 1

*When reading the detailed reports (attached), be aware that fund balances may not be intuitive. Negative balances mean revenues exceeded expenses. Positive fund balance occurs when expenses exceed revenue. This reflects the formatting in our accounting system.*

Contact Information:

For questions regarding this agenda item, please contact Chris Keillor at (775) 589-5222 or [ckeillor@trpa.org](mailto:ckeillor@trpa.org).

Attachment:

- A. January Financial Statements



Attachment A  
January Financial Statements

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
<b>Agency Mgmt</b>				
GF Revenue				
Revenue				
State Revenue	(6,232,422)	(6,232,422)	0	100.0%
Local Revenue	(150,000)	0	(150,000)	0.0%
Other Revenue	0	(8,111)	8,111	
Revenue Total	(6,382,422)	(6,240,533)	(141,889)	97.8%
<b>GF Revenue Total</b>	<b>(6,382,422)</b>	<b>(6,240,533)</b>	<b>(141,889)</b>	<b>97.8%</b>
<b>Gov Board</b>				
Expenses				
Contracts	1,099	3,581	(2,482)	325.9%
Other	19,412	5,360	14,052	27.6%
Rent	2,243	1,500	743	66.9%
Expenses Total	22,754	10,441	12,312	45.9%
<b>Gov Board Total</b>	<b>22,754</b>	<b>10,441</b>	<b>12,312</b>	<b>45.9%</b>
<b>Executive</b>				
Expenses				
Compensation	721,611	417,933	303,677	57.9%
Other	16,106	2,189	13,917	13.6%
Expenses Total	737,717	420,123	317,594	56.9%
<b>Executive Total</b>	<b>737,717</b>	<b>420,123</b>	<b>317,594</b>	<b>56.9%</b>
<b>Legal</b>				
Expenses				
Compensation	265,659	152,881	112,779	57.5%
Contracts	111,800	21,017	90,783	18.8%
Other	11,839	2,269	9,569	19.2%
Expenses Total	389,298	176,167	213,131	45.3%
<b>Legal Total</b>	<b>389,298</b>	<b>176,167</b>	<b>213,131</b>	<b>45.3%</b>
<b>Communications</b>				
Expenses				
Compensation	220,296	132,337	87,959	60.1%
Contracts	20,000	1,306	18,694	6.5%
Other	65,471	11,089	54,382	16.9%
Rent	2,781	(1,750)	4,531	-62.9%
Expenses Total	308,549	142,982	165,567	46.3%
<b>Communications Total</b>	<b>308,549</b>	<b>142,982</b>	<b>165,567</b>	<b>46.3%</b>

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
<b>Finance</b>				
Revenue				
Financing	0	(280)	280	
Revenue Total	0	(280)	280	
Expenses				
Compensation	431,496	250,434	181,061	58.0%
Contracts	58,900	17,535	41,365	29.8%
Other	2,450	196	2,254	8.0%
Expenses Total	492,846	268,165	224,681	54.4%
<b>Finance Total</b>	<b>492,846</b>	<b>267,885</b>	<b>224,961</b>	<b>54.4%</b>
<b>HR</b>				
Expenses				
Compensation	203,505	130,304	73,201	64.0%
Contracts	72,596	41,976	30,620	57.8%
Other	65,490	23,129	42,361	35.3%
Expenses Total	341,590	195,408	146,182	57.2%
<b>HR Total</b>	<b>341,590</b>	<b>195,408</b>	<b>146,182</b>	<b>57.2%</b>
<b>Agency Mgmt Total</b>	<b>(4,089,669)</b>	<b>(5,027,527)</b>	<b>937,858</b>	<b>122.9%</b>
<b>Current Planning</b>				
Current Planning				
Revenue				
Fees for Service	(2,152,966)	(1,291,802)	(861,165)	60.0%
Revenue Total	(2,152,966)	(1,291,802)	(861,165)	60.0%
Expenses				
Compensation	1,183,778	719,510	464,268	60.8%
Contracts	252,283	145,158	107,125	57.5%
Financing	22,079	27,051	(4,972)	122.5%
A&O/Transfers	893,989	449,406	444,583	50.3%
Other	9,104	323	8,781	3.5%
Expenses Total	2,361,233	1,341,448	1,019,784	56.8%
<b>Current Planning Total</b>	<b>208,267</b>	<b>49,647</b>	<b>158,620</b>	<b>23.8%</b>
<b>Code Enforcement</b>				
Expenses				
Compensation	371,302	211,772	159,531	57.0%
A&O/Transfers	280,408	132,273	148,135	47.2%

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
Other	2,207	4,345	(2,138)	196.9%
Expenses Total	653,917	348,389	305,528	53.3%
<b>Code Enforcement Total</b>	<b>653,917</b>	<b>348,389</b>	<b>305,528</b>	<b>53.3%</b>
<b>Boat Crew</b>				
Revenue				
State Revenue	(124,000)	(124,000)	0	100.0%
Revenue Total	(124,000)	(124,000)	0	100.0%
Expenses				
Compensation	45,547	60,175	(14,628)	132.1%
Contracts	5,000	700	4,300	
Other	54,058	22,329	31,729	41.3%
Expenses Total	104,605	83,203	21,402	79.5%
<b>Boat Crew Total</b>	<b>(19,395)</b>	<b>(40,797)</b>	<b>21,402</b>	<b>210.3%</b>
<b>Shorezone Moorings and Concessions</b>				
Revenue				
Fees for Service	(440,041)	(174,229)	(265,812)	39.6%
Revenue Total	(440,041)	(174,229)	(265,812)	39.6%
<b>Shorezone Moorings and Concessions Total</b>	<b>(440,041)</b>	<b>(174,229)</b>	<b>(265,812)</b>	<b>39.6%</b>
<b>Shorezone - Planning</b>				
Expenses				
Compensation	112,706	23,367	89,339	20.7%
A&O/Transfers	85,115	14,595	70,520	17.1%
Expenses Total	197,821	37,962	159,859	19.2%
<b>Shorezone - Planning Total</b>	<b>197,821</b>	<b>37,962</b>	<b>159,859</b>	<b>19.2%</b>
<b>Shorezone Boat Crew</b>				
Expenses				
Compensation	28,647	5,605	23,043	19.6%
Contracts	20,600	0	20,600	0.0%
Financing	0	2,855	(2,855)	
A&O/Transfers	22,931	3,501	19,431	15.3%
Other	11,868	3,254	8,614	27.4%
Rent	4,600	0	4,600	0.0%
Expenses Total	88,647	15,214	73,433	17.2%
<b>Shorezone Boat Crew Total</b>	<b>88,647</b>	<b>15,214</b>	<b>73,433</b>	<b>17.2%</b>

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
<b>Shorezone - Implementation</b>				
Expenses				
Compensation	0	50	(50)	
A&O/Transfers	0	31	(31)	
Other	0	44	(44)	
Expenses Total	0	125	(125)	
<b>Shorezone - Implementa</b>	<b>0</b>	<b>125</b>	<b>(125)</b>	
<b>Shorezone - Communications</b>				
Expenses				
Compensation	0	39	(39)	
Contracts	45,000	0	45,000	0.0%
A&O/Transfers	0	24	(24)	
Other	32	0	32	0.0%
Expenses Total	45,032	63	44,968	0.1%
<b>Shorezone - Communica</b>	<b>45,032</b>	<b>63</b>	<b>44,968</b>	<b>0.1%</b>
<b>Settlements</b>				
Revenue				
Fees for Service	(150,000)	(65,000)	(85,000)	43.3%
Grants	(3,600)	(1,500)	(2,100)	41.7%
Revenue Total	(153,600)	(66,500)	(87,100)	43.3%
Expenses				
Contracts	172,733	59,570	113,163	34.5%
Other	20,600	0	20,600	0.0%
Expenses Total	193,333	59,570	133,763	30.8%
<b>Settlements Total</b>	<b>39,733</b>	<b>(6,930)</b>	<b>46,663</b>	<b>-17.4%</b>
<b>Legal - Direct or Disallowed</b>				
Revenue				
Fees for Service	0	(26,212)	26,212	
Revenue Total	0	(26,212)	26,212	
Expenses				
Contracts	4,439	0	4,439	
Expenses Total	4,439	0	4,439	
<b>Legal - Direct or Disallo</b>	<b>4,439</b>	<b>(26,212)</b>	<b>30,651</b>	
<b>Current Planning Reimbursed</b>				
Revenue				

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
Fees for Service	(150,000)	(160,093)	10,093	106.7%
Revenue Total	(150,000)	(160,093)	10,093	106.7%
<b>Expenses</b>				
Contracts	150,000	90,818	59,182	60.5%
Expenses Total	150,000	90,818	59,182	60.5%
<b>Current Planning Reimb</b>	<b>0</b>	<b>(69,275)</b>	<b>69,275</b>	
<b>Current Planning Total</b>	<b>778,419</b>	<b>133,957</b>	<b>644,462</b>	<b>17.2%</b>
<b>Envir. Imp.</b>				
<b>Env. Improv.</b>				
<b>Expenses</b>				
Compensation	524,816	315,770	209,046	60.2%
Contracts	20,600	2,900	17,700	14.1%
Other	14,825	219	14,605	1.5%
Expenses Total	560,241	318,889	241,351	56.9%
<b>Env. Improv. Total</b>	<b>560,241</b>	<b>318,889</b>	<b>241,351</b>	<b>56.9%</b>
<b>Watercraft Inspection Fees</b>				
<b>Revenue</b>				
Fees for Service	(665,437)	(360,296)	(305,141)	54.1%
Revenue Total	(665,437)	(360,296)	(305,141)	54.1%
<b>Expenses</b>				
Compensation	50,339	26,739	23,601	53.1%
Contracts	556,480	176,939	379,541	31.8%
Financing	16,000	12,221	3,779	76.4%
A&O/Transfers	0	0	0	
Other	11,847	35,047	(23,200)	295.8%
Rent	30,771	16,817	13,954	54.7%
Expenses Total	665,437	267,762	397,675	40.2%
<b>Watercraft Inspection Fi</b>	<b>0</b>	<b>(92,533)</b>	<b>92,534</b>	
<b>CA Gen Fund AIS Prevention</b>				
<b>Revenue</b>				
State Revenue	(375,000)	(375,000)	0	100.0%
Revenue Total	(375,000)	(375,000)	0	100.0%
<b>Expenses</b>				
Contracts	375,000	74,210	300,790	19.8%
Expenses Total	375,000	74,210	300,790	19.8%

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
<b>CA Gen Fund AIS Preven</b>	<b>0</b>	<b>(300,790)</b>	<b>300,790</b>	
<b>NV Gen Fund AIS Prevention &amp; Control</b>				
Revenue				
State Revenue	(375,000)	(375,000)	0	100.0%
Revenue Total	(375,000)	(375,000)	0	100.0%
Expenses				
Compensation	58,279	44,680	13,599	76.7%
Contracts	250,269	11,200	239,069	4.5%
A&O/Transfers	0	0	0	
Other	54,453	762	53,692	1.4%
Rent	12,000	8,133	3,867	
Expenses Total	375,001	64,774	310,227	17.3%
<b>NV Gen Fund AIS Prever</b>	<b>1</b>	<b>(310,226)</b>	<b>310,227</b>	
<b>Tahoe Keys &amp; Lakewide AIS Control (LTRA)</b>				
Revenue				
Grants	(50,000)	(152,446)	102,446	304.9%
Revenue Total	(50,000)	(152,446)	102,446	304.9%
Expenses				
Compensation	0	1,566	(1,566)	
Contracts	50,000	56,526	(6,526)	113.1%
A&O/Transfers	0	978	(978)	
Expenses Total	50,000	59,070	(9,070)	118.1%
<b>Tahoe Keys &amp; Lakewide</b>	<b>0</b>	<b>(93,376)</b>	<b>93,376</b>	
<b>Lakewide AIS Control (USACE)</b>				
Revenue				
Grants	(202,032)	438	(202,470)	-0.2%
Revenue Total	(202,032)	438	(202,470)	-0.2%
Expenses				
Contracts	202,032	190,551	11,481	94.3%
Expenses Total	202,032	190,551	11,481	94.3%
<b>Lakewide AIS Control (U</b>	<b>0</b>	<b>190,989</b>	<b>(190,989)</b>	
<b>BMP Enforcement in NV (NV 319)</b>				
Revenue				
Grants	(159,493)	(43,705)	(115,788)	27.4%

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
Revenue Total	(159,493)	(43,705)	(115,788)	27.4%
Expenses				
Compensation	73,699	36,202	37,497	49.1%
Contracts	60,000	0	60,000	0.0%
A&O/Transfers	25,795	12,671	13,124	49.1%
Expenses Total	159,493	48,873	110,620	30.6%
<b>BMP Enforcement in NV</b>	<b>0</b>	<b>5,168</b>	<b>(5,168)</b>	
Stormwater Planning Support				
Revenue				
Fees for Service	(60,255)	(40,517)	(19,738)	67.2%
Revenue Total	(60,255)	(40,517)	(19,738)	67.2%
Expenses				
Compensation	0	26,907	(26,907)	
A&O/Transfers	0	16,806	(16,806)	
Other	0	381	(381)	
Expenses Total	0	44,095	(44,095)	
<b>Stormwater Planning Su</b>	<b>(60,255)</b>	<b>3,578</b>	<b>(63,833)</b>	<b>-5.9%</b>
USFWS AIS Control Lake Tahoe 2				
Revenue				
Grants	(1,594,378)	(430,721)	(1,163,657)	27.0%
Revenue Total	(1,594,378)	(430,721)	(1,163,657)	27.0%
Expenses				
Compensation	169,829	89,444	80,385	52.7%
Contracts	1,296,294	362,285	934,009	27.9%
A&O/Transfers	128,255	55,866	72,388	43.6%
Other	0	1,408	(1,408)	
Expenses Total	1,594,378	509,003	1,085,374	31.9%
<b>USFWS AIS Control Lake</b>	<b>(0)</b>	<b>78,282</b>	<b>(78,282)</b>	
(CLOSED) Tahoe Fund - Clam Control				
Revenue				
Grants	0	(13,200)	13,200	
Revenue Total	0	(13,200)	13,200	
Expenses				
Contracts	0	13,200	(13,200)	
Expenses Total	0	13,200	(13,200)	



TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
<b>(CLOSED) Tahoe Fund - (</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>USFS Lake Tahoe West - P3</b>				
Revenue				
Grants	(59,376)	(9,954)	(49,422)	16.8%
Revenue Total	(59,376)	(9,954)	(49,422)	16.8%
Expenses				
Compensation	33,828	6,127	27,701	18.1%
A&O/Transfers	25,547	3,827	21,720	15.0%
Expenses Total	59,376	9,954	49,421	16.8%
<b>USFS Lake Tahoe West -</b>	<b>(0)</b>	<b>0</b>	<b>(0)</b>	
<b>USFS LTRA Ski Run Marina</b>				
Revenue				
Grants	(140,576)	(23,141)	(117,435)	16.5%
Revenue Total	(140,576)	(23,141)	(117,435)	16.5%
Expenses				
Compensation	54,453	16,612	37,841	30.5%
Contracts	45,000	0	45,000	0.0%
A&O/Transfers	41,123	10,376	30,747	25.2%
Expenses Total	140,576	26,987	113,588	19.2%
<b>USFS LTRA Ski Run Mari</b>	<b>(1)</b>	<b>3,846</b>	<b>(3,847)</b>	
<b>Shorezone Mitigation Funds</b>				
Revenue				
Fees for Service	0	(58,324)	58,324	
Revenue Total	0	(58,324)	58,324	
<b>Shorezone Mitigation Fu</b>	<b>0</b>	<b>(58,324)</b>	<b>58,324</b>	
<b>AIS Prevention (SNPLMA Rnd 12 Final)</b>				
Revenue				
Grants	(1,329,420)	(473,739)	(855,681)	35.6%
Revenue Total	(1,329,420)	(473,739)	(855,681)	35.6%
Expenses				
Compensation	47,651	21,928	25,723	46.0%
Contracts	1,245,574	418,640	826,934	33.6%
A&O/Transfers	36,195	13,696	22,499	
Expenses Total	1,329,420	454,264	875,155	34.2%

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
<b>AIS Prevention (SNPLM)</b>	<b>(0)</b>	<b>(19,475)</b>	<b>19,474</b>	
<b>ANS Mgmt Plan - Meeks Bay Control</b>				
Revenue				
Grants	(92,000)	(91,988)	(12)	100.0%
Revenue Total	(92,000)	(91,988)	(12)	100.0%
Expenses				
Contracts	92,000	92,000	0	100.0%
Expenses Total	92,000	92,000	0	100.0%
<b>ANS Mgmt Plan - Meeks</b>	<b>0</b>	<b>12</b>	<b>(12)</b>	
<b>AIS Decon Unit Purchase (DBW)</b>				
Revenue				
Grants	(50,000)	0	(50,000)	0.0%
Revenue Total	(50,000)	0	(50,000)	0.0%
Expenses				
Contracts	50,000	0	50,000	0.0%
Expenses Total	50,000	0	50,000	0.0%
<b>AIS Decon Unit Purchase</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>DBW Meyers Station Grant</b>				
Revenue				
Grants	(217,668)	(117,336)	(100,332)	53.9%
Revenue Total	(217,668)	(117,336)	(100,332)	53.9%
Expenses				
Compensation	23,512	15,103	8,408	64.2%
Contracts	194,156	49,737	144,419	25.6%
A&O/Transfers	0	0	0	
Expenses Total	217,668	64,840	152,827	29.8%
<b>DBW Meyers Station Gr</b>	<b>(0)</b>	<b>(52,496)</b>	<b>52,495</b>	
<b>Taylor Tallac Restoration Project</b>				
Revenue				
Grants	(500,000)	(542,335)	42,335	108.5%
Revenue Total	(500,000)	(542,335)	42,335	108.5%
Expenses				
Contracts	500,000	537,676	(37,676)	107.5%

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
Expenses Total	500,000	537,676	(37,676)	107.5%
<b>Taylor Tallac Restoration</b>	<b>0</b>	<b>(4,659)</b>	<b>4,659</b>	
<b>Envir. Imp. Total</b>	<b>499,985</b>	<b>(331,113)</b>	<b>831,098</b>	<b>-66.2%</b>
<b>L RTP</b>				
Long Range & Transp. Planning				
Expenses				
Compensation	552,673	343,622	209,052	62.2%
Contracts	175,450	5,000	170,450	2.8%
Other	9,454	0	9,454	0.0%
Expenses Total	737,578	348,622	388,956	47.3%
<b>Long Range &amp; Transp. PI</b>	<b>737,578</b>	<b>348,622</b>	<b>388,956</b>	<b>47.3%</b>
<b>TMPO</b>				
Expenses				
Compensation	0	5,415	(5,415)	
Contracts	73,670	14,043	59,627	19.1%
Other	37,689	7,673	30,017	20.4%
Rent	803	217	587	27.0%
Expenses Total	112,163	27,347	84,816	24.4%
<b>TMPO Total</b>	<b>112,163</b>	<b>27,347</b>	<b>84,816</b>	<b>24.4%</b>
<b>Transportation</b>				
Revenue				
Grants	(1,543,117)	(117,841)	(1,425,276)	7.6%
Revenue Total	(1,543,117)	(117,841)	(1,425,276)	7.6%
Expenses				
Compensation	332,986	166,314	166,672	49.9%
Contracts	192,016	8,713	183,303	4.5%
A&O/Transfers	512,046	190,403	321,643	37.2%
Other	0	3,407	(3,407)	
Expenses Total	1,037,048	368,837	668,211	35.6%
<b>Transportation Total</b>	<b>(506,069)</b>	<b>250,996</b>	<b>(757,065)</b>	<b>-49.6%</b>
<b>CA Prop 1B Transit Capital Improvement Program South Shore</b>				
Revenue				
Grants	(40,267)	0	(40,267)	0.0%
Revenue Total	(40,267)	0	(40,267)	0.0%

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
<b>Expenses</b>				
Contracts	40,267	0	40,267	0.0%
Expenses Total	40,267	0	40,267	0.0%
<b>CA Prop 1B Transit Capit</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Transportation SB1 Formula &amp; Competitive</b>				
<b>Revenue</b>				
Grants	(445,207)	0	(445,207)	0.0%
Revenue Total	(445,207)	0	(445,207)	0.0%
<b>Transportation SB1 Forn</b>	<b>(445,207)</b>	<b>0</b>	<b>(445,207)</b>	<b>0.0%</b>
<b>USFS Emerald Bay Corridor Plan</b>				
<b>Revenue</b>				
Grants	(399,792)	(101,916)	(297,877)	25.5%
Revenue Total	(399,792)	(101,916)	(297,877)	25.5%
<b>Expenses</b>				
Compensation	8,632	4,918	3,715	57.0%
Contracts	391,160	104,319	286,841	26.7%
A&O/Transfers	0	0	0	
Expenses Total	399,792	109,237	290,555	27.3%
<b>USFS Emerald Bay Corri</b>	<b>0</b>	<b>7,322</b>	<b>(7,321)</b>	
<b>USFS Meeks Bay Restoration</b>				
<b>Revenue</b>				
Grants	(380,382)	(193,193)	(187,189)	50.8%
Revenue Total	(380,382)	(193,193)	(187,189)	50.8%
<b>Expenses</b>				
Compensation	26,989	16,470	10,519	61.0%
Contracts	353,393	179,011	174,382	50.7%
A&O/Transfers	0	0	0	
Expenses Total	380,382	195,481	184,901	51.4%
<b>USFS Meeks Bay Restora</b>	<b>0</b>	<b>2,288</b>	<b>(2,288)</b>	
<b>CTC Shoreline Plan</b>				
<b>Revenue</b>				
Grants	0	(65,000)	65,000	
Revenue Total	0	(65,000)	65,000	
<b>CTC Shoreline Plan Total</b>	<b>0</b>	<b>(65,000)</b>	<b>65,000</b>	

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
<b>NV Energy EV Chargers</b>				
Expenses				
Other	0	24,946	(24,946)	#DIV/0!
Expenses Total	0	24,946	(24,946)	#DIV/0!
<b>NV Energy EV Chargers 1</b>	<b>0</b>	<b>24,946</b>	<b>(24,946)</b>	<b>#DIV/0!</b>
<b>L RTP Total</b>	<b>(101,535)</b>	<b>596,520</b>	<b>(698,055)</b>	
<b>R &amp; A</b>				
Research & Analysis				
Expenses				
Compensation	1,063,155	565,028	498,126	53.1%
Contracts	979,919	107,175	872,744	10.9%
Other	27,380	937	26,443	3.4%
Expenses Total	2,070,453	673,140	1,397,313	32.5%
<b>Research &amp; Analysis Tot</b>	<b>2,070,453</b>	<b>673,140</b>	<b>1,397,313</b>	<b>32.5%</b>
<b>Shorezone - Research &amp; Analysis</b>				
Expenses				
Compensation	0	2,760	(2,760)	
Contracts	0	12,728	(12,728)	
A&O/Transfers	0	1,724	(1,724)	
Expenses Total	0	17,212	(17,212)	
<b>Shorezone - Research &amp;</b>	<b>0</b>	<b>17,212</b>	<b>(17,212)</b>	
<b>Nearshore Trib Monitoring (Lahontan)</b>				
Revenue				
Grants	(216,000)	(19,852)	(196,148)	9.2%
Revenue Total	(216,000)	(19,852)	(196,148)	9.2%
Expenses				
Compensation	0	2,462	(2,462)	
Contracts	216,000	22,120	193,880	10.2%
A&O/Transfers	0	0	0	
Expenses Total	216,000	24,582	191,418	
<b>Nearshore Trib Monitori</b>	<b>0</b>	<b>4,729</b>	<b>(4,729)</b>	
<b>Wetland Monitoring (EPA)</b>				
Revenue				
Grants	(60,000)	(4,320)	(55,680)	7.2%

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
Revenue Total	(60,000)	(4,320)	(55,680)	7.2%
<b>Expenses</b>				
Contracts	60,000	0	60,000	0.0%
Expenses Total	60,000	0	60,000	0.0%
<b>Wetland Monitoring (EP</b>	<b>0</b>	<b>(4,320)</b>	<b>4,320</b>	
<b>R &amp; A Total</b>	<b>2,070,453</b>	<b>690,762</b>	<b>1,379,691</b>	<b>33.4%</b>
<b>Infrastructure</b>				
<b>General Services</b>				
<b>Expenses</b>				
Compensation	91,750	52,383	39,367	57.1%
Contracts	25,767	452	25,315	1.8%
Other	160,531	49,475	111,056	30.8%
Rent	688,980	401,905	287,075	58.3%
Expenses Total	967,028	504,215	462,813	52.1%
<b>General Services Total</b>	<b>967,028</b>	<b>504,215</b>	<b>462,813</b>	<b>52.1%</b>
<b>IT</b>				
<b>Expenses</b>				
Contracts	245,005	111,676	133,329	45.6%
Other	206,833	118,221	88,612	57.2%
Expenses Total	451,838	229,897	221,941	50.9%
<b>IT Total</b>	<b>451,838</b>	<b>229,897</b>	<b>221,941</b>	<b>50.9%</b>
<b>Building</b>				
<b>Revenue</b>				
Other Revenue	0	(0)	0	#DIV/0!
Rent Revenue	(245,833)	(181,234)	(64,599)	73.7%
TRPA Rent Rever	(688,980)	(401,905)	(287,075)	58.3%
Revenue Total	(934,813)	(583,139)	(351,674)	62.4%
<b>Expenses</b>				
Contracts	542,000	240	541,760	0.0%
Financing	426,938	264,382	162,557	61.9%
Other	57,077	22,515	34,562	39.4%
Expenses Total	1,026,015	287,137	738,878	28.0%
<b>Building Total</b>	<b>91,202</b>	<b>(296,003)</b>	<b>387,204</b>	<b>-324.6%</b>
<b>CAM</b>				

TRPA Detailed Financials  
Fiscal YTD January 2022

Row Labels	Ann Budget	YTD	Remaining	Percent Spent
<b>Revenue</b>				
Rent Revenue	(3,358)	0	(3,358)	0.0%
Revenue Total	(3,358)	0	(3,358)	0.0%
<b>Expenses</b>				
Other	63,440	58,285	5,155	91.9%
Expenses Total	63,440	58,285	5,155	91.9%
<b>CAM Total</b>	<b>60,081</b>	<b>58,285</b>	<b>1,797</b>	<b>97.0%</b>
<b>Infrastructure Total</b>	<b>1,570,149</b>	<b>496,394</b>	<b>1,073,755</b>	<b>31.6%</b>
<b>Other</b>				
<b>Other</b>				
<b>Expenses</b>				
Compensation	425,129	0	425,129	0.0%
A&O/Transfers	(2,066,176)	(912,154)	(1,154,022)	44.1%
Other	320,538	0	320,538	0.0%
Expenses Total	(1,320,509)	(912,154)	(408,355)	69.1%
<b>Other Total</b>	<b>(1,320,509)</b>	<b>(912,154)</b>	<b>(408,355)</b>	<b>69.1%</b>
<b>Other Total</b>	<b>(1,320,509)</b>	<b>(912,154)</b>	<b>(408,355)</b>	<b>69.1%</b>







## STAFF REPORT

Date: February 16, 2022  
To: TRPA Governing Board  
From: TRPA Staff  
Subject: Fiscal Year 2021 Audit

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Summary and Staff Recommendation:

Staff recommends acceptance of the fiscal year 2021 final audit report and financial statements.

Required Motion:

In order to accept the Financial Statements, the Governing Board must make the following motion:

- 1) A motion to accept the Fiscal Year 2021 Audit

In order for the motion to pass, an affirmative vote of any eight Board members is required.

Background:

The independent audit firm of Davis Farr completed their review of TRPA's Fiscal Year 2021 Financial Statements and issued an unmodified audit report. An unmodified auditor's report means the Agency is compliant with GAAP and GASB accounting standards. A copy of their opinion letter, and SAS 114 Summary of Audit Results is attached.

Operations Committee members have been provided with pdf copies of the basic TRPA financial statements and the TSAC audited financial statements. Electronic copies of the full audited financial statements, including additional audits, will be available to Governing Board members by request. Those audits include a) a single audit for Federal Awards, b) an audit of Proposition 1B (California) grants, c) Placer County Local Transportation Fund, d) El Dorado County Local Transportation Fund, and e) El Dorado County State Transit Assistance Fund. Fiscal Year 2021 Audited Financial Statements will be available on the TRPA website following acceptance by the Governing Board.

The auditors have issued an unmodified opinion. They found no material weaknesses that could lead to a material misstatement of the financial statements. The auditors did identify two issues requiring non-compliance with the California Code of Regulations in their audit in their audit of the Placer County Local Transportation Fund. The first is a failure of TRPA to submit financial statements within the 180-day requirement of the CA State Controller's office. An initial extension was obtained, but we failed to ask for a second extension and the reports were turned in late. The second issue was Tahoe Truckee Area Regional Transportation (TART) did not

receive a timely certificate of compliance for their maintenance facilities. These findings are in the Placer County LTF audit, not the TRPA overall audit.

Financial Results:

The following tables summarize the Agency’s FY 2021 financial results. The first reflects assets and liabilities, the second revenues and expenses. A detailed discussion of the changes can be found in the Management Discussion and Analysis portion of the audited financial statements.

TRPA net assets decreased by \$1.5 million dollars. The debt refinancing drove much of that. Liabilities decreased by \$1.8 million, most of that came from Accounts Payables being extraordinarily high in FY 2019. This yielded an increase in net assets of \$0.3 million.

<b>Table 1 - Summary of Statement of Net Position</b>				
	<b>2020</b>	<b>2019</b>	<b>Change</b>	<b>%</b>
<b>Assets</b>				
Current & Other Non-Current Assets	14,469,166	15,780,025	(1,310,859)	-8%
Capital Assets	9,145,990	9,337,747	(191,757)	-2%
<b>Total Assets</b>	<b>23,615,156</b>	<b>25,117,772</b>	<b>(1,502,616)</b>	<b>-6%</b>
<b>Liabilities</b>				
Current Liabilities and Other	7,791,518	9,004,338	(1,212,820)	-13%
Unearned Revenue	623,223	1,297,412	(674,189)	-52%
Long Term Liabilities	8,551,910	8,505,531	46,379	1%
<b>Total Liabilities</b>	<b>16,966,651</b>	<b>18,807,281</b>	<b>(1,840,630)</b>	<b>-10%</b>
<b>Net Position</b>				
Net Investment in Capital Assets of Debt	1,098,035	2,358,543	(1,260,508)	-53%
Restricted	2,508,830	2,381,213	127,617	5%
Unrestricted	3,041,640	1,570,735	1,470,905	94%
<b>Total Net Position</b>	<b>6,648,505</b>	<b>6,310,491</b>	<b>338,014</b>	<b>5%</b>

TRPA revenues increased by \$1.0 million, or 6%. The largest driver is fees received from the implementation of the Shoreline mooring permitting program. State revenues were also up due to added allocations from California and funding for the Tahoe Science Advisory Council.

Expenses increased by \$1.5 million or 9%. The bulk of the added expenses are in contracts, especially Lake Tahoe Restoration Act funds used for various AIS programs.

**Table 2 - Revenue, Expenses, Changes in Net Assets**

	2020	2019	Change	%
<b>Revenues</b>				
<b>Program Revenues</b>				
Charges for Services	3,608,207	2,897,252	710,955	25%
Grants and Contributions	6,970,067	7,220,626	(250,559)	-3%
<b>General Revenues</b>				
State Revenue	7,394,427	6,810,236	584,191	9%
Local Revenue	150,000	150,000	0	0%
Investment Earnings - Unrestricted	275,643	332,719	(57,076)	-17%
Miscellaneous	16,302	14,645	1,657	11%
<b>Total Revenues</b>	<u>18,414,646</u>	<u>17,425,478</u>	<u>989,168</u>	6%
<b>Program Expenses</b>				
General Government	2,934,428	2,663,662	270,766	10%
Env. Planning & Implementation	14,965,360	13,775,339	1,190,021	9%
Building Operations	150,059	165,719	(15,660)	-9%
Interest and Debt Service	396,019	391,944	4,075	1%
<b>Total Expenses</b>	<u>18,445,866</u>	<u>16,996,664</u>	<u>1,449,202</u>	9%
<b>Increase (Decrease) in Net Assets</b>	<u>(31,220)</u>	428,814	<u>(460,034)</u>	-107%

These numbers are based full accrual accounting and, as a result, are comparable to corporate financial statements. Additional detail by Fund (modified accrual basis) is included in the Financial Statements.

Independent Auditor:

Davis Farr is a specialized audit firm focusing on Government clients. Davis Farr has been our auditor for the past five years. This is the last year left on their contract.

For Fiscal Year 2021, Davis Farr conducted seven audits for TRPA. In addition to the audit of the overall TRPA Financials; a) a single audit for Federal Awards, b) an audit of Proposition 1B (California) grants, c) Placer County Local Transportation Fund, d) El Dorado County Local Transportation Fund, e) El Dorado County State Transit Assistance Fund and f) an audit of the Tahoe Science Advisory Council.

Contact Information:

For questions regarding this agenda item, please contact Chris Keillor at (775) 589-5222 or [ckeillor@trpa.gov](mailto:ckeillor@trpa.gov).

Attachments:

- A. Auditor Communication Letter
- B. TRPA Audited Financial Statements
- C. TRPA Single Audit
- D. TSAC Audited Financial Statements

Attachment A

Auditor Communication Letter

## **REQUIRED AUDIT COMMUNICATIONS**

Operations and Governance Committee  
Tahoe Regional Planning Agency  
Stateline, Nevada

We have audited the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Tahoe Regional Planning Agency (TRPA) for the year ended June 30, 2021. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, Government Auditing Standards and 2 CFR 200 Uniform Guidance, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter dated December 1, 2021. Professional standards also require that we communicate to you the following information related to our audit.

### **Significant Audit Findings**

#### *Qualitative Aspects of Accounting Practices*

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by TRPA are described in Note 1 to the financial statements. As described in Note 14 to the financial statements, TRPA implemented Governmental Accounting Standards Board (GASB) Statement No. 84, *Fiduciary Activities*. Accordingly, the cumulative effect of the accounting change as of the beginning of the year is reported in the Statement of Fiduciary New Position and Statement of Changes in Fiduciary Net Position. We noted no transactions entered into by TRPA during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting TRPA's financial statements were:

- Management's estimate involving the useful lives and depreciation methodology to use for capital assets is based on past history of similar types of assets, future plans as to their use, and other factors that impact their economic value to TRPA.
- Management's estimate of the accruals for goods or services received, but for which invoices have not yet been received by vendors is based on communication with the vendors for quoted amounts; and

- Management's estimate of employee usage of accumulated vacation and/or compensatory leave balances within the next year is based on the nature of the leave and actual experience of prior year usage.

We evaluated the key factors and assumptions used to develop these estimates in determining that they are reasonable in relation to the financial statements taken as a whole.

The financial statement disclosures are neutral, consistent, and clear.

#### Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

#### Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to each opinion unit's financial statements taken as a whole.

#### Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

#### Management Representations

We have requested certain representations from management that are included in the management representation letter dated February 14, 2022.

#### Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to TRPA's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

#### Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as TRPA's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

**Other Matters**

We applied certain limited procedures to *Management's Discussion and Analysis* and the *Budgetary Comparison Schedules* for the major funds, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the combining and individual nonmajor budgetary comparison schedules, which accompany the financial statements but are not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

**Restriction on Use**

This information is intended solely for the use of the Board of Directors and management of TRPA and is not intended to be and should not be used by anyone other than these specified parties.

*Dawn Ferris*

Irvine, California  
February 14, 2022



Attachment B

TRPA Audited Financial Statements

**TAHOE REGIONAL PLANNING AGENCY**

**Financial Statements**

**Year Ended June 30, 2021**

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**TAHOE REGIONAL PLANNING AGENCY**

**Financial Statements**

**Year Ended June 30, 2021**

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**TAHOE REGIONAL PLANNING AGENCY**

**Financial Statements**

**(Continued)**

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## **INDEPENDENT AUDITOR'S REPORT**

Board of Directors  
Tahoe Regional Planning Agency  
Stateline, Nevada

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the governmental activities, each major fund, and the aggregate remaining fund information of the Tahoe Regional Planning Agency (TRPA), as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise TRPA's basic financial statements as listed in the Table of Contents.

### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditor's Responsibility***

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, each major fund, and the aggregate remaining fund information of TRPA, as of June 30, 2021, and the respective changes in financial position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matter***

As described further in Note 14 to the financial statements, during the year ended June 30, 2021, TRPA implemented Governmental Accounting Standards Board (GASB) Statement No. 84, *Fiduciary Activities*. Our opinion is not modified with respect to this matter.

### ***Report on Summarized Comparative Information***

We have previously audited the financial statements of TRPA for the year ended June 30, 2020 and we expressed an unmodified audit opinion on those audited financial statements in our report dated February 16, 2021. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2020, is consistent, in all material respects, with the audited financial statements from which it has been derived.

### ***Other Matters***

#### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and Budgetary Comparison Schedules for the General Fund and each major Special Revenue Fund be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the GASB who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the Required Supplementary Information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### *Other Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise TRPA's basic financial statements. The combining financial statements and individual nonmajor budgetary comparison schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements. The combining and individual nonmajor fund financial statements and schedules are the responsibility of management and were derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling

such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining financial statements and individual nonmajor budgetary comparison schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated February 14, 2022 on our consideration of TRPA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering TRPA's internal control over financial reporting and compliance.

*Dawn Funn LLP*

Irvine, California  
February 14, 2022



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TAHOE REGIONAL PLANNING AGENCY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2021

The Tahoe Regional Planning Agency (TRPA) was created in 1969 by compact between the States of Nevada and California and ratified by the United States Congress, to protect and restore the environment of Lake Tahoe. The bi-state agency is charged with regional planning, development and redevelopment oversight, regulatory enforcement, and implementation of environmental protection and restoration programs for the Region.

TRPA operates in the context of the Tahoe Region which has global reach and impact. Considered a precious natural resource to the states of California and Nevada, and the driver of the area's \$5 billion economy, Lake Tahoe has faced extraordinary challenges in recent years as it climbed out of the recession. The Tahoe Basin economy is rebounding, and a renaissance is underway in pockets around the lake. This positive trend helps strengthen the agency's resolve to protect and restore Lake Tahoe—a comprehensive undertaking which is labor-intensive and costly. COVID has temporarily impacted the regional economy, but with the demand for outdoor recreation growing, it is expected to rebound following the pandemic.

The Lake Tahoe Region, and TRPA's jurisdiction, cover over 500 square miles. Approximately 90% of the land area is held by the USDA Forest Service and various other state and local entities. Portions of five counties and an incorporated city share Lake Tahoe's shoreline and environs, creating a patchwork of jurisdiction and unique community values that TRPA was created to meld into a cohesive regional planning framework. Over 50,000 people live in the region, and the most recent estimates of visitation top 15 million annually. The lake has been designated an Outstanding National Resource Water under the Federal Clean Water Act—making it not only the crown jewel of the Sierra Nevada Mountain range, but also a national treasure.

TRPA's vision is for a lake environment that is sustainable, healthy, and safe for the community and future generations. TRPA leads the cooperative effort to preserve, restore, and enhance the unique natural and human environment of the Lake Tahoe Region, while improving local communities, and people's interactions with our irreplaceable environment.

The adoption of environmental standards called "thresholds," first set for the Region in 1982, were established by TRPA to answer its mandate. The compact directs the agency to establish a Regional Plan with management measures that meet and maintain the thresholds and authorizes it to work through a variety of means including land use regulations, growth management, capital improvement programs, and resource management plans. TRPA coordinates the 80+ organizations who collectively and collaboratively implement the management measures, programs, and plans to achieve the compact's requirements.

### **Using the Annual Report**

The discussion and analysis of the financial performance of TRPA provides a review of the organization's overall financial activities for the fiscal year ended June 30, 2021. This annual report consists of a series of basic financial statements and notes to those statements. These statements are organized to assist the reader in understanding the Agency as a financial whole and an entire operating entity. The statements also provide an increasingly detailed look at specific financial activities.

The Statement of Net Position and Statement of Activities comprise the agency-wide financial statements and provide information about the activities of the whole agency, presenting both an aggregate and long-term view of the organization's finances. Fund financial statements provide the next level of detail. These statements show how services were financed in the short-term as well as what remains for future

TAHOE REGIONAL PLANNING AGENCY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2021

spending for governmental funds. The fund financial statements also look at the agency's most significant funds—the General Fund, the Transportation Fund, and the Aquatic Invasive Species (AIS) Fund, with all other non-major funds presented in total in one column.

The Notes to the basic financial statements provide more detail.

**TRPA Highlights**

Fiscal Year 2021 (FY 2021) was the Tahoe Regional Planning Agency's first full year operating under the COVID-19 pandemic. The agency effectively pivoted operations to a predominantly virtual work environment and nonetheless has continued to provide a high-level of customer service and make strides on major strategic initiatives set by the Governing Board. Notable progress and improvements were made in the areas of transportation, forest fuel reduction and wildfire protection, water quality and aquatic invasive species management, science and monitoring, and workforce housing.

Helping property owners and local government partners keep projects moving through the challenges of the pandemic has been a priority for TRPA. The agency remained open to customers through appointments, email, and telephone and video conferencing. The volume of project applications received in FY 2021 continued to break records. TRPA planners kept pace, receiving 1,093 applications. Forestry staff also processed 1,494 private property owner tree removal applications to help improve defensible space and complement forest fuel reduction work by public agencies.

TRPA planners helped local government partners to streamline permitting and encourage environmental redevelopment through local area plans. The Governing Board approved the Washoe County Area Plan in May to integrate local and regional plans, building codes, and zoning, and to create incentives for environmental redevelopment projects. The Washoe County Area Plan will encourage reinvestment and environmental improvements in the town center of Incline Village and streamline permitting for property owners in that portion of the basin.

**Forest Health and Wildfire**

TRPA helped form the Tahoe Fire and Fuels Team (TFFT) in 2008 to increase the pace and scale of forest fuel reduction and wildfire protection work. TRPA has helped TFFT partners complete more than 67,000 acres of fuel reduction treatments in and around Tahoe neighborhoods since the devastating Angora Fire of 2007. This year, the agency assisted the TFFT to finalize the 2021 Incident Action Plan that outlines priority work across the Tahoe Basin for the field season. TFFT coordination also helped fire protection districts finalize initial attack plans, evacuations plans, and improve communication in the event of an incident. Additionally, TFFT submitted a comprehensive portfolio of projects for Southern Nevada Public Land Management Act (SNPLMA) consideration and funding. The SNPLMA steering committee recommended funding for the Tahoe Region of \$45 million across the majority of submitted projects with some projects recommended for partial funding.

The devastation of climate-driven wildfires had once again threatened the Tahoe Basin and surrounding areas during the 2021 Tamarack and Caldor fires. The prior decade's fuel and forest health treatment work of TFFT partners in and around the urban interface to prepare Lake Tahoe has been phenomenal and ultimately helped save Lake Tahoe communities from disaster. Still 10,000 acres burned in 2021 within the Tahoe Basin alone, and the scope and scale of this work must grow to match the increasing frequency and severity of wildfires as temperatures in the Sierra Nevada continue to rise.

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**Water Quality and Aquatic Invasive Species**

The fight to protect Lake Tahoe from aquatic invasive species (AIS) grew stronger this fiscal year with improvements to the watercraft inspection program and progress on projects to control existing aquatic weed infestations. TRPA and our watercraft inspection partners made permanent an optional online appointment system begun during COVID-19 that has improved boater wait times and efficiency at inspection stations. Grant funds received in FY 2021 will help design a permanent boat inspection station at Spooner Summit in Nevada, similar to the watercraft inspection station in Meyers, California. Since 2008, the Lake Tahoe watercraft inspection program has intercepted and decontaminated hundreds of vessels carrying invasive species and no new invasive species have been detected in the Tahoe Basin.

Controlling existing AIS infestations is becoming increasingly challenging as climate change continues to alter the native ecosystem. In FY 2021, TRPA managed the project approvals and oversaw the beginning phase of the Taylor-Tallac Marsh aquatic weed removal project, continuation of ultraviolet light treatments, and installation of bubble curtains to prevent movement of invasive weed fragments at Elk Point homeowner's marina, Lakeside Marina and Beach, and the east channel of the Tahoe Keys lagoons. TRPA helped move environmental analysis of the Tahoe Keys aquatic invasive weeds control methods test forward through collaboration, scientific support, and stakeholder engagement. In FY 2021, TRPA and the Lahontan Regional Water Quality Control Board continued to work with environmental consultants responding to comments received on the Draft Environmental Impact Report/Statement and prepared for the release of the final environmental document later in 2021. A comprehensive monitoring plan developed by the Tahoe Keys Property Owners' association has been submitted to the Tahoe Science Advisory Council who will oversee a peer review of critical components of the plan. Public education and management of the control methods test project continued to build this year and the Lahontan and TRPA boards could consider the final documents in early 2022.

**External Affairs**

The agency marked the 50<sup>th</sup> anniversary of the Bi-State Compact in 2020. The Lake Tahoe commemorative coin program was created to honor the enduring partnership of Nevada and California to protect and restore the lake in lieu of an in-person celebration for the 50-year milestone. A limited number of specially designed silver coins were minted at the historic U.S Mint press at the Nevada State Museum in Carson City, Nevada. The campaign raised more than \$100,000 for environmental education programs in the basin. Some of the funds raised also supported TRPA's environmental newspaper known as Tahoe in Depth.

**Transportation and Climate Action**

Alleviating Tahoe's traffic and transportation problems and taking immediate actions to reduce climate-harming emissions is a top priority for TRPA. The 2020 Regional Transportation Plan was adopted in FY 2021 and is the blueprint for Tahoe's sustainable future. The plan prioritizes adding more frequent, reliable transit services, using technology to connect people to transportation options, connect and complete more trails, and bringing plan elements together with a corridor planning framework connecting workers to jobs, visitors to recreation, and residents to town centers, housing, and recreation. The agency also completed a Greenhouse Gas emissions inventory for the Tahoe Basin, initiated the Tahoe Trails Plan to improve and connect hiking and mountain biking trails, and continued implementing and fulfilling existing corridor plans to address traffic, pedestrian, and transit challenges in Tahoe's main recreation corridors like Emerald Bay and State Route 28 along the East Shore.

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The 2020 Regional Transportation Plan also includes a funding plan to ensure the projects listed in the plan are built. The plan identified a regional funding gap of around \$20 million per year and TRPA is assisting the Bi-State Consultation on Transportation and regional partners to recommend solutions to ensure Tahoe's transportation system is fully funded.

**Sustainable Recreation and Tourism**

TRPA has convened dozens of agencies and organizations involved in recreation and visitation to share information and resources and chart a sustainable future for tourism in the Tahoe Basin. In February, agency leaders joined a workshop that helped launch Summer 2021 priority actions including on-site ambassador programs with more than eighty trained staff members, securing over \$400,000 in funding for the Clean Tahoe litter abatement expansion to North Lake Tahoe, formation of a data working group, and creation of a multi-stakeholder summer recreation playbook. The partnership also released a request for proposals to begin development of a regional vision, mission, and roadmap for the future of sustainable recreation and tourism for the Tahoe Region.

**Science & Monitoring**

The final 2019 Environmental Threshold Evaluation was unanimously endorsed by the Governing Board in FY 2021. Thresholds are the environmental goals for the region and are required to be measured every four years. The 2019 evaluation marks a major milestone for the Tahoe Region as it was the first evaluation presented primarily as an online, interactive dashboard, advancing the agency's Digital First strategic initiative. TRPA has engaged agency partners and the Tahoe Science Advisory Council to improve the threshold monitoring plan and to recommend updates to the threshold standards to reflect the latest science, the future needs to adapt to changing climate effects, and the significant values in the Lake Tahoe Region. This year the Governing Board also adopted a new Vehicle Miles Travelled Threshold Standard to align with the region's transportation and land-use goals.

**Housing and Community Revitalization**

TRPA leads the Tahoe Living Working Group to reduce barriers to developing affordable workforce housing in the Tahoe Region. In response to the urgent need to increase access to affordable and achievable housing, in FY 2021 the agency worked on projects of every scale. TRPA worked with developers, local governments, and non-profits to approve a 248-unit, deed-restricted affordable housing project in South Lake Tahoe and moved recommendations forward to allow accessory dwelling units (ADUs) for residents and workers on thousands more properties than had previously been allowed. The recommended code updates include money saving incentives for ADUs in walkable neighborhoods and near town centers and improve the ability for hotels and motels to be converted to residential use.

**Facilities and Maintenance**

TRPA instituted a new hybrid work model that captures the benefits of both in-person collaboration and remote work was an ongoing effort in FY 2021 to facilitate work during the pandemic and to harness efficiencies TRPA has gained by the new work model. The Agency continues to expand online permitting which reduces the need for applicants to travel to the TRPA offices for business and expanded the offering of remote virtual permitting consultation appointments. This will be a major advantage for North Shore and West Shore residents and property owners who are part-time residents who live outside the Basin. The agency is moving forward on deferred maintenance and necessary building repairs with funds from the refinancing last fiscal year of TRPA's long-term debt.

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**TRPA Organization**

TRPA is organized to reflect the three core functions it performs: planning, implementation, and research & analysis in a “Plan, Do, Check” adaptive management or continuous improvement framework.

The Long Range and Transportation Planning Division plans. The Current Planning and Environmental Improvement Divisions work with partners to implement the plans. The Research and Analysis Division continually monitors and checks for desired outcomes and recommends adjustments to respond to emerging trends and achieve priority goals. The TRPA Governing Board annually reviews Agency priorities to “adjust” the focus of the annual Operations Work Program and Annual Budget.

The roles and responsibilities of the divisions are:

- The Long Range and Transportation Planning Division updates plans and regulations to ensure they are achieving and maintaining environmental thresholds. Additionally, the team leads and supports key strategic initiatives which help to further the goals and policies of the Regional Plan and Regional Transportation Plan. The team builds, maintains, and convenes multi-sector partnerships to collaborate for desired results across all levels of government and the private sector. TRPA is the federally designated Tahoe Metropolitan Planning Organization (TMPO) and the California designated Regional Transportation Planning Agency (RTPA) for authorization and receipt of federal and state transportation planning and project implementation funding. Primary activities include reviewing local area plans submitted by local jurisdictions as well as periodic revisions of the Tahoe Regional Plan, Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP). Long Range Planning and Transportation Division’s key programs are:
  - Transportation (MPO/RTPA)
  - Long Range Planning
  - Housing
  - Climate Change/Sustainability
- The Current Planning Division works with many private property owners and partner agencies to review project applications that further environmental improvement and economic investments in Lake Tahoe communities. Customer service and timely review of projects is a top priority for this division to facilitate efficient project implementation by the public and private sectors. Permit streamlining needed to make redevelopment more feasible and successful in reaching the goals of the Regional Plan is a top priority. Permitting and compliance staff ensure all projects meet TRPA Code of Ordinances and environmental standards. Primary responsibilities include code enforcement, inspection of permitted projects, monitoring of memorandum of understanding (MOU) partners, and inspection and enforcement of best management practices to reduce stormwater pollution. The division also manages Shoreline Plan permitting and compliance.
- TRPA’s Environmental Improvement Division leads the Lake Tahoe Environmental Improvement Program (EIP). The EIP is an unparalleled partnership working to achieve the environmental goals of the Tahoe Region. Local, state, and federal agencies, private entities, scientists, and the Washoe Tribe of Nevada and California have collaborated for more than 20 years to restore the environmental health of Lake Tahoe. The division’s key programs include:

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- Management of the Environmental Improvement Program (EIP), the region-wide, multi-sector capital investment strategy to conduct a multitude of restoration programs and projects designed to implement the adopted Regional Plan and address environmental concerns in the Tahoe Region.
  - Management of the Lake Tahoe Aquatic Invasive Species (AIS) program including preventing new species introduction, treatment to control existing invasive species, as well as lake-wide monitoring and emergency response to new infestations.
  - Stormwater program management to reduce polluted stormwater runoff from urban areas and roads is a foundation of the EIP's water quality focus area. Area-wide solutions offer opportunities for the public and private sectors to partner and meet stormwater infiltration and erosion control requirements, generate funding for system maintenance, implement the Lake Tahoe Total Maximum Daily Load (TMDL) Program, and achieve other community goals.
  - Forest Health program management, including collaborative planning and permitting of forest fuel reduction projects to reduce the risk of destructive wildfires and promote the restoration of the forest resources in and across the region's boundaries.
- The Research and Analysis Division continuously tracks the progress and effectiveness of implementing the region's plans, programs, and strategies by monitoring hundreds of environmental threshold standards, performance measures, and management actions. The Research and Analysis Division collaborates with the science community and provides the best possible information for policy decisions, operations, and accountability. Research and Analysis coordinates the 4-year Threshold Evaluation to report on progress toward threshold attainment, directs the agency's development of the LakeTahoelInfo.org platform and leads the Measuring What Matters: Thresholds and Monitoring Update strategic initiative in coordination with the bi-state Tahoe Science Advisory Council to bring the region's thresholds and monitoring systems current with the last 30 years of evolving scientific knowledge. The Division is transforming the agency's services to a "digital first" strategy.

In addition to these operational divisions, TRPA has staff departments to support the division roles and responsibilities listed above. The support activities are the backbone to the general operations of the agency. These include Executive, Legal, External Affairs, Finance, Human Resources, and Information Technology.

### **Financial Highlights**

#### **Agency Revenues**

TRPA revenues for FY 2021 totaled \$19.7 million. The State of California's annual commitment was \$5.0 million, and the State of Nevada's commitment was \$2.0 million. State and local annual commitments represent 38% of total revenues. In addition to these annual commitments, various departments, and agencies of the two states and local organizations contribute to specific projects through grant funding.

Directly funded programs (grants) totaled 37% of revenues, amounting to \$7.3 million from local, state, and federal sources. Major federal contributors include the Department of the Interior, Department of Transportation, Department of Agriculture, and Environmental Protection Agency. State entities include

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CalTrans, NDOT, California Water Quality Control Board (Lahontan Region), Nevada Division of Environmental Protection, California Energy Commission, California State Lands, California Tahoe Conservancy, CalFire, California Department of Boating and Waterways, Nevada Division of State Lands, California Office of Emergency Services, and others.

Fees for services amounted to \$5.0 million or 25% of the Agency's revenues. This includes Planning Fees and reimbursed costs from applicants as well as Watercraft Inspection Fees supporting the AIS program and Shoreline fees. It also includes rent revenue from tenants in the TRPA office building. Fees for services increased by \$1.1 million from 2020 due to increased permitting activities and implementation of the Shoreline program.

### **Agency Expenditures**

Total expenditures for FY 2021 were \$17.2 million. Staff costs accounted for \$7.2 million or 44% of the total. Contracts comprised \$9.0 million or 55% of the total. Financing costs related to interest and principal payments on the bonds for the TRPA office building amounted to \$0.4 million or 2% of total expenditures.

TRPA works closely with other governmental entities in the basin to fund and execute various environmental initiatives. During FY 2021, TRPA passed through:

- \$1.6 million in funding to the Tahoe Transportation District.
- \$0.9 million to Placer County for implementation of transportation projects and operation of transit systems throughout the basin.
- \$1.1 million to the Tahoe Resource Conservation District, a unit of El Dorado County, California for roadside inspections of watercraft as part of the Aquatic Invasive Species program.
- \$2.5 million in mitigation funds were passed on to local jurisdictions to fund projects designed to offset the environmental impact of development.

### **Fund Balances**

The TRPA General Fund Balance increased by 25% or \$1.0 million during FY 2021. Planning activities increased by a net \$0.3 million. The AIS fund balance increased by \$0.4 million enabling the program to defer increasing fees. Transportation funds increased \$0.6 million mostly in California STF/LTA funds. AIS and Other Governmental funds increased by \$0.4 million each.

### **Key Operational Accomplishments in FY 2021**

#### **Long Range and Transportation Planning Division:**

Long Range and Transportation Planning (LRTP) Division maintains regional plans and coordinates management strategies to implement those regional plans. TRPA operates under multiple transportation planning mandates, including serving as the Tahoe Metropolitan Planning Organization (TMPO). Funding for the Division includes TRPA General Funds and transportation grants. TRPA received \$5.3 million in grants from the Federal Government and the states of California and Nevada to support these activities. Almost \$2.8 million of this funding was passed on to transit operators, Placer County and the Tahoe Transportation District. TRPA incurred \$1.3 million in personnel costs and \$4.8 million in contract and operating costs related to LRTP.



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Key 2021 contributions of the LRTP Division include:

- Convened a multi-sector partnership to work on the development of new sustainable revenue sources for transportation.
- Reviewed or approved local government area plans to implement the Regional Plan for Douglas County and Washoe County, Nevada. LRTP is assisting with several area plan amendments to the Tourist Core Area Plan in the City of South Lake Tahoe, California; the South Shore Area Plan in Douglas County, Nevada; and Placer County California.
- Addressed regional affordable housing shortages with multi-agency coalitions implementing the regional housing work plan.
- Produced an updated regional Greenhouse Gas (GHG) inventory to support a regional GHG Reduction Strategy.
- Convened a new multi-stakeholder sustainable recreation and tourism partnership for the Tahoe Basin to address recreation visitation trends and pressures.
- Advanced the Tahoe-Truckee Plug-In Electric Vehicle Readiness Plan's infrastructure installations.
- Completed a transformational and regionally significant community revitalization implementation plan for the U.S. Highway 50 casino corridor to update infrastructure and improve transportation and transit options.
- Continued development and adoption of code amendments in support of Regional Plan effectiveness and policy changes.

**Current Planning Division:**

Current Planning maintained its record of permit review efficiency. The Division received 1,093 permit applications during FY 2021 and issued 836 permits. Reviews were completed on 99% of all applications within 120 days of receiving a complete application meeting TRPA's Code of Ordinances and internal operations performance measure. This is an increase from 97.3% in the prior year. Permits were processed, on average, in 28.3 days from receipt of a completed application to issuing a permit. Fees for services totaled \$2.5 million during the fiscal year. TRPA spent \$1.6 million on personnel costs and \$0.8 million on contracts and operating costs in the Current Planning Division. Field inspectors performed 898 project inspections during the year, and 1,494 tree removal reviews. Project inspections resulted in the resolution and return of 178 project securities totaling \$0.9 million. An additional \$0.2 million of non-cash securities were also released. The Current Planning team is funded through planning fees.

Implementation of the shoreline program approved by the Governing Board in October 2018 continues. Phase 1 of the mooring permitting and registration program, which began during fiscal year 2020 continued for property owners with existing moorings. Using the online registration and permitting system on the Lake Tahoe Info website. During FY 2021, TRPA processed 171 registrations for 1,168 mooring buoys, 450 slips, and 60 boat lifts. In addition, the new pier permitting program under the shoreline program was started. Since the beginning of the mooring registration program, TRPA has registered 3,802 mooring buoys, 984 slips, and 412 boat lifts.

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**Environmental Improvement Division:**

TRPA provides strategic leadership of the Lake Tahoe Environmental Improvement Program (EIP) partnership to achieve the environmental goals of the region. The EIP Division coordinates 80+ organizational partners to implement the varied programs of the EIP. The partnership is governed by the cross-sector Tahoe Interagency Executive Steering Committee (TIESC) and associated multi-stakeholder working groups. These committees and work groups set project priorities, develop collaborative funding strategies, and guide project implementation. The EIP Division is also responsible for tracking all EIP expenditures and accomplishments basin wide. The EIP Division spent \$2.0 million in grants, \$0.8 million in State Funds, and \$1.1 million of fees for services. Including General Funds, the Division spent \$1.1 million on compensation and \$3.0 million on contracts and other expenditures. These numbers include the Aquatic Invasive Species and Stormwater numbers called out separately below.

Despite many obstacles of the COVID-19 pandemic ongoing throughout 2021, EIP partners achieved significant milestones:

- **Visitation Surge:** A new coalition of recreation managers in the basin partnered to solve the unique recreation challenges intensified by high visitation during the COVID-19 pandemic.
- **Fire Adapted Communities:** The Tahoe Fire Fuels Team achieved the highest number of defensible space inspections ever done in a year—6,481.
- **Take Care Stewardship Campaign:** This coordinated basin-wide public outreach campaign expanded its reach and pivoted messaging to keep residents and visitors safe during COVID-19. Traffic to the [takecaretahoe.org](http://takecaretahoe.org) website increased over 200%.
- **Greenhouse Gas (GHG) Emissions:** The Tahoe Region surpassed the initial target of 15 percent GHG emission reduction by 2021. The 2014 Sustainability Action Plan set additional targets of 49 percent by 2035, and net-zero by 2045.
- **Tahoe Blue Crew:** Nearly 100 volunteer crews led by the League to Save Lake Tahoe assisted public land managers by removing over 6,000 pounds of litter at popular recreation sites.
- **24th Annual Lake Tahoe Summit:** The first ever fully virtual Lake Tahoe Summit hosted by U.S. Senator Catherine Cortez Masto engaged a record 1,400 people and focused a national spotlight on the Lake Tahoe Environmental Improvement Program in August 2020.

The Lake Tahoe Aquatic Invasive Species (AIS) Program continued implementation of the nationally recognized watercraft inspection program, to prevent infestation of new invasive species. New challenges arose in the early 2021 season due to COVID. TRPA implemented a new online reservation system for boat inspections. TRPA also oversaw watercraft inspections performed by Tahoe Resource Conservation District (TRCD) inspectors at three roadside stations in the Tahoe Basin during the primary boating season and at two launch ramps during the winter months. Trained personnel inspect boats prior to launch at fifteen (15) launch facilities. In 2021, TRCD performed 5,599 boat inspections and decontaminated 3,232 boats. Inspectors intercepted 20 boats with invasive mussels onboard, an 80 percent increase from 2020. TRPA leads highly successful outreach that prepares most boaters to arrive at an inspection station clean, drained, and dry. The states of Nevada and California have contributed funding in the amount of \$0.8 million to support the AIS prevention program. TRPA collected \$1.1 million in inspection fees. TRPA also

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received \$1.8 million in grants to pay for invasive species control programs. TRPA incurred \$0.3 million in personnel costs and \$2.8 million in contract and operating costs related to the AIS Program.

Invasive species prevention is coupled with actions to control existing AIS in the lake, this year completing over 19 acres of treatments in Lake Tahoe. Using Lake Tahoe Restoration Act funds, TRPA prioritized work to address the Region's largest area of weed infestation in the Tahoe Keys lagoons. Stakeholders helped design a test of different AIS control methods that could knock back the expansive and growing 170+ acre Tahoe Keys infestation. TRPA also launched weed control work just outside of the Tahoe Keys to help control and limit the spread of the infestation into greater Lake Tahoe. These projects are all implemented in partnership with other entities such as TRCD, the League to Save Lake Tahoe, and the University of Nevada Reno.

TRPA's Stormwater Management Team supports work regionwide to complete water quality retrofit improvements on all developed properties in the Lake Tahoe region. TRPA issues permits either directly or by delegation for all BMP retrofit with private homeowners, commercial property owners, and several public entities (local jurisdictions and USDA Forest Service) in the Tahoe Region to implement water quality Best Management Practices (BMPs). In 2021, TRPA issued 251 BMP certificates: 220 for single-family residential parcels, 21 for multi-family residential parcels, and 10 additional permits for commercial parcels. Funding for this activity included \$0.1 million from grants from the U.S. Environmental Protection Agency passed through the Nevada Division of Environmental Protection, local funding, and fees. TRPA spent \$0.1 million in personnel and costs during the fiscal year. The Stormwater Program Manager's salary is paid for out of the TRPA general fund.

TRPA's Forest and Ecosystem Health Program Manager works with the cross-sector Tahoe Fire and Fuels Team (TFFT) partnership (including the USDA Forest Service, state agencies, and local fire districts in the basin) to implement Lake Tahoe's Forest Action Plan and ensure forest health projects are designed and permitted expeditiously in line with the TRPA code of. TRPA is a founding member of the Tahoe Fire and Fuels Team, which coordinates the Forest Health focus area of the EIP.

2021 was one of the worst wildfire years on record, scorching more than 1 million acres in the Sierra Nevada, more than double the previous record set in 2018. Fires burned all around us in 2021— 68,000 acres at the Tamarack Fire near Markleeville, and nearly 1 million acres at the Dixie Fire to our north. Yet Lake Tahoe communities, remarkably, were spared. The Caldor Fire burned into the southern end of the basin doing considerable damage, forcing an evacuation of the south shore, and destroying significant portions of the backcountry and recreational areas. The effects of the wildfire smoke loomed heavy. For the first time, the USDA Forest Service in September 2020 closed all National Forests in California because of fire risk during the COVID-19 pandemic.

TFFT continued public education campaigns to teach residents how to prevent as well as prepare for wildfire. Since the 2007 Angora Fire, the TFFT has completed over 65,000 acres of treatment to reduce hazardous fuels. These restoration projects improve the vitality of the basin's forests to withstand the increasing threats of drought and other extreme weather events. Despite the hardships of implementing field projects in 2021, TFFT completed 2,695 acres of fuels reduction treatment in the basin.

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In 2021, TRPA approved 1,494 permits for the removal of 6,881 trees, a 27% increase in permits and a 23% increase in trees removed. Tree-cutting permits to help achieve defensible space on private parcels. TRPA issued all permits electronically.

**Research and Analysis Division:**

The Research and Analysis Division (R&A) reports on TRPA's planning and implementation programs and regional progress toward threshold attainment. During fiscal year 2021, R&A completed a report on the status of achieving the Region's existing threshold standards and advanced the initiative to update those standards to better reflect contemporary challenges the Region faces from the effects of changing climate. The Threshold Evaluation Report comprehensively reviewed environmental progress in nine categories: air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic resources, noise, and recreation. The evaluation shows the Tahoe Region is making steady incremental progress toward achieving regional shared goals: 79% of the standards evaluated are in attainment and 96% of standards are stable or improving. The growing challenge of managing for climate change is visible in several environmental categories.

In response, the Region is comprehensively updating both regional goals and threshold standards as well as the suite of performance measures used to assess project, program, and plan effectiveness.

R&A's ongoing activities include managing and organizing TRPA's data, maps, and information systems—including Lake Tahoe Info—to improve the public transparency and openness of regional programs and activities, engaging with the scientific community and Tahoe Science Advisory Council, and providing efficient and timely analysis to support TRPA staff and Governing Board decision making.

R&A received \$0.8 million in revenue during the fiscal year split between grants and state contributions to the Tahoe Science Advisory Council (TSAC). These funds were used to support long-term monitoring of lake clarity and fund the integration of Tahoe Total Maximum Daily Load (TMDL) information management tools into the LakeTahoeInfo.org platform. During FY 2021, expenses included \$1.1 million in personnel and \$1.5 million in contract and operating costs. The Tahoe Science Advisory Commission spent an additional \$0.3 million.

**Administrative Financial Highlights**

TRPA continued implementing its strategic plan through staffing and organizational adjustments to achieve goals in an efficient and effective manner. Major changes to TRPA operations were driven by COVID and measures to mitigate the spread of the disease. The Agency quickly pivoted to work-from-home and online business practices. This was accomplished with minimal disruption to service and cost in terms of lost time and productivity. Most TRPA services are now available through online processes. Public meetings, including the TRPA Governing Board and Advisory Planning Commission are now virtual, accessible with either on-line or phone-in options for broad accessibility.

Long term risks have been addressed and funded to the extent possible. There are only two significant long-term liabilities. These are accrued employee paid time off that has not yet been taken and the lease revenue bonds used to finance the building (addressed below). TRPA's retirement plan is a defined contribution plan and is fully funded. All benefit plans are fully funded. There are no known unfunded future liabilities not addressed in these statements. TRPA is periodically subject to lawsuits whose

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outcome cannot be predicted. There are four permit-related lawsuits in process currently, but we do not expect any financial liabilities to arise from it. Applicants typically indemnify TRPA against the costs of defending a permit.

TRPA's Governing Board approved the FY 2021 budget in June of 2020. Budgets were adopted for the General Fund and certain Special Revenue Funds. The budgets for the Transportation Development Act funds including El Dorado County State Transit Assistance Fund, El Dorado County Local Transportation Fund and Placer County Local Transportation Fund are adopted by the respective counties.

TRPA continued scheduled debt service payments for Series A and B Lease Revenue Bonds in the amount of \$0.3 million in interest expense. In June of 2020, these bonds were refinanced through a private placement with Heritage Bank of Nevada, a subsidiary of Glacier National Bank. The new debt issue carries a lower interest rate and provided \$0.5 million of financing for deferred maintenance on the building.

### **Overview of the Financial Statements**

#### **Government-wide Financial Statements - Statement of Net Position and the Statement of Activities**

The government-wide financial statements are designed to provide readers with a broad overview of TRPA finances in a manner like a private-sector business.

The Statement of Net Position presents information on all of TRPA's assets and liabilities, with the difference between the two reported as Net Position. Over time, increases or decreases in Net Position may serve as a useful indicator of whether the financial position of the Agency is improving or deteriorating.

The Statement of Activities presents information showing how TRPA's Net Position changed during the most recent fiscal year. All changes in Net Position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods (i.e., revenue earned but not received).

The government-wide financial statements report functions of TRPA that are principally supported by taxes and intergovernmental revenues, including federal and state grants, as governmental activities. The governmental activities of TRPA include administrative services, support services, legal services, environmental improvement, planning services, and research and analysis.

#### **Reporting the Agency's Most Significant Funds**

##### **Fund Financial Statements**

A fund is a grouping of related accounts used to maintain control over resources that have been segregated for specific activities or objectives. TRPA, like other state and local governments, uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. The funds of the Agency can be divided into two categories: governmental and fiduciary funds.

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**Governmental Funds**

Governmental funds are used to account for the same functions reported as governmental activities in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on near-term inflows and outflows of spendable resources as well as balances of spendable resources available at the end of the fiscal year. These funds are reported using an accounting method called *modified accrual* accounting, which measures cash and all other financial assets that can readily be converted to cash. The governmental fund statements provide a detailed short-term view of TRPA's general government operations. Governmental fund information is useful in evaluating the government's financial resources that can be spent in the near future to finance programs.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. Readers may better understand the long-term impact of the government's near-term financing decisions through the comparison. Both the governmental fund balance sheet and the governmental fund statement of revenues, expenditures, and changes in fund balances provide a reconciliation to facilitate this comparison between governmental funds and governmental activities.

TRPA maintains twelve individual governmental funds. TRPA has combined the 128 Market Street Building fund, Shoreline fund, Settlement fund, and Planning Services fund into the General fund for presentation purposes. The General fund, Transportation fund, and Aquatic Invasive Species fund are each considered major Governmental funds and are presented separately. Data from the other governmental funds are combined into a single, aggregated presentation. Individual fund data for each of these non-major funds is provided in the Required Supplementary Information elsewhere in the report.

**Custodial Funds**

Fiduciary Fund Statements provide information about the financial relationships in which TRPA assesses fees that other entities utilize to mitigate the environmental impact of development and are not reflected in the government-wide financial statements.

**TRPA as a Whole**

The Statement of Net Position provides the perspective of TRPA. Table 1 provides a summary that compares the Agency's Net Position from FY 2021 to FY 20120.

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**Table 1 - Summary of Statement of Net Position**

	2021	2020	Change	%
<b>Assets</b>				
Current & Other Non-Current Assets	17,513,505	14,469,166	3,044,339	21%
Capital Assets	8,794,885	9,145,990	(351,105)	-4%
<b>Total Assets</b>	<u>26,308,390</u>	<u>23,615,156</u>	<u>2,693,234</u>	11%
<b>Liabilities</b>				
Current Liabilities and Other	9,127,590	7,791,518	1,336,072	17%
Unearned Revenue	549,357	623,223	(73,866)	-12%
Long Term Liabilities	8,464,149	8,551,910	(87,761)	-1%
<b>Total Liabilities</b>	<u>18,141,096</u>	<u>16,966,651</u>	<u>1,174,445</u>	7%
<b>Net Position</b>				
Net Investment in Capital Assets of Debt	1,246,755	1,597,860	(351,105)	-22%
Restricted	1,373,111	2,008,830	(635,719)	-32%
Unrestricted	5,547,428	3,041,815	2,505,613	82%
<b>Total Net Position</b>	<u>8,167,294</u>	<u>6,648,505</u>	<u>1,518,789</u>	23%

**Assets:**

Current and Other Noncurrent Assets increased by \$3.0 million from \$14.5 million on June 30, 2020 to \$17.5 million on June 30, 2021. The General Fund cash and equivalents increased by \$2.3M. The largest component was higher than expected Planning fees. Special revenue funds increased by \$0.6M, most in Transportation and is due to LFA/STF funds. The balance was from miscellaneous current asset accounts.

Capital Assets decreased by \$0.4 million or 4%, from a balance of \$9.1 million on June 30, 2020, to a balance of \$8.8 million on June 30, 2021. This is mostly due to depreciation.

**Liabilities:**

Current Liabilities increased by \$1.3M or 17% from \$7.8 million on June 30, 2020 to \$9.1 million on June 30, 2021. Most of that is in various mitigation funds that increased by \$1.1M.

Unearned Revenue decreased by \$0.1 million, from a balance of \$0.6 million as of June 30, 2020 to \$0.5 million as of June 30, 2021. This is attributable to receiving outstanding invoices.

Long-Term Liabilities decreased \$0.4M from 2020. This reflects the current portion of our Lease Revenue Bonds used to fund the TRPA office building. Our refinancing of the building in 2019 gave us a one-year grace period on principle payments.

TAHOE REGIONAL PLANNING AGENCY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2021

**Net Position:**

Net Investment in Capital Assets net of debt decreased by \$0.4 million from \$1.6 million as of June 30<sup>th</sup>, 2020 to \$1.2 million on June 30<sup>th</sup>, 2021. This is due to depreciation.

Restricted – Restricted Net Position decreased by \$0.6 million from \$2.0 million as of June 30<sup>th</sup> 2020, to \$1.4 million as of June 30<sup>th</sup> 2021. This decrease was entirely in Transportation grants and is due to reduced unavailable revenues.

Unrestricted – Unrestricted Net Position increased by \$2.5 million from \$3.0 million on June 30, 2020 to a balance of \$5.5 million on June 30, 2021. Higher planning revenues and lower spending increased the General Fund unrestricted net position by \$1.1M. Transportation, AIS, and other grant funded activities increased as well.

Table 2 shows the changes in Net Position for fiscal year 2020 and 2021.

<b>Table 2 - Revenue, Expenses, Changes in Net Assets</b>				
	<b>2021</b>	<b>2020</b>	<b>Change</b>	<b>%</b>
<b>Revenues</b>				
<b>Program Revenues</b>				
Charges for Services	5,003,812	3,608,207	1,395,605	39%
Grants and Contributions	7,330,434	6,970,067	360,367	5%
<b>General Revenues</b>				
State Revenue	7,226,339	7,394,427	(168,088)	-2%
Local Revenue	149,999	150,000	(1)	0%
Investment Earnings - Unrestricted	(1,178)	275,643	(276,821)	-100%
Miscellaneous	1,001	16,302	(15,301)	-94%
<b>Total Revenues</b>	<u>19,710,407</u>	<u>18,414,646</u>	<u>1,295,761</u>	7%
<b>Program Expenses</b>				
General Government	2,835,296	2,934,428	(99,132)	-3%
Env. Planning & Implementation	13,947,027	14,965,360	(1,018,333)	-7%
Building Operations	143,890	150,059	(6,169)	-4%
Interest and Debt Service	303,802	396,019	(92,217)	-23%
<b>Total Expenses</b>	<u>17,230,015</u>	<u>18,445,866</u>	<u>(1,215,851)</u>	-7%
<b>Increase (Decrease) in Net Assets</b>	<u>2,480,392</u>	<u>(31,220)</u>	<u>2,511,612</u>	

**Program Revenues:**

Charges for Services – Charges for Services Revenue increased by \$1.4 million, or 39%, from \$3.6 million for the year ended June 30, 2020, to \$5.0 million for the year ended June 30, 2021. Most of the increases



TAHOE REGIONAL PLANNING AGENCY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2021

over budgeted numbers came in the Current Planning area. Basic permitting fees were up \$0.6M, reimbursed planning costs were up \$0.3M, and settlements were up \$0.1M.

Grants and Contributions - Grants and Contributions Revenue increased by \$0.3 million, or 5%, from \$7.0 million for the year ended June 30, 2020, to \$7.3 million for the year ended June 30, 2021.

General Revenues - State Revenue decreased by \$0.2 million due to a decreased contribution from Nevada due to COVID related budget reductions. Investment Earnings increased by \$0.3 million due to lower interest rates. Local Revenue and Miscellaneous Earnings were unchanged.

**Program Expenses:**

The cost of all Program Expenses decreased by \$1.2 million, or 7% from \$18.4 million for the year ended June 30, 2020, to \$17.2 million for the year ended June 30, 2021. The largest changes were in contracting. Some of the key factors that resulted in the increase include:

- General Fund expenditures were down \$0.3M due to the Nevada budget cuts.
- Transportation expenditures were down \$0.5M due to completing the RTP.
- AIS expenditures dropped \$0.3M reflecting changes in grant funded treatment programs.
- A mixture of other programs dropped \$0.2M.

**Fund Balances:**

Table 3 provides a summary of the Fund Balances and changes from the prior year.

<b>Table 3 - Summary of Fund Balances</b>				
	2021	2020	Change	%
General Fund	5,630,570	4,509,956	1,120,614	25%
Aquatic Invasive Species Fund	1,393,988	972,042	421,946	43%
Transportation Fund	491,866	(110,208)	602,074	-546%
Other Nonmajor Governmental Funds	781,493	330,961	450,532	136%
Total Fund Balance	8,297,917	5,702,751	2,595,166	

TRPA's governmental funds report a combined fund balance of \$8.3 million as of June 30, 2021, an increase of \$2.6 million from last year. The General Fund balance increased by \$1.1 million due to the factors listed above under Table 2.

**General Fund Budgeting Highlights**

*The following discussion is limited to the General Fund only, not the total Agency financials.*

TRPA adopted the FY 2021 budget in June of 2020. The budget contained the following assumptions concerning revenues and expenses:

TAHOE REGIONAL PLANNING AGENCY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2021

- California's contribution was unchanged.
- Nevada's contribution was reduced by 0.2M because of COVID related reductions to state revenue.
- The Planning Fund fee for service revenue was budgeted at \$1.9 million, consistent with the prior year plus a fee increase.

The budget to actual comparison for the General Fund for the year ended June 30, 2021 includes the following items:

- Revenues were \$1.1 million higher than budgeted due to a combination of \$0.9M higher fees for services and \$0.3 increase in Grant revenues.
- Overall expenditures were \$0.2 million above budget. Project work fluctuates based on available grants. Selected details include:
  - Planning services were \$0.6M over budget due to significantly increased workloads.
  - Research and Analysis expenditures were \$0.3M lower due to completion of the Threshold Evaluation

**Capital Assets**

For the year ended June 30, 2021, TRPA had \$8.8 million invested in capital assets. Table 4 shows June 30, 2021 balances compared to June 30, 2020.

**Table 4 - Summary of Capital Assets Net of Depreciation**

	2021	2020	Change	%
Land	1,606,706	1,606,706	0	0%
Buildings & Improvements	10,775,610	10,775,610	0	0%
Boats, Equipment and Furniture	1,780,033	1,939,105	(159,072)	-8%
Software	978,606	733,245	245,361	33%
Capital In Process	0	259,410	(259,410)	
Accumulated Depreciation	<u>(6,346,070)</u>	<u>(6,168,086)</u>	<u>(177,984)</u>	3%
Total Capital Assets - Net	<u>8,794,885</u>	<u>9,145,990</u>	<u>(351,105)</u>	-4%

Overall capital assets decreased by \$0.4 million or 4%, from \$9.2 million for the year ended June 30, 2020, to \$8.8 million for the year ended June 30, 2021. Capital in Process went to zero due to putting the shoreline permitting software into service Depreciation totaled \$0.2M and \$0.2M of assets were retired.

TAHOE REGIONAL PLANNING AGENCY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2021

**Long Term Debt**

**Table 5 - Summary of Long Term Debt**

	2021	2020	Change	%
Lease Revenue Bonds	8,298,000	8,298,000		
Compensated Absences	796,926	703,069	93,857	13%
Total Long Term Debt	9,094,926	9,001,069	93,857	1%

TRPA's debt considered a liability of governmental activities, increased by \$0.1 million for the year ended June 30, 2021. The change was due to Compensated Absences. TRPA refinanced the Lease Revenue Bonds used to acquire the building in FY 2020. That deal included a one-year deferral of principle payments.

**Factors bearing on TRPA's Future**

TRPA receives significant funding from the states of California and Nevada. The compact calls for funding to be split two-thirds California and one-third Nevada. Actual funding can vary depending on each State's budget process. COVID has had a profound impact on the two state's revenues and TRPA's funding has been reduced as a result. The Agency has developed plans and budgets incorporating those reductions. Funding for Fiscal Year 2022 is secured, and the Agency is working with California on the Fiscal Year 2023 budget (Nevada funding is set).

The key assumptions in the General Fund revenue and expenditure budget for fiscal year 2021 were:

1. The California appropriated budget was finalized in June of 2021. TRPA has already received these funds for FY 2022.
2. The Nevada appropriated budget was approved by the Legislature in 2021, as part of the biennial budget process. TRPA has received its' 2022 allocation from the State of Nevada.
3. The local support from the counties is fixed at \$150,000 per the Tahoe Regional Planning Compact.
4. Development filing fees and permitting revenues are subject to fluctuations in the real estate and construction economies of the Lake Tahoe Basin. TRPA's budget for FY 2022 assumes a similar level to FY 2021. TRPA's Governing Board approved an increase in filing fees at the meeting on November 20, 2021. Fees collected may not equal budgeted totals and represent the biggest near-term risk to General Fund Revenues.
5. TRPA implemented a new Shoreline Code of Ordinances to permit buoys and structures on the lake. User fees are expected to pay the cost of the program. Revenue forecasts should be more stable than development fees since the number of permitted buoys and structures is well defined and property owners are highly incentivized to pay.

TAHOE REGIONAL PLANNING AGENCY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2021

**Contacting TRPA**

This financial report is designed to provide a general overview of the Tahoe Regional Planning Agency's finances for those interested and to demonstrate the Agency's accountability for the money it receives. Questions concerning any information provided in this report or requests for additional financial information should be addressed to the Tahoe Regional Planning Agency, Finance Office, P.O. Box 5310, Stateline, Nevada 89449.

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**BASIC FINANCIAL STATEMENTS**

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**TAHOE REGIONAL PLANNING AGENCY**

**Statement of Net Position**

**June 30, 2021  
(with comparative prior year information)**

	Governmental Activities	
	2021	2020
<b>Assets:</b>		
Cash and investments (note 2)	\$ 15,540,386	12,599,509
Cash and investments with fiscal agent (note 2)	20	10,379
<b>Receivables:</b>		
Accounts	122,279	2,513
Interest	38,642	43,352
Due from other governments	1,593,253	1,662,719
Prepaid items and deposits	218,925	150,694
Capital assets not being depreciated (note 4)	1,606,706	1,866,116
Capital assets, net of accumulated depreciation (note 4)	7,188,179	7,279,874
<b>Total assets</b>	<b>26,308,390</b>	<b>23,615,156</b>
<b>Liabilities:</b>		
Accounts payable	1,366,965	1,480,734
Accrued payroll and benefits	447,603	263,810
Interest payable	27,397	12,785
Due to other governments	1,054,888	1,530
Due to claimants	7,190	10,190
Unearned revenue	549,357	623,223
Deposits payable	5,592,770	5,573,310
<b>Long-term liabilities (note 5):</b>		
Due within one year	630,777	449,159
Due in more than one year	8,464,149	8,551,910
<b>Total liabilities</b>	<b>18,141,096</b>	<b>16,966,651</b>
<b>Net position:</b>		
Net investment in capital assets	1,246,755	1,597,860
<b>Restricted for:</b>		
Environmental implementation	1,336,466	1,349,766
Long range and transportation planning	36,645	659,064
Unrestricted	5,547,428	3,041,815
<b>Total net position</b>	<b>\$ 8,167,294</b>	<b>6,648,505</b>

See Notes to the Basic Financial Statements



**TAHOE REGIONAL PLANNING AGENCY**

**Statement of Activities**

**Year Ended June 30, 2021  
(with comparative prior year information)**

Functions/Programs	Expenses	Indirect Expense Allocation	Program Revenues		
			Charges for Services	Operating Grants and Contributions	Capital Grants and Contributions
Governmental activities:					
General government:					
Administrative services	\$ 1,440,253	(535,654)	-	118,290	-
Support services	2,669,530	(992,843)	3,639	-	-
Legal services	476,768	(177,318)	124,968	-	-
Environmental planning, implementation, and research and analysis:					
Environmental implementation	3,726,364	311,750	1,072,278	2,000,322	-
Planning services	1,499,343	992,736	3,502,505	-	-
Long range and transportation planning	4,884,161	382,421	-	4,437,489	74,861
Research and analysis	2,519,603	18,908	-	309,364	-
Building and rental activities	143,890	-	326,731	-	-
Interest and fiscal charges	329,677	-	-	-	-
Total governmental activities	\$ 17,689,589	-	5,030,121	6,865,465	74,861

General revenues:

State revenue

Local revenue

Investment earnings, unrestricted

Miscellaneous

Total general revenues

Changes in net position

Net position, beginning of year, as restated

Net position, end of year

See Notes to the Basic Financial Statements

Net (Expense) Revenue and  
Changes in Net Position

<u>2021</u>	<u>2020</u>
(786,309)	(953,159)
(1,673,048)	(903,699)
(174,482)	(193,857)
(965,514)	(2,084,498)
1,010,426	(417,564)
(754,232)	(1,416,354)
(2,229,147)	(1,708,007)
182,841	205,565
<u>(329,677)</u>	<u>(396,019)</u>
<u>(5,719,142)</u>	<u>(7,867,592)</u>
\$ 6,966,405	\$ 7,394,427
149,999	150,000
(1,178)	275,643
<u>7,931</u>	<u>16,302</u>
<u>7,123,157</u>	<u>7,836,372</u>
1,404,015	(31,220)
<u>6,763,279</u>	<u>6,679,725</u>
<u>\$ 8,167,294</u>	<u>6,648,505</u>

See Notes to the Basic Financial Statements

**TAHOE REGIONAL PLANNING AGENCY  
Governmental Funds**

**Balance Sheet**

**June 30, 2021  
(with comparative prior year information)**

	Special Revenue Funds			Non-Major Governmental Funds	Totals	
	General	Transportation Fund	Aquatic Invasive Species		2021	2020
<u>Assets</u>						
Cash and investments	\$ 13,312,488	56,361	1,477,486	694,051	15,540,386	12,599,509
Cash and investments with fiscal agent	20	-	-	-	20	10,379
Receivables:						
Accounts	50,953	23	-	-	50,976	2,513
Interest	38,617	25	-	-	38,642	43,352
Due from other governments	5,700	796,153	569,452	221,948	1,593,253	1,662,719
Due from other funds (note 3)	71,303	-	-	-	71,303	24,034
Prepaid items	212,477	4,048	2,400	-	218,925	150,694
<b>Total assets</b>	<b>\$ 13,691,558</b>	<b>856,610</b>	<b>2,049,338</b>	<b>915,999</b>	<b>17,513,505</b>	<b>14,493,200</b>
<u>Liabilities, Deferred Inflows of Resources, and Fund Balances</u>						
Liabilities:						
Accounts payable	\$ 428,570	159,904	651,175	127,316	1,366,965	1,480,734
Accrued payroll and benefits	447,603	-	-	-	447,603	263,810
Due to other funds (note 3)	-	-	-	-	-	24,034
Due to other governments	1,054,888	-	-	-	1,054,888	1,530
Due to claimants	-	-	-	7,190	7,190	10,190
Unearned revenue	510,684	34,498	4,175	-	549,357	623,223
Deposits payable	5,592,770	-	-	-	5,592,770	5,573,310
<b>Total liabilities</b>	<b>8,034,515</b>	<b>194,402</b>	<b>655,350</b>	<b>134,506</b>	<b>9,018,773</b>	<b>7,976,831</b>
Deferred inflows of resources:						
Unavailable revenues	26,473	170,342	-	-	196,815	813,618
<b>Total deferred inflows of resources</b>	<b>26,473</b>	<b>170,342</b>	<b>-</b>	<b>-</b>	<b>196,815</b>	<b>813,618</b>
Fund balances:						
Nonspendable:						
Prepaid items	212,477	4,048	2,400	-	218,925	150,694
Committed for:						
Code enforcements	-	-	-	-	-	377,474
Restricted for:						
Environmental implementation	-	-	1,391,588	383,784	1,775,372	1,325,765
Long range and transportation planning	-	487,818	-	397,709	885,527	72
Debt service	20	-	-	-	20	10,379
Building improvements	500,000	-	-	-	500,000	500,000
Unassigned	4,918,073	-	-	-	4,918,073	3,338,367
<b>Total fund balances</b>	<b>5,630,570</b>	<b>491,866</b>	<b>1,393,988</b>	<b>781,493</b>	<b>8,297,917</b>	<b>5,702,751</b>
<b>Total liabilities, deferred inflows of resources, and fund balances</b>	<b>\$ 13,691,558</b>	<b>856,610</b>	<b>2,049,338</b>	<b>915,999</b>	<b>17,513,505</b>	<b>14,493,200</b>

**TAHOE REGIONAL PLANNING AGENCY**

**Reconciliation of the Balance Sheet of Governmental Funds  
to the Statement of Net Position**

**June 30, 2021**

Fund balances of governmental funds	\$ 8,297,917
Amounts reported for governmental activities in the Statement of Net Position are different because:	
Capital assets net of depreciation have not been included as financial resources in governmental fund activity.	
Capital assets	15,140,955
Accumulated depreciation	(6,346,070)
Long-term liabilities are not due and payable in the current period and therefore are not reported in the governmental funds. Long-term liabilities consist of the following:	
Compensated absences	(796,926)
Lease revenue bonds	(8,298,000)
Interest expenditures are recognized in the governmental funds when due. Interest expense is recorded on the accrual basis in the government- wide financial statements, and therefore these statements reflect a liability for accrued interest payable.	
	(27,397)
Revenue is unavailable in the governmental funds when it is not received soon enough after the year-end to be considered available. The availability criteria does not apply to the government-wide financial statements and, therefore, the revenue is not unavailable.	
	<u>196,815</u>
Net position of governmental activities	<u>\$ 8,167,294</u>

See Notes to the Basic Financial Statements

**TAHOE REGIONAL PLANNING AGENCY  
Governmental Funds**

**Statement of Revenues, Expenditures, and Changes in Fund Balances**

**Year Ended June 30, 2021  
(with comparative prior year information)**

	Special Revenue Funds			Non-Major Governmental Funds	Totals	
	General	Transportation Fund	Aquatic Invasive Species		2021	2020
<b>Revenues:</b>						
Federal grants	\$ -	1,898,061	1,532,326	295,524	3,725,911	2,537,900
State government grants and contracts	6,216,405	471,432	936,607	3,001,215	10,625,659	11,317,566
Local government grants and contracts	282,289	5,800	67,113	-	355,202	228,912
Charges for services	3,382,934	-	1,072,278	-	4,455,212	3,256,677
Fines and forfeitures	230,000	-	-	-	230,000	11,300
Rental income	318,600	-	-	-	318,600	352,329
Investment income	(3,183)	-	-	2,005	(1,178)	275,653
Miscellaneous revenues	1,001	-	-	-	1,001	13,756
<b>Total revenues</b>	<u>10,428,046</u>	<u>2,375,293</u>	<u>3,608,324</u>	<u>3,298,744</u>	<u>19,710,407</u>	<u>17,994,093</u>
<b>Expenditures:</b>						
<b>Current:</b>						
<b>General government:</b>						
Administrative services	1,346,396	-	-	-	1,346,396	1,249,480
Support services	1,453,042	-	-	-	1,453,042	1,539,970
Legal services	476,768	-	-	-	476,768	290,339
Interfund reimbursements	(439,103)	-	-	-	(439,103)	(768,639)
<b>Environmental planning, implementation and research and analysis:</b>						
Environmental implementation	576,024	-	3,290,561	171,529	4,038,114	4,572,688
Planning services	2,503,342	-	-	-	2,503,342	2,606,146
Long range and transportation planning	755,370	1,788,658	-	2,340,133	4,884,161	5,665,095
Research and analysis	2,167,643	-	-	351,960	2,519,603	2,185,164
Building and rental activities	143,890	-	-	-	143,890	150,059
<b>Debt service:</b>						
Principal payment	-	-	-	-	-	8,445,000
Bond issuance costs	(11,263)	-	-	-	(11,263)	239,833
Interest and fiscal charges	315,065	-	-	-	315,065	415,896
<b>Total expenditures</b>	<u>9,287,174</u>	<u>1,788,658</u>	<u>3,290,561</u>	<u>2,863,622</u>	<u>17,230,015</u>	<u>26,591,031</u>
<b>Excess (deficiency) of revenues over (under) expenditures</b>	<u>1,140,872</u>	<u>586,635</u>	<u>317,763</u>	<u>435,122</u>	<u>2,480,392</u>	<u>(8,596,938)</u>
<b>Other financing sources (uses):</b>						
Transfers in (note 3)	-	15,439	104,183	15,410	135,032	269,187
Transfers out (note 3)	(135,032)	-	-	-	(135,032)	(269,187)
Refunding bonds issued	-	-	-	-	-	8,298,000
<b>Total other financing sources (uses)</b>	<u>(135,032)</u>	<u>15,439</u>	<u>104,183</u>	<u>15,410</u>	<u>-</u>	<u>8,298,000</u>
<b>Net changes in fund balances</b>	<u>1,005,840</u>	<u>602,074</u>	<u>421,946</u>	<u>450,532</u>	<u>2,480,392</u>	<u>(298,938)</u>
<b>Fund balances (deficit), beginning of year</b>	<u>4,624,730</u>	<u>(110,208)</u>	<u>972,042</u>	<u>330,961</u>	<u>5,817,525</u>	<u>6,001,689</u>
<b>Fund balances, end of year</b>	<u>\$ 5,630,570</u>	<u>491,866</u>	<u>1,393,988</u>	<u>781,493</u>	<u>8,297,917</u>	<u>5,702,751</u>

**TAHOE REGIONAL PLANNING AGENCY**

**Reconciliation of the Statement of Revenues, Expenditures, and Changes in  
Fund Balances of Governmental Funds to the Statement of Activities**

**Year Ended June 30, 2021**

Net change in fund balances - total governmental funds \$ 2,480,392

Amounts reported for governmental activities in the Statement of Activities  
are different because:

Governmental funds report capital outlays as expenditures. However, in the  
Statement of Activities, the costs of those assets are allocated over their  
estimated useful lives as depreciation expense or allocated to the appropriate  
functional expense when the cost is below the capitalization threshold. This  
activity is reconciled as follows:

Depreciation	(400,964)
Capital asset additions	49,859

Interest on noncurrent liabilities is not accrued in governmental funds, but  
rather is recognized as an expenditure when due. The net change is reported  
on the Statement of Activities. (14,612)

Compensated absences reported on the Statement of Activities do not require the  
use of current financial resources and therefore are not reported as expenditures  
in governmental funds. The net change is reported on the Statement of Activities. (93,857)

Revenue is unavailable in the governmental funds when it is not received soon  
enough after year-end to be considered available. The availability criteria does  
not apply to the government-wide financial statements and, therefore, the  
revenue is not unavailable. (616,803)

Change in net position of governmental activities \$ 1,404,015

See Notes to the Basic Financial Statements

**TAHOE REGIONAL PLANNING AGENCY  
Fiduciary Funds**

**Statement of Fiduciary Funds Net Position**

**June 30, 2021  
(with comparative prior year information)**

	Custodial Funds	
	2021	2020
<u>Assets</u>		
Cash and investments	13,611,574	13,876,303
Receivables:		
Interest	10,390	50,601
Due from other governments	145,877	177,740
Total assets	13,767,841	14,104,644
 <u>Liabilities, Deferred Inflows of Resources, and Net Position</u>		
Accounts payable	74,574	50,000
Due to other funds	71,303	-
Due to other governments	-	13,811,292
Deposits payable	-	243,352
Total liabilities	145,877	14,104,644
Deferred inflows of resources:		
Unavailable revenue	7,377	-
Total deferred inflows of resources	7,377	-
Net position:		
Restricted for:		
Water Quality	3,100,888	-
Stream Environment Zone	1,142,977	-
Air Quality	1,621,787	-
Operations and Maintenance	1,635,053	-
Unrestricted	6,113,882	-
Total net position	13,614,587	-
Total liabilities, deferred inflows of resources, and net position	\$ 13,767,841	\$ 14,104,644

See Notes to the Basic Financial Statements

**TAHOE REGIONAL PLANNING AGENCY  
Fiduciary Funds**

**Statement of Changes in Fiduciary Funds Net Position**

**June 30, 2021  
(with comparative prior year information)**

	Custodial Funds	
	2021	2020
Additions:		
Federal grants	\$ 143,416	-
State government grants and contracts	322,228	-
Charges for service	3,472,607	-
Investment income	2,987	-
Total additions	3,941,238	-
Deductions:		
Environmental implementation	3,254,176	-
Total deductions	3,254,176	-
Net increase in fiduciary net position	687,062	-
Net position, beginning of year, as restated	12,927,525	-
Net position, end of year	\$ 13,614,587	-



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# TAHOE REGIONAL PLANNING AGENCY

## Notes to the Basic Financial Statements

Year Ended June 30, 2021

### (1) Summary of Significant Accounting Policies

#### (a) Reporting Entity

The 91<sup>st</sup> Congress consented to the creation of the Tahoe Regional Planning Agency (TRPA) (PL 91-148) by the states of California and Nevada in 1969. The purpose of TRPA, as outlined in the state legislation, is to maintain equilibrium between the region's natural endowment and its man-made environment, and to preserve the scenic beauty and recreational opportunities of the region.

#### (b) Financial Statement Presentation

The basic financial statements of TRPA are composed of the following:

- Government-wide financial statements
- Fund financial statements
- Notes to the basic financial statements

#### Government-Wide Financial Statements

The government-wide financial statements (i.e., the Statement of Net Position and the Statement of Activities) report information on all of the nonfiduciary activities of TRPA. These statements report governmental activities, which normally are supported by taxes and intergovernmental revenues. TRPA does not have any business-type activities, which rely to a significant extent on fees and charges for support. Eliminations have been made in the statement of activities so that certain allocated expenses are recorded only once (by the function to which they were allocated).

The Statement of Activities demonstrates the degree to which the direct expenses of a given function or segment is offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. Program revenues include 1) charges to customers who purchase, use, or directly benefit from goods, services or privileges provided by a given function or segment, and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Taxes and other items not properly included among program revenues are reported instead as general revenues.

#### Fund Financial Statements

The underlying accounting system of TRPA is organized and operated on the basis of separate funds, each of which is considered to be a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenues and expenditures. Governmental resources are allocated to and accounted for in individual funds based upon the purposes for which they are to be spent and the means by which spending activities are controlled.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(1) Summary of Significant Accounting Policies (Continued)**

Fund financial statements for TRPA's governmental funds are presented after the government-wide financial statements. The emphasis on fund financial statements is on major governmental funds, each displayed in a separate column. All remaining governmental funds are aggregated and reported as nonmajor funds.

(c) Major Funds

Major funds are defined as funds that have assets, liabilities, revenues or expenditures equal to at least ten percent of their fund-type total and at least five percent of the grand total of all fund types. The General Fund is always a major fund. TRPA may also select other funds it believes should be presented as major funds.

TRPA reports the following major governmental funds:

- General Fund – The General Fund is the general operating fund of TRPA and is used to account for all financial resources except those required to be accounted for in another fund. Principal sources of revenue include monies provided by the State of California, monies provided by the State of Nevada, and fees for services rendered.
- Transportation Special Revenue Fund – This fund is used to account for revenues received from federal and state grants for transportation planning for the entire Lake Tahoe basin.
- Aquatic Invasive Species Special Revenue Fund – This fund is used to account for revenue from federal, state and private funding sources utilized towards the detection, control and prevention of aquatic invasive species in the Lake Tahoe region.

Additionally, TRPA reports the following fund type:

Fiduciary Funds

TRPA's fiduciary funds are custodial funds and are used to account for assets held by TRPA in a trustee capacity or as an agent for individuals, private organizations or other governments. The financial statements include the following custodial funds:

## TAHOE REGIONAL PLANNING AGENCY

### Notes to the Basic Financial Statements

(Continued)

#### (1) Summary of Significant Accounting Policies (Continued)

- California Tahoe Regional Planning Agency Tahoe Keys Fund – This fund was established during the existence of the California Tahoe Regional Planning Agency (CTRPA), a political subdivision of the State of California, exercising responsibility for the development and enforcement of plans for land and resource development in the Lake Tahoe region of California. This fund holds environmental mitigation fees that are collected on behalf of the Lahontan Regional Water Quality Board. These fees are paid by property owners with projects located in the geographical area known as the “Tahoe Keys”. Disbursements from this fund are made by TRPA subject to approval of the Lahontan Regional Water Quality Board to fund water quality projects beneficial to the Tahoe Keys.
- California Tahoe Regional Planning Agency Indirect Source Fund – This fund was established during the existence of CTRPA to collect environmental mitigation fees paid by projects directly effecting air quality within the Lake Tahoe Basin. Disbursements from this fund are made by TRPA on behalf of the California Resources Agency with concurrence of the Attorney General to fund air quality projects beneficial to the Lake Tahoe region of California.
- Excess Coverage Mitigation Fund – This fund was established to hold environmental mitigation fees collected on behalf of the States of California and Nevada as an offsetting effect to expected impacts on land coverage. The mitigation fees are paid by project applicants in lieu of a reduction of land coverage. Disbursements from this fund are made to the States of California and Nevada to fund land purchases.
- Custodial Funds – This fund was established to collect mitigation fees on behalf of various Lake Tahoe basin jurisdictions as an offsetting effect to expected impacts of certain projects within the Lake Tahoe Basin. The mitigation fees are paid by project applicants and grouped into air quality, water quality and stream zone environment. Disbursements from this fund are made to Lake Tahoe basin jurisdictions to fund eligible projects that serve to mitigate impacts of development.
- Science Advisory Council – The states of California and Nevada established the Tahoe Science Advisory Council (TSAC) in December 2015 by a memorandum of understanding to ensure the best available science informs public policy decisions at Lake Tahoe. The agreement between the Secretary of the California Natural Resources Agency and the Director of the Nevada Department of Conservation and Natural Resources set up an independent group of scientists to work together in an advisory capacity to promote and enhance the use of the best available scientific information on matters of interest to both states.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(1) Summary of Significant Accounting Policies (Continued)**

Twelve voting members of TASC include representatives of various California and Nevada research institutions along with the US Geological Survey and the US Forest Service Pacific Southwest Research Station. An Executive Committee oversees the Council and meets annually.

**(d) Measurement Focus and Basis of Accounting**

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collected within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, TRPA considers revenues to be available if they are collected within 60 days of the end of the current fiscal period, except for grants for which the availability period is 120 days. Expenditures generally are recorded when a liability is incurred; however, principal and interest expenditures on long-term debt and compensated absences of governmental funds are recorded only when payment is due. Governmental capital asset acquisitions are reported as expenditures in governmental funds. Proceeds of governmental long-term debt and acquisitions under capital leases are reported as other financing sources.

Those revenues susceptible to accrual include fuel taxes collected and held by the State at year-end on behalf of TRPA, intergovernmental revenue, and interest revenue. In applying the susceptible-to-accrual concept to intergovernmental revenues, there are essentially two types of revenues. In one, moneys must be expended on the specific purpose or project before any amounts will be paid to TRPA; therefore, revenues are recognized based upon expenditures incurred. In the other, moneys are virtually unrestricted and are usually revocable only for failure to comply with prescribed compliance requirements. These resources are reflected as revenues at the time of receipt or earlier if the susceptible-to-accrual criteria are met.

The custodial funds, a fiduciary fund type, are also reported using the economic resources measurement focus and the accrual basis of accounting.

**(e) Cash and Investments**

Investments are reported in the accompanying financial statements at fair value. The fair value is determined based upon market closing prices. The fair value of mutual funds is stated at share value.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(1) Summary of Significant Accounting Policies (Continued)**

Changes in fair value that occur during a fiscal year are recognized as investment income reported for that fiscal year. Investment income includes interest earnings and changes in fair value. Interest earned on investments is allocated to the General Fund, certain nonmajor funds and agency funds in accordance with policies established by TRPA's management.

(f) Fair Value Measurements

Certain assets and liabilities are required to be reported at fair value. The fair value framework provides a hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of fair value hierarchy are described as follows:

- Level 1 – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.
- Level 2 – Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly and fair value is determined through the use of models or other valuation methodologies including:
  - Quoted prices for similar assets or liabilities in active markets;
  - Quoted prices for identical or similar assets or liabilities in markets that are inactive;
  - Inputs other than quoted prices that are observable for the asset or liability; and
  - Inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement. These unobservable inputs reflect TRPA's own assumptions about the inputs market participants would use in pricing the asset or liability (including assumptions about risk). These unobservable inputs are developed based on the best information available in the circumstances and may include TRPA's own data.

(g) Prepaid Items

Certain payments to vendors reflecting costs applicable to future accounting periods are recorded as prepaid items in both the government-wide and fund financial statements. The cost of prepaid items is recorded as expenditures/expenses when consumed rather than when purchased.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(1) Summary of Significant Accounting Policies (Continued)**

(h) Interfund Transactions

During the course of operations, numerous transactions occur between individual funds involving goods provided or services rendered. There are also transfers of revenues from funds authorized to receive the revenue to funds authorized to expend it. Outstanding interfund balances are reported as due from/to other funds.

(i) Capital Assets

Capital assets are defined by TRPA as assets with an initial individual cost of more than \$5,000 and an estimated useful life in excess of two years. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Contributed capital assets are valued at their estimated acquisition value at the date of the contribution. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend the life of the asset are not capitalized.

TRPA depreciates its capital assets over their estimated useful lives using the straight-line method. Depreciation is charged as an expense against operations and accumulated depreciation is reported on the Statement of Net Position. The range of lives used for depreciation purposes for each capital asset class is as follows:

<u>Item</u>	<u>Useful Life</u>
Buildings and improvements	10-40 years
Boats and equipment	3-12 years
Furniture and fixtures	3-12 years
Software	3 years

(j) Deferred Outflows and Inflows of Resources

In addition to assets, the balance sheet will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of fund balance that applies to a future period(s) and so will not be recognized as an outflow of resources (expenditure) until then. TRPA currently does not have any items that qualify for reporting in this category.

In addition to liabilities, the balance sheet will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of fund balance that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. TRPA has only one type of item, which arises only under a modified accrual basis of accounting, which qualifies for reporting in this category, and is reported as unavailable revenue. Unavailable revenue arises when potential revenues do not meet both the measurable and availability criteria for recognition in the current period. In subsequent periods, when the revenue recognition criteria are met, the deferred inflow of resources is removed from the balance sheet and revenue is recognized.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(1) Summary of Significant Accounting Policies (Continued)**

(k) Unearned Revenue

Unearned revenue represents amounts received prior to the incurrence of eligible expenditures for intergovernmental revenue that is in a form substantially equivalent to reimbursement grants. For these intergovernmental revenues, TRPA does not become entitled to the revenues until it has first incurred expenditures for the projects specified for these funds.

(l) Compensated Absences

Compensated absences include accumulated vacation and other compensatory leave balances that are accrued as earned. The employees' entitlement to these balances is attributable to services already rendered and it is probable that virtually all of these balances will be liquidated by either paid time off or payments upon termination or retirement. Compensated absences are generally liquidated in the General Fund.

(m) Long-Term Obligations

In the government-wide financial statements, long-term debt is reported as long-term liabilities in the governmental activities. Bond discounts are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are recorded net of the bond discount.

In the fund financial statements, governmental fund types recognize bond discounts and bond issuance costs during the current period. The face amount of the debt issued is reported as other financing sources. Discounts on debt issuances are reported as other financing uses. Bond issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures when incurred.

(n) Fund Balances

Fund balances are reported in the fund statements in the following classifications:

- Nonspendable – includes amounts that cannot be spent because they are either not spendable in form (such as inventory) or legally or contractually required to be maintained intact (such as endowments).
- Restricted – includes amounts that can be spent only for specific purposes stipulated by constitution, external resource providers, or through enabling legislation. If the Board action limiting the use of funds is included in the same action (legislation) that created (enables) the funding source, then it is restricted.



**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(1) Summary of Significant Accounting Policies (Continued)**

- *Committed* – includes amounts that can be used only for the specific purposes determined by a formal action of the Board. It includes legislation (Board action) that can only be overturned by new legislation requiring the same type of voting consensus that created the original action. Therefore, if the Board action limiting the use of the funds is separate from the action (legislation) that created (enabled) the funding source, then it is committed, not restricted. For TRPA, a resolution is the highest level of decision-making authority that is used to establish a commitment of fund balance.
- *Assigned* – includes amounts that are designated or expressed by the Board, but does not require a formal action like a resolution or ordinance. The Board has delegated the ability to assign uses of specific funds, for specific purposes to the Executive Director and the Finance Director.
- *Unassigned* – includes the remaining spendable amounts which are not included in one of the other classifications.

It is TRPA's policy that restricted resources will be applied first, followed by (in order of application) committed, assigned and unassigned resources, in the absence of a formal policy adopted by the Board.

(o) Net Position

In the government-wide financial statements, net position represents the difference between assets and liabilities and deferred inflows and outflows and is classified into three categories:

- *Net investment in capital assets* – consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- *Restricted net position* – represents the net position that is not accessible for general use because their use is subject to restrictions enforceable by third parties.
- *Unrestricted net position* – represents those assets that are available for general use.

When both restricted and unrestricted resources are available for use, it is TRPA's policy to use restricted resources first.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(1) Summary of Significant Accounting Policies (Continued)**

(p) Use of Estimates

The preparation of basic financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the reporting date and revenues and expenses during the reporting period. Actual results could differ from those estimates.

(q) Prior Year Data

Selected information from the prior years has been included in the accompanying financial statements in order to provide an understanding of changes in TRPA's financial position and operations. This information has been included for comparison purposes only and does not represent a complete presentation in accordance with generally accepted accounting principles. Accordingly, such information should be read in conjunction with TRPA's financial statements for the year ended June 30, 2020, from which this selected financial data was derived. Certain minor reclassifications of prior year data have been made in order to enhance its comparability with current year figures.

**(2) Cash and Investments**

Cash and investments as of June 30, 2021 are classified in the accompanying financial statements as follows:

Statement of Net Position:	
Cash and investments	\$15,540,386
Cash and investments with fiscal agent	20
Fiduciary Funds:	
Cash and investments	<u>13,611,574</u>
Total cash and investments	<u>\$29,151,980</u>

Cash and investments as of June 30, 2021 consist of the following:

Cash on hand	\$ 100
Deposits with financial institutions	4,404,621
Investments	<u>24,747,259</u>
Total cash and investments	<u>\$29,151,980</u>

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(2) Cash and Investments (Continued)**

Investments Authorized by the California Government Code, Nevada Revised Statutes and TRPA’s Investment Policy

The table below identifies the investment types that are authorized for TRPA by the California Government Code, Nevada Revised Statutes and TRPA’s investment policy. The table also identifies certain provisions of the California Government Code, Nevada Revised Statutes, or TRPA’s investment policy, if more restrictive, that address interest rate risk, credit risk and concentration of credit risk.

Investment Types <u>Authorized by State Law</u>	Authorized by Investment <u>Policy</u>	Maximum <u>Maturity*</u>	Maximum Percentage <u>of Portfolio*</u>	Maximum Investment <u>In One Issuer*</u>
Local agency bonds	Yes	5 years	40%	None
U.S. Treasury obligations	Yes	5 years	75%	None
Federal agency securities	Yes	5 years	50%	30%
Banker’s acceptances	Yes	180 days	20%	30%
Commercial paper	Yes	180 days	15%	10%
Negotiable certificates of deposit	Yes	5 years	25%	None
Repurchase agreements	Yes	90 days	None	None
Medium-term notes	Yes	5 years	20%	10%
Mutual funds	Yes	N/A	10%	10%
Money market mutual funds	Yes	N/A	20%	10%
County pooled investment fund	Yes	N/A	None	None
State investment pools	Yes	N/A	None	None

\* Based on state law requirements or investment policy requirements, whichever is more restrictive.

Investments Authorized by Debt Agreements

Investment of debt proceeds held by the fiscal agent is governed by provisions of the debt agreements, rather than the general provisions of the California Government Code, Nevada Revised Statutes or TRPA’s investment policy. As of June 30, 2021, there was \$20 in a cost of issuance fund. These funds are to be held by the Trustee in trust and applied to the cost of issuance for the 2020 Lease revenue Refunding Bonds.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(2) Cash and Investments (Continued)**

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One way that TRPA manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer-term investments and by timing cash flows from maturities. A portion of the portfolio is always maturing or coming close to maturity evenly over time as necessary to provide the cash flow and liquidity needed for TRPA's operations. In addition, the investment policy limits purchase of securities to those with maturities of five years or less.

Information about the sensitivity of the fair value of TRPA's investments (including investments held by fiscal agent) to market interest rate fluctuations is provided by the following table that shows the distribution of TRPA's investments by maturity.

	Total	Maturities (in Months)	
		12 Months or less	13-24 Months
Treasury Securities	\$ 9,768,230	1,611,656	8,156,574
Federal Agency Securities	456,813	456,813	-
Medium Term Notes	780,062	780,062	-
Local Agency Investment Fund (LAIF)	11,687,462	11,687,462	-
Local Government Investment Pool (LGIP)	1,153,834	1,153,834	-
Money Market Funds	900,838	900,838	-
Investments with fiscal agent:			
Money Market Funds	<u>20</u>	<u>20</u>	<u>-</u>
 Total Investments	 <u>\$ 24,747,259</u>	 <u>16,590,685</u>	 <u>8,156,574</u>

Disclosures Relating to Credit Risk

Generally, Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Presented below is the minimum rating required by (where applicable) the California Government Code, Nevada Revised Statutes, TRPA's investment policy, or debt agreements, and the actual rating as of year end for each investment type.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(2) Cash and Investments (Continued)**

	Total	Minimum	Ratings as of Year End			
		Legal Rating	AAA	AA+ - AA-	A+ - A-	Not Rated
Treasury Securities	\$ 9,768,230	N/A*	-	-	-	9,768,230
Federal Agency Securities	456,813	N/A	-	456,813	-	-
Medium Term Notes	780,062	A	-	200,460	579,602	-
LAIF	11,687,462	N/A	-	-	-	11,687,462
LGIP	1,153,834	N/A	-	-	-	1,153,834
Money Market Funds	900,838	Multiple**	900,838	-	-	-
Investments with fiscal agent:						
Money Market Funds	20	AAA-m	20	-	-	-
<b>Total Investments</b>	<b><u>\$24,747,259</u></b>		<b><u>900,858</u></b>	<b><u>657,273</u></b>	<b><u>579,602</u></b>	<b><u>22,609,526</u></b>

\* - Exempt from disclosure

\*\* - Must receive highest ranking by not less than two nationally recognized statistical rating organizations or retain an investment advisor registered with the SEC or exempt from registration and who has not less than five years' experience investing in money market instruments with assets under management in excess of \$500 million.

**Concentration of Credit Risk**

Concentration risk is the risk of loss attributed to the magnitude of an investor's investment in a single issue. To limit concentration risk, TRPA places a limit on the amount that can be invested in specific investment types. No investments in any one issuer (other than U.S. Treasury securities, mutual funds and external investment pools) that represents 5% or more of total TRPA investments were held at year year-end.

**Custodial Credit Risk**

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. TRPA's Investment Policy requires financial institutions to collateralize deposits. TRPA participates in Nevada's collateral pool for public agencies, which is overseen by the Nevada State Treasurer. Amounts with financial institutions are first covered by FDIC insurance and amounts exceeding the limit are collateralized by the bank with the Nevada State Treasurer's office. The minimum collateralization is 102% of the public deposit.

The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. To address investment custodial credit risk, TRPA's Investment Policy requires the investments be placed with an independent third party for safekeeping and that all trade where applicable will be executed by Delivery vs. Payment. This ensures that securities are deposited in eligible financial institutions prior to the release of funds.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(2) Cash and Investments (Continued)**

TRPA's investment manager and its safekeeping custodian are affiliated with the same bank, but are under separate operational management. To ensure proper internal controls are in place between the manager and the safekeeping custodian, TRPA annually reviews the examination report on controls placed in operation and tests of operating effectiveness for the trust services of the investment safekeeping custodian issued by an independent public accounting firm.

TRPA uses an investment management firm to manage all of its investments that are held in securities form. The investment management firm executes investment purchases within the prescribed allowability and diversification guidelines provided by TRPA's investment policy. The investment manager places buy and sell orders with a number of broker-dealers on behalf of TRPA and in keeping with TRPA's Investment Policy. The investment manager executes all transactions using Delivery vs. Payment with the securities being held in safekeeping by the trust department affiliated with the investment manager. In addition, all cash and securities in TRPA's portfolio are held in safekeeping in TRPA's name by the safekeeping custodian, acting as agent for TRPA.

For investments identified herein as held by fiscal agent, the fiscal agent selects the investment under the terms of the applicable trust agreement, acquires the investment and holds the investment on behalf of TRPA.

Investment in State Investment Pools

TRPA is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by the California Government Code under the oversight of the Treasurer of the State of California, and the Local Government Investment Pool (LGIP) that is regulated by the Nevada Revised Statutes under the oversight of the Treasurer of the State of Nevada. The fair value of TRPA's investments in these pools are reported in the accompanying financial

statements at an amount based upon TRPA's pro-rata share of the fair value provided by pools. The balance available for withdrawal is based on the accounting records maintained by the pools, which are recorded on an amortized cost basis. Currently, the pools do not have an investment rating.

Investment in County Investment Pool

Funds invested in county investment pools represent Local Transportation Funds under the Transportation Development Act that are held by the Counties of El Dorado and Placer, who receive the funds from the State of California on behalf of TRPA. The fair value of TRPA's investment in these pools are reported in the accompanying financial statements at an amount based upon TRPA's pro-rata share of the fair value provided by the pools. The balance available for withdrawal is based on the accounting records maintained by the pools. Currently, the pools do not have an investment rating.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(2) Cash and Investments (Continued)**

Fair Value Measurement and Application

TRPA categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. TRPA’s investments are categorized as follows:

	Total	Fair Value Hierarchy		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Observable Inputs (Level 3)
Investments measured at fair value:				
Treasury Securities	\$ 9,768,230	9,768,230	-	-
Federal Agency Securities	456,813	-	456,813	-
Medium Term Notes	780,062	-	780,062	-
Total investments measured at fair value	11,005,105	9,768,230	1,236,875	-
Investments not measured at fair value:				
LAIF	11,687,462			
LGIP	1,153,834			
Money Market	900,858			
Total Investments not measured at fair value	13,742,154			
Total Investments	\$ 24,747,259			

**(3) Interfund Transactions**

Interfund Transfers

Interfund transfers consisted of the following for the year ended June 30, 2021:

Transfers In	Transfers Out	Amount
Transportation Fund	General Fund	\$ 15,439
Aquatic Invasive Species Fund	General Fund	104,183
Nonmajor Governmental Funds	General Fund	15,410
Total		\$ 135,032

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(3) Interfund Transactions (Continued)**

Interfund transfers are primarily used: (1) to reimburse funds that have made an expenditure on behalf of another fund due to statutory requirements; (2) to pay for capital projects or capital outlays, lease or debt service payments and operating expenses; and (3) to finance various programs with unrestricted revenues.

**(4) Capital Assets**

Capital asset activity for the year ended June 30, 2021 is as follows:

Depreciation expense of \$400,964 was charged to the Support Services function.

	Balance At June 30, 2020	Additions	Deletions	Balance At June 30, 2021
Capital assets not being depreciated:				
Land	\$ 1,606,706	-	-	1,606,706
Construction in progress	259,410	49,859	(309,269)	-
Total capital assets not being depreciated	<u>1,866,116</u>	<u>49,859</u>	<u>(309,269)</u>	<u>1,606,706</u>
Capital assets being depreciated:				
Buildings and improvements	10,775,610	-	-	10,775,610
Boats, equipment and furniture	1,939,105	-	(159,072)	1,780,033
Software	733,245	309,269	(63,908)	978,606
Total capital assets being depreciated	<u>13,447,960</u>	<u>309,269</u>	<u>(222,980)</u>	<u>13,534,249</u>
Less accumulated depreciation for:				
Buildings and improvements	3,779,103	274,855	-	4,053,958
Boats, equipment and furniture	1,655,738	74,705	(159,072)	1,571,371
Software	733,245	51,404	(63,908)	720,741
Total accumulated depreciation	<u>6,168,086</u>	<u>400,964</u>	<u>(222,980)</u>	<u>6,346,070</u>
Capital assets being depreciated, net	<u>7,279,874</u>	<u>(91,695)</u>	<u>-</u>	<u>7,188,179</u>
Total capital assets	<u>\$ 9,145,990</u>	<u>(41,836)</u>	<u>(309,269)</u>	<u>8,794,885</u>



**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(5) Long-Term Liabilities**

The following is a summary of changes in long-term liabilities for the year ended June 30, 2021:

	Balance at June 30, 2020	Additions	Deletions	Balance at June 30, 2021	Amount Due in One Year	Amount Due Beyond One Year
2020 Series A Lease Revenue Bonds	7,396,000	-	-	7,396,000	-	7,396,000
2020 Series B Lease Revenue Bonds	902,000	-	-	902,000	100,000	802,000
Compensated Absences	703,069	667,984	(574,127)	796,926	530,777	266,149
<b>Total</b>	<b><u>\$ 9,001,069</u></b>	<b><u>667,984</u></b>	<b><u>(574,127)</u></b>	<b><u>9,094,926</u></b>	<b><u>630,777</u></b>	<b><u>8,464,149</u></b>

**Lease Revenue Refunding Bonds**

On June 16, 2020, TRPA issued \$8,298,000 in Lease Revenue Refunding Bonds through the City of Carson, Nevada, comprised of \$7,396,000 in Lease Revenue Refunding Bonds Series 2020A (Tax-Exempt) and \$902,000 in Lease Revenue Refunding Bonds Series 2020B (Taxable). These 2020 Bonds were issued to currently refund the outstanding balances of TRPA's 2007 Lease Revenue Bonds, Series A and B, which were originally issued to fund the acquisition and improvements for the building located at 128 Market Street, Stateline, Nevada, which serves as TRPA's office headquarters. Principal payments for the 2020 Bonds are due annually on December 1 in amounts ranging from \$98,000 to \$530,000. Interest is payable semiannually at 4.00% for the 2020 Series A bonds and at 3.65% for the 2020 Series B bonds.

Annual debt service requirements to maturity are as follows:

<u>Series A Bonds</u>			
<u>Year Ending</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
<u>June 30</u>			
2022	\$ -	295,840	295,840
2023	-	295,840	295,840
2024	-	295,840	295,840
2025	-	295,840	295,840
2026	156,000	292,720	448,720
2027-2031	1,417,000	1,310,700	2,727,700
2032-2036	1,724,000	997,680	2,721,680
2037-2041	2,098,000	616,600	2,714,600
2042-2045	2,001,000	164,020	2,165,020
<b>Total</b>	<b><u>\$ 7,396,000</u></b>	<b><u>4,565,080</u></b>	<b><u>11,961,080</u></b>

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(5) Long-Term Liabilities (Continued)**

Series B Bonds			
Year Ending June 30	Principal	Interest	Total
2022	\$ 100,000	31,098	131,098
2023	226,000	25,149	251,149
2024	235,000	16,735	251,735
2025	243,000	8,012	251,012
2026	98,000	1,789	99,789
Total	\$ 902,000	82,783	984,783

Compensated Absences

TRPA’s policies relating to employee leave benefits are described in Note 1(l). This liability will be paid in future years from future resources from the General Fund.

**(6) Pledged Revenue**

TRPA’s 2007 Series A and Series B Lease Revenue Bonds debt service payments were collateralized by the pledging of rental income. For the current year, debt service payments as a percentage of the pledged gross revenue are indicated in the table below. These percentages also approximate the relationship of debt service to pledged revenue for the remainder of the term of the commitment.

<u>Description of Pledged Revenue</u>	<u>Annual Amount of Pledged Revenue</u>	<u>Annual Debt Service Payments (of all Debt Secured by this Revenue)</u>	<u>Debt Service as a Percentage of Pledged Revenue</u>
Rental Income	\$ 318,600	391,344	123.00%

**(7) Defined Contribution Pension Plan**

Plan Description

TRPA offers regular employees three defined contribution retirement plans. The first is a Social Security Replacement Plan (SSRP). The second is a 401(a) plan with a contribution above the minimum requirements of a Social Security Replacement Plan. The third is a voluntary 457(b) deferred compensation plan. Participation and vesting in all three plans are immediate. Seasonal employees, interns and short-term employees are not eligible.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(7) Defined Contribution Pension Plan (Continued)**

Contributions

TRPA contributes 8% of the employees' pay into the SSRP plan. Employer contributions are in lieu of contributing to Social Security. TRPA contributes 5.54% to the 401(a) plan. Employee contributions to the 457(b) plan are limited by IRS regulations, updated annually. Benefit provisions are established and may be amended by TRPA's Board of Directors. During the fiscal year ended June 30, 2021, TRPA contributed \$424,927 to the SSRP, \$294,121 to the 401(a) plan and employees contributed \$576,674 to the 457(b) plan.

**(8) Risk Management**

TRPA is exposed to various risks of loss related to torts; theft of, damage to, or destruction of assets; errors or omissions; injuries to employees; and natural disasters. TRPA protects itself against such losses with commercial insurance purchased from independent third parties. Loss exposures retained by TRPA are treated as normal expenditures and include any loss contingency not covered by TRPA's purchased insurance policies. Settlements have not exceeded covered amounts in the previous three fiscal years.

**(9) Proposition 1B**

As a part of the State of California's Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, approved by California voters as Proposition 1B (Prop 1B) on November 7, 2006, TRPA was awarded funding from the Public Transportation, Modernization, Improvement and Service Enhancement Account (PTMISEA) and the Transit System Safety, Security and Disaster Response Account (TSSSDRA). Prop 1B activity during the fiscal year ended June 30, 2021 was as follows:

	<u>PTMISEA</u>	<u>TSSSDRA</u>	<u>Total</u>
Unspent Prop 1B funds as of June 30, 2020	\$ 105,567	188	105,755
Prop 1B funds received	-	-	-
Interest earned	370	-	370
Prop 1B expenditures incurred	<u>(74,861)</u>	<u>-</u>	<u>(74,861)</u>
Unspent Prop 1B funds as of June 30, 2021	<u>\$ 31,076</u>	<u>188</u>	<u>31,264</u>

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(10) Contingencies**

Litigation

Various claims and suits have been filed against TRPA in the normal course of business. Although the outcome of these matters is not presently determinable, in the opinion of legal counsel, the resolutions of these matters will not have a material adverse effect on the financial condition of TRPA.

Federal and State Grants

TRPA receives federal and state funds for specific purposes that are subject to audit by the granting agencies. Although the outcome of any such audits cannot be predicted, it is management's opinion that these audits would not have a material effect on TRPA's financial position or changes in financial position.

**(11) Economic Dependency**

During the fiscal year ended June 30, 2021, approximately 75% of TRPA's total revenue was derived from federal, state, and local government agencies.

**(12) Expenditures Exceeding Appropriations**

Expenditures exceeded appropriations in the following funds:

	<u>Expenditures</u>	<u>Appropriations</u>	<u>Excess</u>
General Fund	\$9,287,174	9,123,185	163,989
Environmental Improvement Program Fund	414,610	362,369	52,241
Erosion Control Fund	108,879	102,240	6,639

**(13) Deficit Fund Balances**

TRPA has accumulated a fund deficit in the following individual funds:

Science Advisory Council	\$(7,378)
Charitable Contributions Fund	(4,580)

The Science Advisory Council fund deficit is due to revenues not received within the availability period. The Charitable Contributions fund deficit is due to the fund being used to cover the costs of several small projects like the Tahoe in Depth publication, while TRPA collects contributions to cover the bulk of the cost, any deficit in the fund will be made up by transfers from the general fund.

**TAHOE REGIONAL PLANNING AGENCY**

**Notes to the Basic Financial Statements**

**(Continued)**

**(14) Restatement of Beginning Equity**

Governmental Accounting Standards Board Statement No. 84, *Fiduciary Activities*, changed the accounting and reporting standards of fiduciary activities. Consistent with Statement No. 84, the beginning net position of TRPA’s fiduciary funds has been restated as of July 1, 2020 to summarize Statement No. 84’s effect on fiduciary net position as if Statement No. 84 had been applied retroactively.

	General Fund	CTRPA Tahoe Keys	CTRPA Indirect Source	Excess Coverage Mitigation	Custodial Funds	Science Advisory Council
Fund balance/net position as of June 30, 2020, as previously reported	\$ 4,509,956	-	-	-	-	-
Adjustment for fund balance	<u>114,774</u>	<u>396,640</u>	<u>9,336</u>	<u>5,214,571</u>	<u>7,478,153</u>	<u>(171,175)</u>
Fund balance/net position as of June 30, 2020, as restated	<u>\$ 4,624,730</u>	<u>396,640</u>	<u>9,336</u>	<u>5,214,571</u>	<u>7,478,153</u>	<u>(171,175)</u>

**REQUIRED SUPPLEMENTARY INFORMATION**

**TAHOE REGIONAL PLANNING AGENCY**  
**General Fund**  
**Budgetary Comparison Schedule**  
**Year Ended June 30, 2021**

	Budgeted Amounts		Actual	Variances with Final Budget
	Original	Final		Positive (Negative)
Revenues:				
State government grants and contracts	\$ 6,117,031	6,117,031	6,216,405	99,374
Local government grants and contracts	155,985	155,985	282,289	126,304
Charges for services	2,487,012	2,487,012	3,382,934	895,922
Fines and forfeitures	150,000	150,000	230,000	80,000
Rental income	328,603	328,603	318,600	(10,003)
Investment income	88,764	88,764	(3,183)	(91,947)
Miscellaneous revenues	<u>1,539</u>	<u>1,539</u>	<u>1,001</u>	<u>(538)</u>
 Total revenues	 <u>9,328,934</u>	 <u>9,328,934</u>	 <u>10,428,046</u>	 <u>1,099,112</u>
Expenditures:				
Current:				
General government:				
Administrative services	1,280,095	1,280,095	1,346,396	(66,301)
Support services	1,820,064	1,820,064	1,453,042	367,022
Legal services	393,486	393,486	476,768	(83,282)
Interfund reimbursements	(1,304,045)	(1,304,045)	(439,103)	(864,942)
Environmental planning, implementation, and research and analysis:				
Environmental implementation	545,665	545,665	576,024	(30,359)
Planning services	3,084,268	3,084,268	2,503,342	580,926
Long range and transportation planning	845,335	845,335	755,370	89,965
Research and analysis	1,878,402	1,878,402	2,167,643	(289,241)
Building and rental activities	262,413	262,413	143,890	118,523
Debt service:				
Principal payment	-	-	-	-
Bond issuance costs	-	-	(11,263)	11,263
Interest and fiscal charges	<u>317,502</u>	<u>317,502</u>	<u>315,065</u>	<u>2,437</u>
 Total expenditures	 <u>9,123,185</u>	 <u>9,123,185</u>	 <u>9,287,174</u>	 <u>(163,989)</u>
 Excess (deficiency) of revenues over (under) expenditures	 <u>205,749</u>	 <u>205,749</u>	 <u>1,140,872</u>	 <u>935,123</u>
Other financing sources (uses):				
Transfers out	(108,714)	(108,714)	(135,032)	26,318
Refunding bonds issued	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
 Total other financing sources (uses)	 <u>(108,714)</u>	 <u>(108,714)</u>	 <u>(135,032)</u>	 <u>26,318</u>
 Net change in fund balance	 97,035	 97,035	 1,005,840	 961,441
Fund balance, beginning of year	<u>4,624,730</u>	<u>4,624,730</u>	<u>4,624,730</u>	<u>-</u>
Fund balance, end of year	<u>\$ 4,721,765</u>	<u>4,721,765</u>	<u>5,630,570</u>	<u>961,441</u>

See Note to Required Supplementary Information

**TAHOE REGIONAL PLANNING AGENCY**  
**Transportation Fund**  
**Budgetary Comparison Schedule**  
**Year Ended June 30, 2021**

	Budgeted Amounts		Actual	Variances with Final Budget Positive (Negative)
	Original	Final		
Revenues:				
Federal grants	\$ 1,537,839	1,537,839	1,898,061	360,222
State government grants and contracts	674,040.00	674,040	471,432	(202,608)
Local government grants and contracts	-	-	5,800	5,800
Total revenues	<u>2,211,879</u>	<u>2,211,879</u>	<u>2,375,293</u>	<u>163,414</u>
Expenditures:				
Environmental planning, implementation, and research and analysis:				
Planning services	-	-	-	-
Long range and transportation planning	<u>2,305,474</u>	<u>2,305,474</u>	<u>1,788,658</u>	<u>516,816</u>
Total expenditures	<u>2,305,474</u>	<u>2,305,474</u>	<u>1,788,658</u>	<u>516,816</u>
Excess (deficiency) of revenues over (under) expenditures	(93,595)	(93,595)	586,635	680,230
Other financing sources:				
Transfers in	-	-	<u>15,439</u>	<u>15,439</u>
Net change in fund balance	(93,595)	(93,595)	602,074	695,669
Fund balance (deficit), beginning of year	<u>(110,208)</u>	<u>(110,208)</u>	<u>(110,208)</u>	-
Fund balance, end of year	<u>\$ (203,803)</u>	<u>(203,803)</u>	<u>491,866</u>	<u>695,669</u>

See Note to Required Supplementary Information



**TAHOE REGIONAL PLANNING AGENCY**  
**Aquatic Invasive Species Fund**  
**Budgetary Comparison Schedule**  
**Year Ended June 30, 2021**

	Budgeted Amounts		Actual	Variances with Final Budget Positive (Negative)
	Original	Final		
Revenues:				
Federal grants	\$ 2,219,319	2,219,319	1,532,326	(686,993)
State government grants and contracts	917,186	917,186	936,607	19,421
Local government grants and contracts	40,212	40,212	67,113	26,901
Charges for services	<u>1,029,085</u>	<u>1,029,085</u>	<u>1,072,278</u>	<u>43,193</u>
Total revenues	<u>4,205,802</u>	<u>4,205,802</u>	<u>3,608,324</u>	<u>(597,478)</u>
Expenditures:				
Current:				
Environmental planning, implementation, and research and analysis:				
Environmental implementation	<u>3,381,485</u>	<u>3,381,485</u>	<u>3,290,561</u>	<u>90,924</u>
Total expenditures	<u>3,381,485</u>	<u>3,381,485</u>	<u>3,290,561</u>	<u>90,924</u>
Excess (deficiency) of revenues over (under) expenditures	824,317	824,317	317,763	(506,554)
Other financing sources:				
Transfers in	<u>97,335</u>	<u>97,335</u>	<u>104,183</u>	<u>6,848</u>
Net change in fund balance	921,652	921,652	421,946	(499,706)
Fund balance, beginning of year	<u>972,042</u>	<u>972,042</u>	<u>972,042</u>	<u>-</u>
Fund balance, end of year	<u>\$ 1,893,694</u>	<u>1,893,694</u>	<u>1,393,988</u>	<u>(499,706)</u>

See Note to Required Supplementary Information

**TAHOE REGIONAL PLANNING AGENCY**

**Note to Required Supplementary Information**

**Year Ended June 30, 2021**

**(1) Budgetary Data**

TRPA follows the procedures below when establishing the budgetary data reflected in the financial statements:

1. By September 30 of each calendar year, TRPA management submits a proposed operating and capital improvement budget to the Board of Directors for the fiscal year commencing the following July 1. The budget includes the proposed expenditures and means of financing them. In order to obtain state funding, TRPA must submit budget requests to the State of California annually and the State of Nevada biannually.
2. The budget is legally enacted through adoption of a resolution by the Board of Directors.
3. TRPA's Executive Director is authorized to implement the programs as approved in the adopted budget. Within a specific fund, the Executive Director or his designee may transfer appropriations between categories, departments, projects and programs as needed to implement the adopted budget, whereas the Board of Directors must authorize budget increases and decreases, and transfers between funds. Therefore, the legal level of budgetary control is at the fund level.
4. Budgets are adopted on a basis consistent with generally accepted accounting principles. Budgets were adopted for the General Fund and certain Special Revenue Funds. The budgets for the El Dorado County State Transit Assistance Fund, El Dorado County Local Transportation Fund and Placer County Local Transportation Fund are adopted by the respective County's jurisdictions.

**TAHOE REGIONAL PLANNING AGENCY**  
**General Fund**  
**Combining Balance Sheet**  
**Year Ended June 30, 2021**

	General Fund	128 Market Street Building	Shoreline	Settlements	Charitable Contributions	Mitigation	Total
<u>Assets</u>							
Cash and investments	\$ 9,507,055	2,065,024	452,274	213,421	35,788	1,038,926	13,312,488
Cash and investments with fiscal agent	-	20	-	-	-	-	20
Receivables:							
Accounts	42,822	8,131	-	-	-	-	50,953
Interest	24,185	-	-	-	-	14,432	38,617
Due from other governments	-	-	-	-	5,700	-	5,700
Due from other funds	71,303	-	-	-	-	-	71,303
Prepaid items	194,495	17,982	-	-	-	-	212,477
<b>Total assets</b>	<b>\$ 9,839,860</b>	<b>2,091,157</b>	<b>452,274</b>	<b>213,421</b>	<b>41,488</b>	<b>1,053,358</b>	<b>13,691,558</b>
<u>Liabilities, Deferred Inflows of Resources, and Fund Balances</u>							
Liabilities:							
Accounts payable	\$ 348,217	11,417	56,936	12,000	-	-	428,570
Accrued payroll and benefits	447,603	-	-	-	-	-	447,603
Due to other governments	1,530	-	-	-	-	1,053,358	1,054,888
Unearned revenue	464,616	-	-	-	46,068	-	510,684
Deposits payable	5,565,864	26,906	-	-	-	-	5,592,770
<b>Total liabilities</b>	<b>6,827,830</b>	<b>38,323</b>	<b>56,936</b>	<b>12,000</b>	<b>46,068</b>	<b>1,053,358</b>	<b>8,034,515</b>
Deferred inflows of resources:							
Unavailable revenues	26,473	-	-	-	-	-	26,473
<b>Total deferred inflows of resources</b>	<b>26,473</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>26,473</b>
Fund balances:							
Nonspendable:							
Prepaid items	194,495	17,982	-	-	-	-	212,477
Committed for:							
Code enforcements	-	-	-	-	-	-	-
Restricted for:							
Debt service	-	20	-	-	-	-	20
Building improvements	-	500,000	-	-	-	-	500,000
Unassigned	2,791,062	1,534,832	395,338	201,421	(4,580)	-	4,918,073
<b>Total fund balances</b>	<b>2,985,557</b>	<b>2,052,834</b>	<b>395,338</b>	<b>201,421</b>	<b>(4,580)</b>	<b>-</b>	<b>5,630,570</b>
<b>Total liabilities, deferred inflows of resources, and fund balances</b>	<b>\$ 9,839,860</b>	<b>2,091,157</b>	<b>452,274</b>	<b>213,421</b>	<b>41,488</b>	<b>1,053,358</b>	<b>13,691,558</b>

**TAHOE REGIONAL PLANNING AGENCY**  
**General Fund**  
**Combining Statement of Revenues, Expenditures and Changes in Fund Balances**  
**Year Ended June 30, 2021**

	General Fund	128 Market Street Building	Shoreline	Settlements	Charitable Contributions	Mitigation	Eliminations (1)	Total
<b>Revenues:</b>								
State government grants and contracts	\$ 6,216,405	-	-	-	-	-	-	6,216,405
Local government grants and contracts	163,999	-	-	3,900	114,390	-	-	282,289
Charges for services	2,992,536	8,131	382,267	-	-	-	-	3,382,934
Fines and forfeitures	-	-	-	230,000	-	-	-	230,000
Rental income	-	1,007,580	-	-	-	-	(688,980)	318,600
Investment income	(4,115)	21	911	-	-	-	-	(3,183)
Miscellaneous revenues	1,001	-	-	-	-	-	-	1,001
<b>Total revenues</b>	<b>9,369,826</b>	<b>1,015,732</b>	<b>383,178</b>	<b>233,900</b>	<b>114,390</b>	<b>-</b>	<b>(688,980)</b>	<b>10,428,046</b>
<b>Expenditures:</b>								
<b>Current:</b>								
<b>General Government:</b>								
Administrative services	1,063,247	-	-	159,872	123,277	-	-	1,346,396
Support services	1,453,042	-	-	-	-	-	-	1,453,042
Legal services	476,768	-	-	-	-	-	-	476,768
Interfund reimbursements	(1,705,814)	-	-	-	-	-	1,266,711	(439,103)
<b>Environmental planning, implementation, and research and analysis:</b>								
Environmental implementation	576,024	-	-	-	-	-	-	576,024
Planning services	3,382,018	-	388,035	-	-	-	(1,266,711)	2,503,342
Long range and transportation planning	754,976	-	-	-	394	-	-	755,370
Research and analysis	2,117,695	-	49,948	-	-	-	-	2,167,643
Building and rental activities	688,980	143,890	-	-	-	-	(688,980)	143,890
<b>Debt service:</b>								
Bond issuance costs	-	(11,263)	-	-	-	-	-	(11,263)
Interest and fiscal charges	-	315,065	-	-	-	-	-	315,065
<b>Total expenditures</b>	<b>8,806,936</b>	<b>447,692</b>	<b>437,983</b>	<b>159,872</b>	<b>123,671</b>	<b>-</b>	<b>(688,980)</b>	<b>9,287,174</b>
Excess (deficiency) of revenues over (under) expenditures	562,890	568,040	(54,805)	74,028	(9,281)	-	-	1,140,872
<b>Other financing sources (uses):</b>								
Transfers in	-	-	-	-	5,000	-	(5,000)	-
Transfers out	(140,032)	-	-	-	-	-	5,000	(135,032)
<b>Total other financing sources (uses)</b>	<b>(140,032)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,000</b>	<b>-</b>	<b>-</b>	<b>(135,032)</b>
<b>Net change in fund balances</b>	<b>422,858</b>	<b>568,040</b>	<b>(54,805)</b>	<b>74,028</b>	<b>(4,281)</b>	<b>-</b>	<b>-</b>	<b>1,005,840</b>
Fund balances (deficit), beginning of year, as restated	2,562,699	1,484,794	450,143	127,393	(299)	-	-	4,624,730
Fund balances (deficit), end of year	\$ 2,985,557	2,052,834	395,338	201,421	(4,580)	-	-	5,630,570

(1) Transfers, rental income and other interfund charges within the group of funds that are consolidated to form the General Fund for purposes of the combined financial statements have been eliminated on this schedule.

**TAHOE REGIONAL PLANNING AGENCY**  
**Non-Major Governmental Funds**  
**Combining Balance Sheet**  
**June 30, 2021**  
**(with comparative prior year information)**

	SPECIAL REVENUE FUNDS		
	Environmental Improvement Program	Erosion Control Fund	El Dorado County Local Transportation Fund
<u>Assets</u>			
Cash and investments	\$ 140,303	156,039	310,857
Due from other governments	190,738	31,210	-
Total assets	\$ 331,041	187,249	310,857
<u>Liabilities, Deferred Inflows of Resources, and Fund Balances</u>			
Liabilities:			
Accounts payable	\$ 127,316	-	-
Due to other funds	-	-	-
Due to claimants	-	7,190	-
Total liabilities	127,316	7,190	-
Fund balances (deficit):			
Restricted for:			
Environmental implementation	203,725	180,059	-
Long range and transportation planning	-	-	310,857
Unassigned	-	-	-
Total fund balances	203,725	180,059	310,857
Total liabilities, deferred inflows of resources, and fund balance	\$ 331,041	\$ 187,249	\$ 310,857

<u>SPECIAL REVENUE FUNDS</u>			
Placer County Local Transportation Fund	El Dorado County State Transit Assistance Fund	Totals	
		2021	2020
86,841	11	694,051	208,991
-	-	221,948	213,098
<u>86,841</u>	<u>11</u>	<u>915,999</u>	<u>422,089</u>
-	-	127,316	56,904
-	-	-	24,034
-	-	7,190	10,190
<u>-</u>	<u>-</u>	<u>134,506</u>	<u>91,128</u>
-	-	383,784	354,923
86,841	11	397,709	72
-	-	-	(24,034)
<u>86,841</u>	<u>11</u>	<u>781,493</u>	<u>330,961</u>
<u>\$ 86,841</u>	<u>\$ 11</u>	<u>\$ 915,999</u>	<u>\$ 422,089</u>

**TAHOE REGIONAL PLANNING AGENCY**  
**Non-Major Governmental Funds**  
**Combining Statement of Revenues, Expenditures and Changes in Fund Balances**  
**Year Ended June 30, 2021**  
**(with comparative prior year information)**

	SPECIAL REVENUE FUNDS		
	Environmental Improvement Program	Erosion Control Fund	El Dorado County Local Transportation Fund
Revenues:			
Federal grants	\$ 210,787	84,737	-
State government grants and contracts	230,916	10,500	1,275,657
Local government grants and contracts	-	-	-
Investment income	-	-	1,141
Total revenues	<u>441,703</u>	<u>95,237</u>	<u>1,276,798</u>
Expenditures:			
Environmental planning, implementation, and research and analysis:			
Environmental implementation	62,650	108,879	-
Long range and transportation planning	-	-	965,965
Research and analysis	<u>351,960</u>	<u>-</u>	<u>-</u>
Total expenditures	<u>414,610</u>	<u>108,879</u>	<u>965,965</u>
Excess (deficiency) of revenues over (under) expenditures	<u>27,093</u>	<u>(13,642)</u>	<u>310,833</u>
Other financing sources:			
Transfers in	<u>1,694</u>	<u>13,716</u>	<u>-</u>
Total other financing sources	<u>1,694</u>	<u>13,716</u>	<u>-</u>
Net change in fund balances	28,787	74	310,833
Fund balances (deficit), beginning of year	<u>174,938</u>	<u>179,985</u>	<u>24</u>
Fund balances, end of year	<u>\$ 203,725</u>	<u>180,059</u>	<u>310,857</u>

<u>SPECIAL REVENUE FUNDS</u>			
<u>Placer County Local Transportation Fund</u>	<u>El Dorado County State Transit Assistance Fund</u>	<u>Totals</u>	
		<u>2021</u>	<u>2020</u>
-	-	295,524	260,625
672,442	811,700	3,001,215	3,263,936
-	-	-	15,000
<u>460</u>	<u>404</u>	<u>2,005</u>	<u>7,040</u>
<u>672,902</u>	<u>812,104</u>	<u>3,298,744</u>	<u>3,546,601</u>
-	-	171,529	271,946
562,027	812,141	2,340,133	2,958,959
<u>-</u>	<u>-</u>	<u>351,960</u>	<u>208,198</u>
<u>562,027</u>	<u>812,141</u>	<u>2,863,622</u>	<u>3,439,103</u>
<u>110,875</u>	<u>(37)</u>	<u>435,122</u>	<u>107,498</u>
<u>-</u>	<u>-</u>	<u>15,410</u>	<u>21,409</u>
<u>-</u>	<u>-</u>	<u>15,410</u>	<u>21,409</u>
110,875	(37)	450,532	128,907
<u>(24,034)</u>	<u>48</u>	<u>330,961</u>	<u>202,054</u>
<u>86,841</u>	<u>11</u>	<u>781,493</u>	<u>330,961</u>



**TAHOE REGIONAL PLANNING AGENCY**  
**Environmental Improvement Program**  
**Budgetary Comparison Schedule**  
**Year Ended June 30, 2021**

	Final Budget	Actual	Variances with Final Budget Positive (Negative)
Revenues:			
Federal grants	\$ 248,556	210,787	(37,769)
State government grants and contracts	<u>108,812</u>	<u>230,916</u>	<u>122,104</u>
Total revenues	<u>357,368</u>	<u>441,703</u>	<u>84,335</u>
Expenditures:			
Current:			
Environmental planning, implementation, and research and analysis:			
Environmental implementation	72,917	62,650	10,267
Research and analysis	<u>289,452</u>	<u>351,960</u>	<u>(62,508)</u>
Total expenditures	<u>362,369</u>	<u>414,610</u>	<u>(52,241)</u>
Excess of revenues over expenditures	(5,001)	27,093	32,094
Other financing sources (uses):			
Transfers in	<u>5,000</u>	<u>1,694</u>	<u>(3,306)</u>
Net change in fund balance	(1)	28,787	28,788
Fund balance, beginning of year	<u>174,938</u>	<u>174,938</u>	<u>-</u>
Fund balance, end of year	<u>\$ 174,937</u>	<u>203,725</u>	<u>28,788</u>

**TAHOE REGIONAL PLANNING AGENCY**  
**Erosion Control Fund**  
**Budgetary Comparison Schedule**  
**Year Ended June 30, 2021**

	<u>Final Budget</u>	<u>Actual</u>	Variances with Final Budget Positive (Negative)
Revenues:			
Federal grants	\$ 95,846	84,737	(11,109)
State government grants and contracts	<u>20,500</u>	<u>10,500</u>	<u>(10,000)</u>
Total revenues	<u>116,346</u>	<u>95,237</u>	<u>(21,109)</u>
Expenditures:			
Current:			
Environmental planning, implementation, and research and analysis:			
Environmental implementation	<u>102,240</u>	<u>108,879</u>	<u>(6,639)</u>
Total expenditures	<u>102,240</u>	<u>108,879</u>	<u>(6,639)</u>
Excess (deficiency) of revenues over (under) expenditures	14,106	(13,642)	(27,748)
Other financing sources:			
Transfers in	<u>6,379</u>	<u>13,716</u>	<u>7,337</u>
Net change in fund balance	20,485	74	(20,411)
Fund balance, beginning of year	<u>179,985</u>	<u>179,985</u>	<u>-</u>
Fund balance, end of year	<u>\$ 200,470</u>	<u>180,059</u>	<u>(20,411)</u>

**TAHOE REGIONAL PLANNING AGENCY  
Fiduciary Funds**

**Combining Statement of Fiduciary Funds Net Position**

**June 30, 2021  
(with comparative prior year information)**

	Custodial Funds					Totals	
	CTRPA Tahoe Keys	CTRPA Indirect Source	Excess Coverage Mitigation	Custodial Funds	Science Advisory Council	2021	2020
	<u>Assets</u>						
Cash and investments	\$ 428,602	9,322	5,672,945	7,500,705	-	13,611,574	13,876,303
Receivables:							
Interest	733	16	9,641	-	-	10,390	50,601
Due from other governments	-	-	-	-	145,877	145,877	177,740
<b>Total assets</b>	<b>\$ 429,335</b>	<b>9,338</b>	<b>5,682,586</b>	<b>7,500,705</b>	<b>145,877</b>	<b>13,767,841</b>	<b>14,104,644</b>
<u>Liabilities, Deferred Inflows of Resources, and Net Position</u>							
Accounts payable	\$ -	-	-	-	74,574	74,574	50,000
Due to other funds	-	-	-	-	71,303	71,303	-
Due to other governments	-	-	-	-	-	-	13,811,292
Deposits payable	-	-	-	-	-	-	243,352
<b>Total liabilities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>145,877</b>	<b>145,877</b>	<b>14,104,644</b>
Deferred inflows of resources:							
Unavailable revenue	-	-	-	-	7,377	7,377	-
<b>Total deferred inflows of resources</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7,377</b>	<b>7,377</b>	<b>-</b>
Net position:							
Restricted for:							
Water Quality	-	-	-	3,100,888	-	3,100,888	-
Stream Environment Zone	-	-	-	1,142,977	-	1,142,977	-
Air Quality	-	-	-	1,621,787	-	1,621,787	-
Operations and Maintenance	-	-	-	1,635,053	-	1,635,053	-
Unrestricted	429,335	9,338	5,682,586	-	(7,377)	6,113,882	-
<b>Total net position</b>	<b>429,335</b>	<b>9,338</b>	<b>5,682,586</b>	<b>7,500,705</b>	<b>(7,377)</b>	<b>13,614,587</b>	<b>-</b>
<b>Total liabilities, deferred inflows of resources, and net position</b>	<b>\$ 429,335</b>	<b>\$ 9,338</b>	<b>\$ 5,682,586</b>	<b>\$ 7,500,705</b>	<b>\$ 145,877</b>	<b>\$ 13,767,841</b>	<b>\$ 14,104,644</b>

**TAHOE REGIONAL PLANNING AGENCY  
Fiduciary Funds**

**Combining Statement of Changes in Fiduciary net Position**

**June 30, 2021  
(with comparative prior year information)**

	Custodial Funds					Totals	
	CTRPA Tahoe Keys	CTRPA Indirect Source	Excess Coverage Mitigation	Custodial Funds	Science Advisory Council	2021	2020
	<b>Additions:</b> Federal grants State government grants and contracts Charges for service Investment income  Total additions	\$ - - 32,500 195  32,695	- - - 2  2	- - 1,875,471 899  1,876,370	- - 1,564,636 1,891  1,566,527	143,416 322,228 - -  465,644	143,416 322,228 3,472,607 2,987  3,941,238
<b>Deductions:</b> Environmental implementation  Total deductions  Net changes in fiduciary net position  Net position, beginning of year, as restated  Net position, end of year	-  -  32,695  396,640  \$ 429,335	-  -  2  9,336  9,338	1,408,355  1,408,355  468,015  5,214,571  5,682,586	1,543,975  1,543,975  22,552  7,478,153  7,500,705	301,846  301,846  163,798  (171,175)  (7,377)	3,254,176  1,845,821  687,062  12,927,525  13,614,587	-  -  -  -  -

Attachment C

TRPA Single Audit

**TAHOE REGIONAL PLANNING AGENCY**  
**Single Audit Report on Federal Awards**  
**Year Ended June 30, 2021**

**TAHOE REGIONAL PLANNING AGENCY**

**Single Audit Report on Federal Awards**

**Year Ended June 30, 2021**

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**REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING  
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN  
AUDIT OF FINANCIAL STATEMENTS PERFORMED IN  
ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

**INDEPENDENT AUDITOR'S REPORT**

Board of Directors  
Tahoe Regional Planning Agency  
Stateline, Nevada

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, each major fund, and the aggregate remaining fund information of the Tahoe Regional Planning Agency (TRPA), as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise TRPA's basic financial statements, and have issued our report thereon dated February 14, 2022.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered TRPA's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing an opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of TRPA's internal control. Accordingly, we do not express an opinion on the effectiveness of TRPA's internal control.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of TRPA's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.



### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether TRPA's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of TRPA's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering TRPA's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*Darin Funnell*

Irvine, California  
February 14, 2022

**REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM;  
REPORT ON INTERNAL CONTROL OVER COMPLIANCE;  
AND REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
REQUIRED BY THE UNIFORM GUIDANCE**

**INDEPENDENT AUDITOR'S REPORT**

Board of Directors  
Tahoe Regional Planning Agency  
Stateline, Nevada

**Report on Compliance for Each Major Federal Program**

We have audited the Tahoe Regional Planning Agency's (TRPA's) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on TRPA's major federal program for the year ended June 30, 2021. TRPA's major federal programs are identified in the Summary of Auditor's Results Section of the accompanying Schedule of Findings and Questioned Costs.

***Management's Responsibility***

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

***Auditor's Responsibility***

Our responsibility is to express an opinion on compliance for each of TRPA's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about TRPA's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major federal program. However, our audit does not provide a legal determination of TRPA's compliance.

### ***Opinion on Each Major Federal Program***

In our opinion, TRPA complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2021.

### **Report on Internal Control Over Compliance**

Management of TRPA is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered TRPA's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of TRPA's internal control over compliance.

*A deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

### **Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance**

We have audited the financial statements of the governmental activities, each major fund, and the aggregate remaining fund information of TRPA as of and for the year ended June 30, 2021, and have issued our report thereon dated February 14, 2022, which contained an unmodified opinion on those financial statements. Our audit was conducted for the purpose

of forming an opinion on the financial statements as a whole. The accompanying Schedule of Expenditures of Federal Awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Expenditures of Federal Awards is fairly stated in material respects in relation to the financial statements as a whole.

*Davis Fenn LLP*

Irvine, California  
February 14, 2022

**TAHOE REGIONAL PLANNING AGENCY**  
**Schedule of Expenditures of Federal Awards**  
**Year Ended June 30, 2021**

Federal Grantor/Pass-Through Grantor/Program Title	Catalog of Federal Domestic Assistance Number	Program Identification Number	Federal Expenditures	Amount Provided to Subrecipients
<b><u>U.S. Department of Interior</u></b>				
Passed through United States Fish and Wildlife Service:				
Fish and Wildlife Management Assistance:				
Southern Nevada Public Lands Management Act - Round 12 Final	15.608	F18AP00268	\$ 5,671	-
Invasive Species:				
Lake Tahoe Restoration Act	15.652	F18CC000767	<u>1,296,070</u>	-
Total U.S. Department of Interior			<u>1,301,741</u>	-
<b><u>U.S. Department of Agriculture</u></b>				
U.S. Forest Service:				
Watershed Restoration and Enhancement (Wyden Amendment):				
Meeks Bay Restoration Plan	10.693	19-PA-11051900-019	397,300	-
Upper Bijou Park Creek Restoration Project	10.693	20-PA-11051900-012	12,134	-
Highway 89 Corridor Plan	10.693	19-PA-11051900-017	50,881	-
Lake Tahoe West Restoration Project	10.693	20-PA-11052900-010	<u>42,331</u>	-
Total U.S. Department of Agriculture			<u>502,646</u>	-
<b><u>U.S. Department of Transportation</u></b>				
Passed through California Department of Transportation:				
Metropolitan Transportation Planning and State and Non-				
Metropolitan Planning and Research:				
Highway Planning and Research	20.505	19OWPTMPO 74A0824	678,211	-
FTA-5303	20.505	19OWPTMPO 74A0824	<u>94,216</u>	-
Subtotal CFDA No. 20.505			<u>772,427</u>	-
Passed through Nevada Department of Transportation:				
Highway and Planning Construction Cluster:				
Highway Planning and Research	20.205	PR127-18-804	195,105	-
FTA-5303	20.205	PR127-18-804	<u>31,730</u>	-
Subtotal CFDA No. 20.205			<u>226,835</u>	-
Total U.S. Department of Transportation			<u>999,262</u>	-
<b><u>U.S. Environmental Protection Agency</u></b>				
Passed through State of Nevada:				
State of Nevada: Non-Point Source Implementation Grants	66.460	DEP 19-037	<u>72,552</u>	-
Passed through Nevada Division of Environmental Protection:				
US EPA Regional Wetlands Program Development Grants	66.461	99T64901	66,451	-
US EPA Regional Wetlands Program Development Grants	66.436	98T05101	<u>102,013</u>	-
Total U.S. Environmental Protection Agency			<u>241,016</u>	-
<b><u>U.S. Army Corps of Engineers</u></b>				
Lake Tahoe Aquatic Invasive Species Program Phase II	*	PPA 29	<u>158,137</u>	-
Total U.S. Army Corps of Engineers			<u>158,137</u>	-
Total expenditures of federal awards			<u>\$ 3,202,802</u>	-

\* No CFDA number because this Federal Award is an agreement, not a grant.

See Note to Schedule of Expenditures of Federal Awards.

**TAHOE REGIONAL PLANNING AGENCY**

**Note to the Schedule of Expenditures of Federal Awards**

**Year Ended June 30, 2021**

**(1) Summary of Significant Accounting Policies Applicable to the Schedule of Expenditures of Federal Awards**

Scope of Presentation

The accompanying schedule presents only the expenditures incurred by the Tahoe Regional Planning Agency (TRPA) that are reimbursable under programs of federal agencies providing financial awards. For the purposes of this schedule, financial awards include federal awards received directly from a federal agency, as well as federal funds received indirectly by TRPA from a non-federal agency or other organization. Only the portions of program expenditures reimbursable with such federal funds are reported in the accompanying schedule. Program expenditures in excess of the maximum reimbursement authorized or the portion of the program expenditures that were funded with other state, local or other non-federal funds are excluded from the accompanying schedule.

Basis of Accounting

The expenditures included in the accompanying schedule were reported on the accrual basis of accounting. Under the accrual basis of accounting, expenditures are recognized when incurred. Expenditures reported include any property or equipment acquisitions incurred under the federal program. TRPA elected to not use the 10% de minimis cost rate and obtained a negotiated indirect cost rate of 62.46% from its cognizant agency.

**TAHOE REGIONAL PLANNING AGENCY**

**Schedule of Findings and Questioned Costs**

**Year Ended June 30, 2021**

**Section I - Summary of Auditor's Results**

**Financial Statements**

- |   |            |
|---|------------|
| 1. Type of auditor's report issued on whether the financial statements audited were prepared in accordance with GAAP: | Unmodified |
| 2. Internal control over financial reporting:   |            |
| a. Material weakness(es) identified?  | No         |
| b. Significant deficiency(ies) identified?  | No         |
| 3. Noncompliance material to the financial statements noted?  | No         |

**Federal Awards**

- |  |               |
|--|---------------|
| 1. Internal control over major programs:   |               |
| a. Material weakness(es) identified?   | No            |
| b. Significant deficiency(ies) identified?   | None Reported |
| 2. Type of auditor's report issued on compliance for major programs:                                   | Unmodified    |
| 3. Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516 (a)? | No            |
| 4. Identification of major programs:   |               |
| <u>CFDA Number</u> <u>Name of Federal Program or Cluster</u>   |               |
| 15.652                            Invasive Species   |               |
| 5. Dollar threshold used to distinguish between Type A and Type B programs:                            | \$750,000     |
| 6. Auditee qualified as a low-risk auditee?  | Yes           |

**TAHOE REGIONAL PLANNING AGENCY**  
**Schedule of Findings and Questioned Costs**  
**(Continued)**

**Section II - Financial Statement Findings**

There are no audit findings identified in the current year ended June 30, 2021.

**Section III - Federal Award Findings and Questioned Costs**

There were no federal award findings or questioned costs for the year ended June 30, 2021.



**TAHOE REGIONAL PLANNING AGENCY**

**Summary Schedule of Prior Audit Findings**

**Year Ended June 30, 2021**

**2020-001: Auditor Detected Audit Adjustment**

We recommended TRPA establish procedures to, whenever possible, identify adjustments in the reporting period in which the related transactions occurred. We also recommended that TRPA recognize as revenue deposits payable amounts when they are determined to be abandoned

**Management Response**

There were no material auditor-identified adjustments noted during the audit for the year ended June 30, 2021. As such, this finding is considered resolved.

Attachment D

TSAC Audited Financial Statements

**TAHOE SCIENCE ADVISORY COUNCIL**

**Financial Statements**

**Year Ended June 30, 2020**

**TAHOE SCIENCE ADVISORY COUNCIL**

**Financial Statements**

**Year Ended June 30, 2020**

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## **INDEPENDENT AUDITOR'S REPORT**

Board of Directors  
Tahoe Science Advisory Council  
Stateline, Nevada

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the governmental activities and major fund of the Tahoe Science Advisory Council (TSAC) as of and for the year ended June 30, 2020, and the related notes to the financial statements, as listed in the Table of Contents.

### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditor's Responsibility***

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and major fund of the TSAC as of June 30, 2020, and the respective change in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matter***

As described further in note 3 to the financial statements, the financial statements for the year ended June 30, 2020 reflect a prior period adjustment related to the reporting of due from other governments. Our opinion is not modified with respect to this matter.

As discussed in Note 1, the financial statements present only the TSAC, an agency fund of Tahoe Regional Planning Agency (TRPA), and do not purport to, and do not, present fairly the financial position of TRPA, as of June 30, 2020, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

### ***Report on Summarized Comparative Information***

We have previously audited the financial statements of TSAC for the year ended June 30, 2019 and we expressed an unmodified audit opinion on those financial statements in our report dated December 10, 2019. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2019, is consistent, in all material respects, with the audited financial statements from which it has been derived.

### ***Other Matters***

#### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the Required Supplementary Information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated February 16, 2021 on our consideration of TSAC's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering TSAC's internal control over financial reporting and compliance.

*Dawn Furr LLP*

Irvine, California  
February 16, 2021

**THE TAHOE SCIENCE ADVISORY COUNCIL  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2020**

The Lake Tahoe region covers over 500 square miles. Approximately 90% of the land area is held by the US Forest Service and various other state and local entities. Over 50,000 people live in the Region, and the most recent estimates of visitation top 10 million annually. The lake has been designated an Outstanding National Resource Water under the Federal Clean Water Act.

The Lake Tahoe Region is governed by a complex assortment of federal, regional, state, and local government agencies. For nearly four decades, resource management agencies at all levels have been informed by targeted research and monitoring. Partnerships between agency and academic partners have been critical to addressing environmental impacts from previous development and for guiding new programs and policies in response to new challenges.

The Tahoe Science Advisory Council (Council) was established in December 2015 by a memorandum of understanding (MOU) between the Secretary of the California Natural Resources Agency and the Director of the Nevada Department of Conservation and Natural Resources. The Council is an independent group of scientists who work closely with local resource management agencies in an advisory capacity to promote and enhance the use of the best available scientific information on matters of interest to both the states of California and Nevada as it relates to Lake Tahoe resource management.

The Council's primary goal is to engage in scientific analysis and scientific review that can inform decision-making and land use policies in the Tahoe Basin in a cohesive, objective, and non-partisan manner. To this end, the Council is advisory, non-regulatory, and shall not duplicate any scientific effort already being undertaken by public entities in the Tahoe Basin without the express authorization of the Bi-State Executive Committee.

This discussion and analysis of the Council's financial performance provides review of the organization's overall financial activities for the fiscal year ended June 30, 2020.

**Council Leadership**

The formal Council leadership body is a Bi-State Executive Committee that consists of the Secretary of the California Natural Resources Agency, the Director of the Nevada Department of Conservation and Natural Resources, the Executive Director of the Tahoe Regional Planning Agency along with executive representatives from higher education institutions in California and Nevada. The United States Geological Survey and the United States Forest Service are also represented on the Bi-State Executive Committee. The group meets annually to review Council accomplishments, consider future work, and provide direction.

Resource management agency coordination is provided by a Regional Management Team consisting of Bi-State Executive Committee and Council representatives. The Council has a self-selected, rotating chair (or co-chairs) to coordinate Council activities, lead regular meetings, engage with local resource management agencies, and participate in the Regional Management Team. Council chairs shall serve two-year terms that can be renewed.

The Council also has a Program Officer that is responsible for overseeing the administration of state funds invested in the Council, and for guiding the translation of science into action and policy. In partnership with the Regional Management Team, the Program Officer coordinates Council work plans, manages program contracts, and liaises between academic and agency partners.



**THE TAHOE SCIENCE ADVISORY COUNCIL  
MANAGEMENT’S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2020**

**Council Funding**

The State of California has provided operational support since the Council’s inception. In accordance with Senate Bill 630 (Pavely, 2013) submerged-lands lease fees on the California side of the Lake Tahoe Basin are deposited in the Lake Tahoe Science and Improvement Account. The legislation identifies the Council as one of three allowable uses for Account monies, and California distributes funding through the California Natural Resources Agency (CNRA). The CNRA has contracted with TRPA as the Council’s fiscal agent. The current agreement (OCA17031) provides \$453,000 over three years (FY19, 20, and 21).

The agreement directly funds Council member institutions and provides resources for financial and administrative support.

In FY20, the State of Nevada provided Council funding through two project grants. The Nevada Division of Environmental Protection awarded \$150,000 for an assessment of seasonal clarity trends at Lake Tahoe, and the Nevada Division of State Lakes awarded a \$73,710 Lake Tahoe License Plate Program grant to analyze transportation drivers in the Tahoe Region. Both grant projects were initiated in FY20 and extend to FY21.

**Council Work**

Lake Clarity

Lake Tahoe is known for its cobalt blue color and uncommonly clear water. The clarity of Lake Tahoe is measured using a Secchi disk – the Secchi depth is the depth at which a 10-inch white disk remains visible when lowered into the water. For several years, the Council has focused on reviewing the causes of Lake Tahoe’s clarity decline, guided by a detailed science plan for re-evaluating clarity drivers and trends.

In FY 2020, the Council initiated priority project work identified in its 2019 report *“Science to Action Planning, Project Briefing and Science Vision for Lake Tahoe.”* Decades of clarity monitoring have established annual and seasonal clarity trends. In recent years, winter clarity decline has plateaued while summer clarity losses continue. With funding support from the State of Nevada, the Council conducted a thorough assessment of available data to explore the divergence in clarity trends. The findings highlight the complexity of Lake Tahoe’s clarity condition and indicate climate change continue to influence water quality measurements.

Future policy changes hinge on a contemporary understanding of Lake Tahoe’s water quality, and on an assessment of potential management actions. The Council’s recent findings will guide the review of basin-wide management initiatives, including the Tahoe Regional Planning Agency’s Environmental Improvement Program and the bi-state Lake Tahoe Total Maximum Daily Load program (developed to restore lost clarity), and will inform future Council program priorities.

Upland Ecosystem Management

Effective watershed conservation and restoration depends on a robust scientific foundation. Improving resilience of the Lake Tahoe Basin's upland ecosystems to climate change and disturbance (e.g. wildfire, introduction of species) is a broadly shared objective among resource management agencies. Decades of work in the Tahoe Basin suggest that improving management of upland ecosystems requires a holistic, coordinated framework that evaluates progress toward expected outcomes with monitoring, identifies undesirable conditions to inform resource decision making, and engages stakeholders and the public.

**THE TAHOE SCIENCE ADVISORY COUNCIL  
MANAGEMENT’S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2020**

Building on the Science to Action plan developed for Lake Tahoe’s clarity, the Council drafted a document to define both near-and long-term research priorities that will promote watershed resilience and enhance the sustainability of environmental quality, ecosystem services, and societal benefits.

The final document, entitled *Upland Ecosystem Science to Action Plan: Integrated Research to Inform Greater Resilience in the Lake Tahoe Basin Uplands*, broadly (1) identifies important climate change impacts on upland ecosystems; (2) outlines the critical need for research and management partnerships; (3) describes the state of the science and critical research needs; and (4) provides a solid foundation for guiding upland ecosystem management in the Lake Tahoe basin.

Threshold Update

The Tahoe Regional Planning Agency (TRPA) is required to establish environmental carrying capacities (threshold standards) that set environmental standards for the Lake Tahoe basin. These threshold standards establish goals for restoration and environmental condition in nine categories: air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic resources, noise, and recreation. The thresholds contain a mix of numerical, management, and policy statements that reflect the degree of quantification used in describing the standard.

Most of TRPA’s threshold standards are more than thirty years old. One of the Council’s primary functions is to assist in reviewing and, where appropriate, updating these standards. Previous Council work guided a comprehensive Threshold system structure update. In FY20, the Council applied the new structure to water quality threshold standards. The resulting analysis will provide TRPA the opportunity to greatly simplify water quality standards while still maintaining the same level of environmental protection. The Council has also initiated work to support updating the Vehicle Miles Traveled threshold standard and is planning a project supporting sustainable recreation threshold development.

**Table 1** shows the changes in fund balance for fiscal years 2019 and 2020.

**Table 1 - Revenue, Expenditures, and Change in Fund Balance  
Year Ended June 30, 2020**

	2020	2019	Change	%
<b>Revenues</b>				
<b>Program Revenues</b>				
State government grants and contracts	\$ 79,103	129,532	(50,429)	
<b>Total Revenues</b>	<u>79,103</u>	<u>129,532</u>	<u>(50,429)</u>	-39%
<b>Expenditures:</b>				
<b>Environmental implementation</b>				
Salaries and benefits	4,576	3,058	1,518	50%
Overhead	902	-	902	100%
Contract services	<u>209,654</u>	<u>127,294</u>	<u>82,360</u>	65%
<b>Total Expenses</b>	<u>215,132</u>	<u>130,352</u>	<u>84,780</u>	65%
<b>Net change in fund balance</b>	(136,029)	(820)	(135,209)	16484%
Fund balance (deficit) at beginning of year	<u>(35,146)</u>	<u>(34,326)</u>	<u>(820)</u>	
Fund balance (deficit) at end of year	<u>\$ (171,175)</u>	<u>(35,146)</u>	<u>(136,029)</u>	

**THE TAHOE SCIENCE ADVISORY COUNCIL  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2020**

**Council Revenue**

The Council's project work was conducted by member institutions and funded through standing contracts with TRPA. Fiscal year 2020 revenue decreased by 39%, but this figure does not include Unavailable Revenue in the amount of \$171,175 that was for expenses accrued in FY20 but will be recovered in FY21 due to the timing of grant billings. Unavailable revenue represents revenue not collected within 120 days of the fiscal year end.

Revenue for fiscal year 2020 totaled \$79,103. Expenses in the amount of \$171,175 were accrued to fiscal year 2020 but received after the final request for reimbursement was submitted. The revenue related to these expenses will be recovered in fiscal year 2021.

**Council Expenditures**

Salaries and benefits expenses have remained steady between the two years and represents the cost of direct administrative support. Overhead costs were not allocated to the Council in either fiscal year. All direct programmatic expenses have been classified as contract services for fiscal year 2020. Substantive projects and technical assistance costs total \$209,654 in fiscal year 2020.

Total expenses increased 65% in fiscal year 2020. With the new funding agreement in place at the beginning of the fiscal year, management representatives spent time focusing on strategies and priorities for the new funding period to determine the best use of funds. The Council Program Officer was able to ramp up work orders with each of the institutions resulting in increases in expenditures for the program.

The Council's substantive project work (as described above) was conducted by member institutions and funded through standing contracts with TRPA. Invoices for project work for the fiscal year ending June 30, 2020 totaled \$209,654. Administrative costs, including Council support, totaled \$4,576.

**TAHOE SCIENCE ADVISORY COUNCIL  
Table 2 - Balance Sheet  
June 30, 2020**

	2020	2019	Change	%
<b><u>Assets</u></b>				
Due from other governments	\$ 177,740	86,642	91,098	105%
<b>Total Assets</b>	<b>177,740</b>	<b>86,642</b>	<b>91,098</b>	<b>105%</b>
<b><u>Liabilities</u></b>				
Accounts payable	128,578	77,454	51,124	66%
Due to other governments	49,162	44,334	4,828	11%
<b>Total Liabilities</b>	<b>177,740</b>	<b>121,788</b>	<b>55,952</b>	<b>46%</b>
Deferred inflows of resources:				
Unavailable revenue	171,175	-	171,175	100%
<b>Total deferred inflows of resources:</b>	<b>171,175</b>	<b>-</b>	<b>171,175</b>	<b>100%</b>
<b><u>Fund Balance</u></b>				
Unassigned	(171,175)	(35,146)	(136,029)	
<b>Total liabilities, deferred inflows and fund balance</b>	<b>\$ 177,740</b>	<b>86,642</b>	<b>91,098</b>	

**THE TAHOE SCIENCE ADVISORY COUNCIL  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2020**

**Council Fund Balance**

The fund balance deficit of \$171,175 represents invoices for work done in fiscal year 2020 that were received after the final request for reimbursement was submitted. This amount will be recovered in fiscal year 2021.

**Council Balance Sheet**

Assets increased in fiscal year 2020 by \$91,098 due to an increase in accounts receivables balances outstanding at the fiscal year end. Outstanding accounts receivable not collected within 120 days of the fiscal year end leave a balance of \$171,175 in unavailable revenue. Accounts payable increased by \$51,124 in fiscal year 2020, remaining fairly steady between the fiscal years.

**TAHOE SCIENCE ADVISORY COUNCIL**

**Statement of Net Position**

**June 30, 2020**

**(with comparative prior year information)**

	<u>Governmental Activities</u>	
	<u>2020</u>	<u>2019</u>
Assets:		
Due from other governments	<u>\$ 177,740</u>	<u>86,642</u>
Total Assets	<u>177,740</u>	<u>86,642</u>
Liabilities:		
Accounts payable	128,578	77,454
Due to other governments	<u>49,162</u>	<u>44,334</u>
Total Liabilities	<u>177,740</u>	<u>121,788</u>
Net Position:		
Unrestricted	<u>-</u>	<u>(35,146)</u>
Total Net Position	<u>\$ -</u>	<u>(35,146)</u>

**TAHOE SCIENCE ADVISORY COUNCIL**

**Statement of Activities**

**Year Ended June 30, 2020  
(with comparative prior year information)**

Functions/Programs	Expenses	Program Revenues			Net (Expenses) Revenues and Changes in Net Position Governmental Activities	
		Charges for Services	Operating Grants and Contributions	Capital Grants and Contributions	2020	2019
Governmental Activities:						
Environmental implementation	\$ 215,132	-	215,132	-	-	(35,146)
Total governmental activities	<u>\$ 215,132</u>	<u>-</u>	<u>215,132</u>	<u>-</u>	-	<u>(35,146)</u>
		General revenues			-	-
		Total general revenues			-	-
		Changes in net position			-	(35,146)
		Net Position at Beginning of of Year, as Restated (Note 3)			-	-
		Net Position at End of Year			<u>\$ -</u>	<u>(35,146)</u>

**TAHOE SCIENCE ADVISORY COUNCIL**

**Balance Sheet**

**June 30, 2020**

**(with comparative prior year information)**

	<u>2020</u>	<u>2019</u>
<u>Assets</u>		
Due from other governments	\$ <u>177,740</u>	<u>86,642</u>
Total assets	<u>\$ 177,740</u>	<u>86,642</u>
<u>Liabilities, Deferred Inflows of Resources and Fund Balance</u>		
Liabilities:		
Accounts payable	\$ 128,578	77,454
Due to other governments	<u>49,162</u>	<u>44,334</u>
Total liabilities	<u>177,740</u>	<u>121,788</u>
Deferred inflows of resources:		
Unavailable revenue	<u>171,175</u>	<u>-</u>
Total deferred inflows of resources	<u>171,175</u>	<u>-</u>
Fund balance:		
Unassigned	<u>(171,175)</u>	<u>(35,146)</u>
Total liabilities, deferred inflows of resources and fund balance	<u>\$ 177,740</u>	<u>86,642</u>

See Notes to Financial Statements

**TAHOE SCIENCE ADVISORY COUNCIL**

**Reconciliation of the Governmental Fund Balance Sheet  
to the Statement of Net Position**

**June 30, 2020**

Fund balances for governmental funds	\$ (171,175)
Amounts reported for governmental activities in the Statement of Net Position are different because:	
Certain revenues relating to due from other governments are measurable but not available and, accordingly, are recorded as unavailable revenue in the governmental funds under the modified accrual basis of accounting.	<u>171,175</u>
Net position of governmental activities	<u>\$ -</u>



**TAHOE SCIENCE ADVISORY COUNCIL**

**Statement of Revenues, Expenditures and Change in Fund Balance**

**Year Ended June 30, 2020  
(with comparative prior year information)**

	<u>2020</u>	<u>2019</u>
Revenues:		
State government grants and contracts	<u>\$ 79,103</u>	<u>129,532</u>
Total revenues	<u>79,103</u>	<u>129,532</u>
Expenditures:		
Environmental implementation:		
Salaries and benefits	4,576	3,058
Overhead	902	-
Contract services	<u>209,654</u>	<u>127,294</u>
Total expenditures	<u>215,132</u>	<u>130,352</u>
Net change in fund balance	(136,029)	(820)
Fund balance (deficit) at beginning of year	<u>(35,146)</u>	<u>(34,326)</u>
Fund balance (deficit) at end of year	<u><u>\$ (171,175)</u></u>	<u><u>(35,146)</u></u>

See Notes to Financial Statements

**TAHOE SCIENCE ADVISORY COUNCIL**

**Reconciliation of the Statement of Revenues, Expenditures, and Changes in  
Fund Balances of Governmental Funds to the Statement of Activities**

**Year Ended June 30, 2020**

Net change in fund balances - total governmental funds \$ (136,029)

Amounts reported for governmental activities in the Statement of Activities are different because:

Revenue is unavailable in the governmental funds when it is not received soon enough after year-end to be considered available. The availability criteria does not apply to the government-wide financial statements and, therefore, the revenue is not unavailable.

136,029

Change in net position of governmental activities

\$ -

# TAHOE SCIENCE ADVISORY COUNCIL

## Notes to Financial Statements

Year Ended June 30, 2020

### (1) **General Information**

The accompanying financial statements are intended to reflect the financial position and results of operations for the Tahoe Science Advisory Council (TSAC) fund only. The TSAC fund is an agency fund of the Tahoe Regional Planning Agency (TRPA).

The states of California and Nevada established the TSAC in December 2015 by a Memorandum of Understanding to ensure the best available science informs public policy decisions at Lake Tahoe. The agreement between the Secretary of the California Natural Resources Agency and the Director of the Nevada Department of Conservation and Natural Resources set up an independent group of scientists to work together in an advisory capacity to promote and enhance the use of the best available scientific information on matters of interest to both states. Twelve voting members of the TSAC include representatives of various California and Nevada research institutions along with the U.S. Geological Survey and the U.S. Forest Service Pacific Southwest Research Station. An Executive Committee oversees the TSAC and meets annually.

### (2) **Summary of Significant Accounting Policies**

#### (a) Financial Statement Presentation

The basic financial statements of TSAC are composed of the following:

- Government-wide financial statements
- Fund financial statements
- Notes to the basic financial statements

#### Government-Wide Financial Statements

The government-wide financial statements (i.e., the Statement of Net Position and the Statement of Activities) report information on all of the nonfiduciary activities of TSAC. These statements report governmental activities, which normally are supported by intergovernmental revenues. TSAC does not have any business-type activities, which rely to a significant extent on fees and charges for support.

The Statement of Activities demonstrates the degree to which the direct expenses of a given function or segment is offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. Program revenues include 1) charges to customers who purchase, use, or directly benefit from goods, services or privileges provided by a given function or segment, and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Taxes and other items not properly included among program revenues are reported instead as general revenues.

# TAHOE SCIENCE ADVISORY COUNCIL

## Notes to Financial Statements

(Continued)

### (2) Summary of Significant Accounting Policies (Continued)

#### Fund Financial Statements

The underlying accounting system of TSAC is organized and operated on the basis of separate funds, each of which is considered to be a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenues and expenditures. Governmental resources are allocated to and accounted for in individual funds based upon the purposes for which they are to be spent and the means by which spending activities are controlled.

Fund financial statements for TSAC's governmental fund are presented after the government-wide financial statements. The emphasis on fund financial statements is on major governmental funds. TSAC reports the following major governmental fund:

- Tahoe Science Advisory Council Fund – This fund is used to account for all of the financial activity associated with TSAC.

This fund is used to account for all of the TRPA's responsibilities associated with TSAC. TRPA has a contract with the California Natural Resources Agency to act as the fiscal agent for the science advisory council. In addition to the monies that TRPA handles, the California Natural Resources Agency incurs costs on their own for the Science Advisory Council. Those costs are not TRPA's responsibility and are not included in the audited financial statements.

A budgetary comparison schedule is not presented for this fund as the Tahoe Science Advisory Council did not have a legally adopted annual budget.

#### (b) Measurement Focus and Basis of Accounting

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collected within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, TSAC considers revenues to be available if they are collected within 60 days of the end of the current fiscal period, except for grants for which the availability period is 120 days.

# TAHOE SCIENCE ADVISORY COUNCIL

## Notes to Financial Statements

(Continued)

### (2) Summary of Significant Accounting Policies (Continued)

Expenditures generally are recorded when a liability is incurred; however, principal and interest expenditures on long-term debt and compensated absences of governmental funds are recorded only when payment is due. Governmental capital asset acquisitions are reported as expenditures in governmental funds. Proceeds of governmental long-term debt and acquisitions under capital leases are reported as other financing sources.

#### (c) Deferred Outflows and Inflows of Resources

In addition to assets, the balance sheet will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of fund balance that applies to a future period(s) and so will not be recognized as an outflow of resources (expenditure) until then. TSAC currently does not have any items that qualify for reporting in this category.

In addition to liabilities, the balance sheet will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of fund balance that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. TSAC has only one type of item that will apply, which arises only under a modified accrual basis of accounting, which qualifies for reporting in this category, and is reported as unavailable revenue. Unavailable revenue arises when potential revenues do not meet both the measurable and availability criteria for recognition in the current period. In subsequent periods, when the revenue recognition criteria are met, the deferred inflow of resources is removed from the balance sheet and revenue is recognized.

#### (d) Fund Balances

Fund balances are reported in the fund statements in the following classifications:

- *Nonspendable* – includes amounts that cannot be spent because they are either not spendable in form (such as inventory) or legally or contractually required to be maintained intact (such as endowments).
- *Restricted* – includes amounts that can be spent only for specific purposes stipulated by constitution, external resource providers, or through enabling legislation. If the Board action limiting the use of funds is included in the same action (legislation) that created (enables) the funding source, then it is restricted.

# TAHOE SCIENCE ADVISORY COUNCIL

## Notes to Financial Statements

(Continued)

### (2) Summary of Significant Accounting Policies (Continued)

- Committed – includes amounts that can be used only for the specific purposes determined by a formal action of the Board. It includes legislation (Board action) that can only be overturned by new legislation requiring the same type of voting consensus that created the original action. Therefore, if the Board action limiting the use of the funds is separate from the action (legislation) that created (enabled) the funding source, then it is committed, not restricted. TSAC considers a resolution to constitute a formal action of the Board of Directors for the purposes of establishing committed fund balance.
- Assigned – includes amounts that are designated or expressed by the Board, but does not require a formal action like a resolution or ordinance. The Board may delegate the ability of an employee or committee to assign uses of specific funds, for specific purposes. Such delegation of authority has not yet been granted to persons or bodies other than the Board of Directors.
- Unassigned – includes the remaining spendable amounts which are not included in one of the other classifications.

It is TSAC's policy that restricted resources will be applied first, followed by (in order of application) committed, assigned and unassigned resources, in the absence of a formal policy adopted by the Board. At June 30, 2020, the governmental fund had a deficit fund balance of \$171,175. The deficit is expected to be addressed by future year revenues.

#### (e) Net Position

In the government-wide financial statements, net position represents the difference between assets and liabilities and deferred inflows and outflows and is classified into three categories:

- Net Investment in capital assets – consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- Restricted net position – represents the net position that is not accessible for general use because their use is subject to restrictions enforceable by third parties.
- Unrestricted net position – represents those assets that are available for general use.

When both restricted and unrestricted resources are available for use, it is TSAC's policy to use restricted resources first.

**TAHOE SCIENCE ADVISORY COUNCIL**

**Notes to Financial Statements**

**(Continued)**

**(2) Summary of Significant Accounting Policies (Continued)**

(f) Use of Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain amounts and disclosures. Accordingly, actual results could differ from those estimates.

(g) Prior Year Data

Selected information from the prior year has been included in the accompanying financial statements in order to provide an understanding of changes in TSAC's financial position and operations. This information has been included for comparison purposes only and does not represent a complete presentation in accordance with generally accepted accounting principles. Accordingly, such information should be read in conjunction with TSAC's financial statements for the year ended June 30, 2019, from which this selected financial data was derived. Certain minor reclassifications of prior year data have been made in order to enhance its comparability with current year figures.

**(3) Restatement of Beginning Net Position**

During the fiscal year it was noted that a certain receivable had not been properly reported in the prior year. The following schedule summarizes the net effect on beginning net position as follows:

Net position as of June 30, 2019, as previously reported	\$(35,146)
Adjustment for a receivable not reported in the prior year for reimbursable expenditures incurred but not billed	<u>35,146</u>
Net position as of June 30, 2019, as restated	\$ <u>    -    </u>

**REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING  
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT  
OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE  
WITH GOVERNMENT AUDITING STANDARDS**

**INDEPENDENT AUDITOR'S REPORT**

Board of Directors  
Tahoe Science Advisory Council  
Stateline, Nevada

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Tahoe Science Advisory Council (TSAC) as of and for the year ended June 30, 2020, and the related notes to the financial statements, and have issued our report thereon dated February 16, 2021.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the TSAC's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of TSAC's internal control. Accordingly, we do not express an opinion on the effectiveness of the TSAC's internal control.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. We identified one deficiency in internal control, described below, that we consider to be a significant deficiency.



(1) Auditor Detected Adjustments

During our audit, we identified material adjustments related to the recording of grant receivables (due from other governments). An adjustment was made for underreporting a grant receivable in the prior year and another adjustment was made to record a receivable for eligible costs incurred during the fiscal year but not billed. The accounting literature indicates that for expenditure driven grants grantees obtain a claim for resources, are able to record a receivable, when eligible expenditures are incurred. TSAC had previously recorded receivables when claims for reimbursement were submitted. Auditing standards require the auditors include an internal control recommendation when there are material audit adjustments.

Recommendation

We recommend TSAC establish procedures to, whenever possible, identify adjustments in the reporting period in which the related transactions occurred. It is recognized this is not always possible and on occasion TSAC's accounting procedures will properly identify adjustment in subsequent periods. TSAC should also consider modifying its practice of recording year end receivables to include recording accruals for eligible expenditures incurred but not yet billed.

Management Response

TRPA agrees with the recommendation of the auditors. The University of California system rolled out a new personnel management system, including payroll, in October 2019. The transition has been slow and arduous and is known to have caused delays on UC invoices. In addition, some contractors have been waiting to invoice until the full work order is completed rather than invoicing monthly as requested in the contract documents. Staff has communicated with internal and external project managers about the importance of timely invoices and they will work together to get timely invoices submitted. Finance staff has developed a better way of tracking the invoices that have been received after the fiscal year end accounts payable cut off which will help make an adjusting entry in the future.

**Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the TSAC's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under *Government Auditing Standards*.

**TSAC's Response to Finding**

TSAC's response to the finding identified in our audit is described above. TSAC's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

**Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of TSAC's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering TSAC's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*Dawn Farn LLP*

Irvine, California  
February 16, 2021

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STAFF REPORT

Date: February 16, 2022

To: TRPA Governing Board

From: TRPA Staff

Subject: Lake Tahoe Community College: Remodel for Efficiency and Science Modernization Project, One College Drive, South Lake Tahoe, California, Assessor's Parcel Number 025-041-010, TRPA File Number ERSP2020-2105

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Summary and Staff Recommendation:

Staff recommends that the Governing Board make the required mitigated finding of no significant effect and approve the proposed project.

Required Motions:

In order to approve the proposed project, the Board must make the following motions, based on this staff report:

- 1) A motion to approve the required findings including a mitigated finding of no significant effect (as shown in attachment A); and
- 2) A motion to approve the proposed project subject to the conditions contained in the draft permit (as shown in Attachment B).

In order for motions to pass, an affirmative 5-9 (5 CA and 9 total) vote of the Board is required.

Governing Board Review:

The Code of Ordinances requires Governing Board review of the project because it involves the addition of more than 3,500 square feet of new land coverage, per TRPA Code Section 2.2.2.D.

Project Description:

The proposed project will include internal renovations to portions of the main campus building; removal of several existing portable classrooms; a redesigned campus entry courtyard in front of the main building with landscaping and hardscape; the addition of a small snow shed roof over a side entry; and a new fire and maintenance access road along the western edge of the campus footprint. The interior remodeling will not affect the existing building exteriors, except for the replacement of the north wall on a portion of the Fine Arts Building.

The interior renovations will improve and modernize existing learning and office spaces within the Lake Tahoe Community College (LTCC) Main Building and will also include upgrades to infrastructure facilities including water, fire service, electrical, sewer, storm drain, and technology. The redesigned campus entry will include regrading and repaving, signage, an amphitheater, sidewalk connections, and landscape design.

The proposed fire and maintenance access road will include removing and restoring approximately 4,000 square feet of existing dirt pathway, construction of an infiltration facility for drainage, and installation of a new water line. The new access road will require approximately 14,000 square feet of new pavement surface and is necessary to provide access for maintenance and emergency vehicles on the west side of the campus which is currently inaccessible. Dirt pathways identified for removal and restoration as part of this project will be restored by using site spoils to bring the path surface level with the existing grade and then hydroseeded to revegetate and stabilize the disturbed area. The project will result in a total net increase in coverage of 7,822 square feet on Land Capability 7 land.

Site Description:

The overall Lake Tahoe Community College project area is a 120.87 – acre parcel located east of Trout Creek, south of Highway 50, and west of Al Tahoe Blvd. in South Lake Tahoe. The proposed construction sites are Class 7 lands directly adjacent to the main structures on the Lake Tahoe Community College campus, located roughly in the center of the overall project area. The fire/maintenance access road will be immediately west of the campus, and the revised entry courtyard is on the east side. Most of the proposed work is within existing disturbed areas. The new fire/maintenance access road is located in a well-forested area with Jeffrey pine, sage and bitterbrush, and has a maximum 5-percent slope. The project is not visible from any TRPA scenic travel routes or Lake Tahoe.

Zoning:

The project area is located within Land Use District 4 of the Bijou/Al Tahoe Community Plan. Schools – College, are an allowed use for the Community Plan. The project is consistent with the design standards and guidelines of the Community Plan.

Land Capability and Coverage:

The overall project area is verified as land capability Classes 1b, 4 and 7, with the proposed project located within Class 4 and Class 7 lands. All proposed and relocated land coverage will be within Class 7. The total verified existing coverage is 794,687 square feet. Maximum base allowed coverage is 1,162,985 square feet. The project will add 7,822 square feet of Class 7 land coverage for a total proposed coverage is 802,509 square feet. All additional land coverage will be mitigated by payment of a water quality mitigation fee.

Height:

The proposed project will not modify the height of the existing structures.

Scenic:

The project is not visible from any TRPA scenic travel routes or Lake Tahoe.

Traffic, Parking and Circulation:

The proposed project does not change the existing traffic, parking, or circulation within the project area, except for providing emergency vehicle access to the west side of the campus. The proposed fire/maintenance road will be gated with an emergency KnoxBox, and available only to authorized vehicles with official business.

Public Noticing:

TRPA provided property owners within 300 feet of the project area notice that the Governing Board would be reviewing and considering approval of this project.

Modifications to Lots Within the Project Area:

The California Tahoe Conservancy (CTC) has acquired a portion of the college property in the Trout Creek meadow for construction of the Greenway Trail between Meyers and the South Shore Stateline area. This land acquisition includes lot line adjustments that have not been reviewed by TRPA and which require approval in the future. Although the land area owned by LTCC has been reduced as a result of the CTC purchase, the project area has not changed from what was used for past LTCC projects. The CTC and LTCC are both California state agencies, the latter being a special district of the State.

Environmental Review:

The Applicant has prepared an Initial Environmental Checklist (IEC) to analyze potential environmental impacts caused by the project. Based on this IEC and conditions in the draft permit, staff recommends that a Mitigated Finding of No Significant Effects be made for the proposed project.

Regional Plan Compliance:

The proposed project, as conditioned in the draft permit, complies with all requirements of the TRPA Goals and Policies, Bijou/Al Tahoe Community Plan, TRPA Design Review Guidelines, TRPA Code of Ordinances, including all required findings in Chapters 3, 4, 30, and 50, and the Regional Transportation Plan and Active Transportation Plan.

Contact Information:

For questions regarding this project, please contact Theresa Avance, Senior Planner, at (775) 589-5227 or [tavance@trpa.gov](mailto:tavance@trpa.gov).

Attachments:

- A. Required Findings/Rationale
- B. Draft Permit
- C. Project Plans
- D. Initial Environmental Checklist

Attachment A

Required Findings/Rationale

REQUIRED FINDINGS/RATIONALE FOR APPROVAL OF THE  
REMODEL FOR EFFICIENCY AND SCIENCE MODERNIZATION PROJECT

The following is a list of the required findings as set forth in Chapters 3, 4, 30, and 50 of the TRPA Code of Ordinances. Following each finding, agency staff has summarized the evidence on which the finding can be made.

1. Chapter 3 — Findings for Initial Environmental Checklist

§3.3.2.B The proposed project could have a significant effect on the environment but, due to the listed mitigation measures that have been added to the project, the project could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with Rules of Procedure Section 6.7.

Based on the information submitted in the Initial Environmental Checklist (IEC), the proposed project could have a significant effect on the environment. However, due to mitigation measures in the proposed permit the project will have no significant effect on the environment. These measures mitigate the effects of new land coverage. As a result, TRPA will prepare a mitigated finding of no significant effect as required by Rules of Procedure, Section 6.7.

2. Chapter 4 – Required Findings:

§4.4.1.A The project is consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, Plan Area Statements and maps, the Code and other TRPA plans and programs.

The project is located within the Incline Bijou/Al Tahoe Community Plan District 4 – Town Center, where Schools-College is an allowed use. There is no evidence showing the proposed project will have an adverse effect on the Land Use, Transportation, Conservation, Recreation, Scenic Quality, Public Service and Facilities, or Implementation sub-elements of the Regional Plan. The project, as conditioned, will not adversely affect the implementation of any applicable elements of the Regional Plan.

§4.4.1.B The project will not cause the environmental threshold carrying capacities to be exceeded.

TRPA staff has completed the “Project Review Conformance Checklist & Article V(g) Findings” in accordance with Section 4.4.2 of the TRPA Code of Ordinances and incorporates the checklist into this analysis. All responses contained in the checklist for the project indicate compliance with the environmental threshold carrying capacities. In addition, the applicant has completed an Initial Environmental Checklist (IEC), which is hereby incorporated into this analysis. A copy of the completed checklist and IEC will be made available online with the project file at [parcels.laketahoeinfo.org](http://parcels.laketahoeinfo.org).

§4.4.1.C Wherever federal, state, or local air and water quality standards applicable for the Region, whichever are strictest, must be attained and maintained pursuant to Article V(g) of the TPRA Compact, the project meets or exceeds such standards.

The project, as conditioned, will not have an adverse impact on applicable air and water quality standards for the Region. New land coverage shall be mitigated by fee in accordance with Chapter 60 of the TRPA Code.

### 3. Chapter 30 — Land Coverage Findings

- Findings necessary for the relocation of existing land coverage:

§30.4.5.A The relocation is to an equal or superior portion of the parcel or project area.

All land coverage will be relocated from Land Capability Class 7 land to other Class 7 land. The affected areas are equal in land capability, slope, vegetation, and share other similar site characteristics.

§30.4.5.B The area from which the land coverage was removed for relocation is restored in accordance with subsection 30.5.3.

All areas of removed land coverage will be revegetated or restored to natural conditions using hydroseed as well as woodchip and pine needle mulch, and original ground slope shall be restored.

§30.4.5.C The relocation shall not be to Land Capability Districts 1a, 1b, 1c, 2, or 3, from any higher numbered land capability district.

All land coverage is being relocated from Land Capability Class 7 land to other Land Capability Class 7 land.

### 4. Chapter 50 – Additional Public Service Facility Findings

§50.8.1.A There is a need for the project.

The project will result in improved and modernized learning and office spaces within the LTCC main building. The project will also include necessary upgrades to infrastructure facilities including water, fire service, electrical, sewer, storm drain, and technology. These upgrades will improve the efficiency of the college as well as safety. The construction of the fire and maintenance access road will provide needed access for emergency vehicles.

§50.8.1.B The project complies with the Goals and Policies, applicable plan area statements, and Code.

The proposed project is located in Land Use District 4 of the Bijou-Al Tahoe Community Plan. Schools — College is an allowed use for this Community Plan



District. The design of the improvements is consistent with the design standards and guidelines for District 4 of the Bijou — Al Tahoe Community Plan.

§50.8.1.C The project is consistent with the TRPA Environmental Improvement Program.

There are several Environmental Improvement Program projects identified near the Early Learning Center project site, including the Greenway Bike Trail, the Bijou Bike Park, and the Community Ballfields. None of these projects will be adversely affected by the Remodel for Efficiency and Science Modernization project.

§50.8.1.D The project meets the findings adopted pursuant to Article V (g) of the Compact as set forth in Chapter 4: Required Findings, as they are applicable to the project's service capacity.

The proposed project has adequate public utility service (water, sewer and electricity) and is accessed by a paved road.

§50.8.1.E If the proposed project is to be located within the boundaries of a community plan area, then, to the extent possible consistent with public health and safety, the project is compatible with the applicable community plan; and

The proposed project is in Land Use District 4 of the Bijou — Al Tahoe Community Plan and complies with all applicable provisions of the plan. The project is subject to approval by the California State Architect which is responsible for the health and safety of project design and construction.

§50.8.1.F Where a public service project is proposed for construction in a community plan area before the community plan has been adopted by TRPA, the sponsoring entity shall demonstrate that the need for such a construction schedule outweighs the need for the prior completion of the community plan process.

The proposed project is located within the boundaries of an adopted community plan.

Attachment B

Draft Permit

**DRAFT PERMIT**

PROJECT DESCRIPTION: Remodel for Efficiency and Science Modernization Project

APN 025-041-010, etc.

PERMITTEE(S): Lake Tahoe Community College

FILE # ERS2020-2105

COUNTY/LOCATION: El Dorado County/1 College Drive, City of South Lake Tahoe, CA

Having made the findings required by Agency ordinances and rules, the TRPA Governing Board approved the project on February 23, 2022, subject to the standard conditions of approval attached hereto (Attachment Q), and the special conditions found in this permit.

This permit shall expire on February 23, 2025 without further notice unless the construction has commenced prior to this date and diligently pursued thereafter. Commencement of construction consists of pouring concrete for a foundation and does not include grading, installation of utilities or landscaping. Diligent pursuit is defined as completion of the project within the approved construction schedule. The expiration date shall not be extended unless the project is determined by TRPA to be the subject of legal action which delayed or rendered impossible the diligent pursuit of the permit.

NO TREE REMOVAL, CONSTRUCTION OR GRADING SHALL COMMENCE UNTIL:

- (1) TRPA RECEIVES A COPY OF THIS PERMIT UPON WHICH THE PERMITTEE(S) HAS ACKNOWLEDGED RECEIPT OF THE PERMIT AND ACCEPTANCE OF THE CONTENTS OF THE PERMIT;
- (2) ALL PRE-CONSTRUCTION CONDITIONS OF APPROVAL ARE SATISFIED AS EVIDENCED BY TRPA'S ACKNOWLEDGEMENT OF THIS PERMIT;
- (3) THE PERMITTEE OBTAINS A COUNTY/CITY BUILDING PERMIT. TRPA'S ACKNOWLEDGEMENT IS NECESSARY TO OBTAIN A COUNTY/CITY BUILDING PERMIT. THE COUNTY/CITY PERMIT AND THE TRPA PERMIT ARE INDEPENDENT OF EACH OTHER AND MAY HAVE DIFFERENT EXPIRATION DATES AND RULES REGARDING EXTENSIONS; AND
- (4) A TRPA PRE-GRADING INSPECTION HAS BEEN CONDUCTED WITH THE PROPERTY OWNER AND/OR THE CONTRACTOR.

\_\_\_\_\_  
TRPA Executive Director/Designee

\_\_\_\_\_  
Date

PERMITTEE'S ACCEPTANCE: I have read the permit and the conditions of approval and understand and accept them. I also understand that I am responsible for compliance with all the conditions of the permit and am responsible for my agents' and employees' compliance with the permit conditions. I also understand that if the property is sold, I remain liable for the permit conditions until or unless the new owner acknowledges the transfer of the permit and notifies TRPA in writing of such acceptance. I also understand that certain mitigation fees associated with this permit are non-refundable once paid to TRPA. I understand that it is my sole responsibility to obtain any and all required approvals from any other state, local or federal agencies that may have jurisdiction over this project whether or not they are listed in this permit.

Signature of Permittee(s)\_\_\_\_\_

Date\_\_\_\_\_

PERMIT CONTINUED ON NEXT PAGE

**APN 025-041-010, etc.  
FILE NO. ERSP2020-2105**

Water Quality Mitigation Fee (1): Amount \$14,548.92 Paid \_\_\_\_\_ Receipt No. \_\_\_\_\_

Security Posted (2): Amount \$5,000 Type \_\_\_\_ Paid \_\_\_\_\_ Receipt No. \_\_\_\_\_

Security Administrative Fee (3): Amount \$ \_\_\_\_\_ Paid \_\_\_\_\_ Receipt No. \_\_\_\_\_

**Notes:**

- (1) See Special Condition 3.I., below.
- (2) See Special Condition 3.J., below.
- (3) To be determined. See current TRPA fee schedule at the time of permit acknowledgement.

Required plans determined to be in conformance with approval: Date: \_\_\_\_\_

TRPA ACKNOWLEDGEMENT: The permittee has complied with all pre-construction conditions of approval as of this date:

\_\_\_\_\_  
TRPA Executive Director/Designee

\_\_\_\_\_  
Date

***SPECIAL CONDITIONS***

1. This permit specifically authorizes construction of the proposed Remodel for Efficiency and Science Modernization (RFE) project as described in the plans submitted to TRPA on December 22, 2020, and as revised in the plans received by TRPA on September 10, 2021. The project includes internal renovations to portions of the main campus building; removal of several existing portable classrooms; a redesigned campus entry courtyard in front of the main building with landscaping and hardscape; the addition of a small snow shed roof over a side entry; and a new fire and maintenance access road along the western edge of the campus footprint, and new BMPs on the west side to capture new and existing stormwater runoff. The interior remodeling will not affect the existing building exteriors, except for the replacement of the north wall on a portion of the Fine Arts Building. The land coverage needed for the project will include a combination of relocated existing coverage and 7,822 sq. ft. of new Class 7 land coverage available from the base allowable coverage for the project area. 562 square feet of removed Class 4 land coverage will be banked for future use.
2. The Standard Conditions of Approval listed in Attachment Q shall apply to this permit.
3. Prior to permit acknowledgement, the following conditions of approval must be satisfied.
  - A. All site plans shall be revised to include:
    - (1) Land capability district delineations.
    - (2) All existing verified and previously approved land coverage associated with previously approved projects, including existing dirt pathways and the Early

Learning Center. Existing dirt paths were verified with the original University Center Project, TRPA File ERSP2016-0501, and the development associated with the Early Learning Center was approved in TRPA File ERSP2020-0046.

- B. The permittee shall provide a site plan for the overall project area that clearly shows:
- (1) Boundaries of the recognized LTCC project area, as demonstrated on the plans approved with the University Center Project (TRPA File ERSP2016-0501). The boundaries of the Joint Powers Agreement (JPA) shall be clearly identified.
  - (2) The land coverage calculation table on Sheet C1.0 shall be relocated to the overall project area site plan and shall be revised to include:
    - (a) The corrected existing land coverage calculations based on the "LTCC Coverage Tracking Tables" for past project approvals prepared by TRPA.
    - (b) The corrected proposed land coverage calculations based on the relocation of only verified existing land coverage. Other disturbed areas and/or dirt paths that were not previously verified may not be included in the coverage relocation amounts in the table.
  - (3) A note indicating: "APNs 025-010-34, 025-010-54, 025-041-08, 025-041-10, and 031-011-02 are included in the coverage calculation numbers for parcel 025-041-10. Total project area in square footage based on surveyed parcel size is 5,491,674 SF. Square footage of area granted to the Community Play Consortium Ballfields through Joint Powers Agreement Project Area Deed Restriction (ERSP2016-0070) is 226,669 SF. Resultant project area remaining for the Lake Tahoe Community College, excluding the JPA Project Area is 5,265,005 SF, as shown on the approved land coverage table."
- C. The permittee shall provide a land coverage relocation plan that clearly demonstrates where and how much existing land coverage is being removed for relocation and banking purposes. Areas where land coverage is being removed for relocation shall be identified with specific shading.
- D. The Existing Site and Demo Plans (Sheets C2.0 and 2.1) shall be revised to include:
- (1) Temporary erosion control structures located downslope of all proposed construction areas.
  - (2) Vegetation protective fencing around the entire construction site. The fencing shall be no more than 12 feet from any footprint, driveway, or area of approved disturbance. Trees located within the construction area that are to be retained shall be individually protected by fencing or other means as necessary.
  - (3) A note indicating: "All areas disturbed by construction shall be revegetated in accordance with the TRPA Handbook of Best Management Practices and Living with Fire, Lake Tahoe Basin, Second Edition."

- (4) A note indicating: "Dust control measures shall be in place during construction. Broadcast mulch shall not be permitted as a dust control measure within 35 feet of structures."
  - (5) Revised notes on Sheet C2.1 indicating the dirt paths are to be removed "as shown", not "as necessary".
  - (6) Location of the existing drainage pipes and inlets associated with the identified inlet protection.
- E. The Grading and Drainage Plan for the Fire Access Road area (Sheet C4.2) shall be revised to include:
- (1) Identification, details and calculation of the area of existing land coverage that contributes to the stormwater runoff that is captured by the existing stormwater pipes, and that will be infiltrated into the proposed infiltration facility identified as Drainage Management Area (DMA1) on the submitted BMP calculation sheet.
  - (2) Retrofitting of the existing and proposed stormwater inlets to include drop inlet filters (e.g. Flo-Gard).
  - (3) Mechanical stabilization of the fire/maintenance access road cut/fill slope in accordance with the TRPA Handbook of Best Management Practices (BMPs).
  - (4) Parking barriers where necessary along the fire access road to restrict parking to approved parking surfaces only.
  - (5) Alternative design options to the proposed infiltration facility (30'x5'x5' gravel filled drywell) for DMA1 shall be considered and discussed with the TRPA Stormwater Management Team, including using a stepped detention basin and/or splitting the infiltration facility into separate infiltration facilities. The final design for the DMA1 facility shall be confirmed and approved by TRPA prior to final submittal for acknowledgement of this permit. The BMP Calculation Spreadsheet shall be revised according to the final design.
- F. Provide a lighting plan, including proposed fixture details, that identifies any new lighting for the project area, with light fixtures that are consistent with TRPA Code of Ordinances, Section 36.8, Exterior Lighting Standards, and architectural standards in the Bijou/Al Tahoe Community Plan.
- G. A BMP Inspection and Maintenance Plan shall be submitted detailing the maintenance activity and schedule for all BMPs installed on the property. An overall BMP plan that identifies the location of each existing and proposed infiltration facility shall be included with the plan. A BMP Maintenance Log template is available at [www.tahoebmp.org/Maintenance](http://www.tahoebmp.org/Maintenance).
- H. A water quality mitigation fee shall be paid to TRPA for the creation of new land coverage in the project area at a rate of \$1.86 per square foot.

- I. A water quality mitigation fee of \$14,548.92 shall be paid to TRPA. This fee is based on the creation of 7,822 square feet of land coverage at a rate of \$1.86/sq. ft.
  - J. The security required under Standard Condition I.B. of Attachment Q shall be \$5,000, along with the security administration fee per the latest TRPA Filing Fee schedule at the time of acknowledgment. Please see Attachment J, Security Procedures, for appropriate methods of posting the security.
  - K. The permittee shall submit one electronic set of all required documents and plans to TRPA.
4. The permittee shall submit a projected construction completion schedule to TRPA prior to commencement of construction. Said schedule shall include completion dates for each item of construction, as well as BMP installation for the entire project area, as outlined in Section 33.5 of the TRPA Code of Ordinances.
  5. Temporary and permanent BMPs may be field-fit as appropriate by the TRPA inspector.
  6. All BMPs shall be maintained subject to the Inspection and Maintenance Plan approved as part of this permit. All maintenance activities shall be recorded in a corresponding maintenance log. This log shall be maintained for the life of the property and made available for inspection by TRPA staff. If this log is not complete, TRPA will assume that maintenance has not been performed and reserves the right to revoke the BMP Certificate of Completion.
  7. The permittee shall prepare and provide photographs to the TRPA Compliance Inspector that have been taken during construction that demonstrate any subsurface BMPs or trenching and backfilling proposed on the project have been constructed correctly (depth, fill material, etc.).
  8. Excavation equipment shall be limited to approved construction areas to minimize site disturbance. No grading or excavation shall be permitted outside of the approved areas of disturbance.
  9. All waste resulting from the saw-cutting of pavement shall be removed using a vacuum (or other TRPA approved method) during the cutting process or immediately thereafter. Discharge of waste material to surface drainage features is prohibited and constitutes a violation of this permit.
  10. All exterior lighting shall be consistent with TRPA Code of Ordinances, Section 36.8, Exterior Lighting Standards, and architectural standards in the Bijou/Al Tahoe Community Plan.
  11. To the maximum extent allowable by law, the Permittee agrees to indemnify, defend, and hold harmless TRPA, its Governing Board (including individual members), its Planning Commission (including individual members), its agents, and its employees (collectively, TRPA) from and against any and all suits, losses, damages, injuries, liabilities, and claims by any person (a) for any injury (including death) or damage to person or property or (b) to set aside, attack, void, modify, amend, or annul any actions of TRPA. The foregoing indemnity obligation applies, without limitation, to any and all suits, losses, damages, injuries, liabilities, and claims by any person from any cause whatsoever arising out of or in connection with either directly or indirectly, and in whole or in part (1) the processing, conditioning, issuance, administrative

appeal, or implementation of this permit; (2) any failure to comply with all applicable laws and regulations; or (3) the design, installation, or operation of any improvements, regardless of whether the actions or omissions are alleged to be caused by TRPA or Permittee.

Included within the Permittee's indemnity obligation set forth herein, the Permittee agrees to pay all fees of TRPA's attorneys and all other costs and expenses of defenses as they are incurred, including reimbursement of TRPA as necessary for any and all costs and/or fees incurred by TRPA for actions arising directly or indirectly from issuance or implementation of this permit. TRPA will have the sole and exclusive control (including the right to be represented by attorneys of TRPA's choosing) over the defense of any claims against TRPA and over their settlement, compromise or other disposition. Permittee shall also pay all costs, including attorneys' fees, incurred by TRPA to enforce this indemnification agreement. If any judgment is rendered against TRPA in any action subject to this indemnification, the Permittee shall, at its expense, satisfy and discharge the same.

END OF PERMIT



Attachment C

Project Plans

SHEET INDEX

G0.00	COVER
G0.03	OVERALL CAMPUS SITE PLAN
C1.0	GENERAL NOTES
C2.0	EXISTING & DEMO PLAN
C2.1	EXISTING & DEMO PLAN
C3.0	PLAZA: SITE LAYOUT & UTILITY PLAN
C4.0	GRADING & DRAINAGE PLAN
C4.1	GRADING & DRAINAGE PLAN
C4.2	GRADING & DRAINAGE PLAN
C6.0	BMP DETAILS
C6.0A	BMP DETAILS
C6.1	CONSTRUCTION DETAILS
C6.2	WATER DETAILS
C6.3	CONSTRUCTION DETAILS
AS1.00	OVERALL SITE PLAN
AS1.01	ENLARGED SITE PLAN
AS1.02	ENLARGED SITE PLAN
AS1.11	SITE DETAILS
AS1.12	SITE DETAILS
L1.00	LANDSCAPE PLAN
L1.01	LANDSCAPE PLAN
L3.00	HYDROZONE PLAN
AD2.11	PHASE 1 DEMOLITION PLANS
AD2.21	PHASE 2A DEMOLITION PLANS
AD2.31	PHASE 2B DEMOLITION PLANS
A2.05	SNOW SHED CANOPY
A2.11	PHASE 1 FLOOR PLAN
A2.21	PHASE 2A FLOOR PLAN
A2.31	PHASE 2B FLOOR PLAN
A3.00	EXTERIOR ELEVATIONS
S2.05	SNOW SHED PLANS PHASE 2B
S3.02	SNOW SHED SECTIONS AND DETAILS

# REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION

LAKE TAHOE COMMUNITY COLLEGE  
One College Drive South Lake Tahoe, CA 96150

CONSTRUCTION DOCUMENTS

12-18-2020

# LPAS

2484 Natomas Park Drive Suite 100 Sacramento CA 95833  
916 443 0335 lpasdesign.com Architecture + Design

DSA FILE #9-C1  
DSA APP. #02-118557

Project # 1099-0006



DSA FILE #9-C1  
 DSA APP. #02-118557

# LPAS

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 2486 Natomas Park Drive Suite 100 Sacramento CA 95833  
 ph 916 443 0335  
 5 Third Street Suite 1117 San Francisco CA 94103  
 ph 415 213 0335  
 lpas.com

## REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION LAKE TAHOE COMMUNITY COLLEGE

One College Drive South Lake Tahoe, CA 96150

NO.	ISSUE	DATE

ARCHITECT

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CONSULTANT

OVERALL CAMPUS SITE PLAN | K1  
 1" = 80'-0"

## OVERALL CAMPUS SITE PLAN

PROJECT NO: 1099-0006  
 DATE: 09-10-2020

SHEET NO:  
**G0.03**



ABBREVIATIONS

GENERAL NOTES

Table with 2 columns: Abbreviation and Description. Includes items like DW (Diameter), EQ (Elevation), and various material and construction codes.

ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE REQUIREMENTS OF CITY OF SOUTHLAKE TRAPE PUBLIC IMPROVEMENT AND ENGINEERING STANDARDS, DATED 2008. ALL REQUIREMENTS TO STATE OF CALIFORNIA...

See Revised Coverage Table Next Sheet

COVERAGE TABLE

Table with columns: TOTAL AREA (SF), LCB TO (1%), ALLOWABLE COVERAGE (SF), LCB 4% (20%), LCB 4% (30%), LCB 4% (40%), LCB 4% (50%), TOTAL ALLOWED COVERAGE. Includes rows for Building, Parking, Road, etc.

TRPA logo and contact information for Architecture + Design, 2486 Natomas Park Drive, Suite 100, Sacramento, CA 95833.

REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION LAKE TAHOE COMMUNITY COLLEGE

One College Drive South Lake Tahoe, CA 96150

NO. ISSUE DATE
ADDENDUM 2 06-23-2021
3 TRPA COMMENTS 09-10-2021

BMP SIZING CALCULATIONS

BMP Calculation Spreadsheet

BMP Calculation Spreadsheet table with columns: Property Address, Date, Rainfall, Wastewater, MAP DATA, outflow, Total Drain Run Quantity, etc.

INSTRUCTION TO CONTRACTORS



TRPA EROSION CONTROL & RE-VEGETATION NOTES

- 1. NO DUST: EARTHWORK SHALL OCCUR BETWEEN 10:00 AM AND 5:00 PM WITHOUT WRITTEN APPROVAL OF THE MARICOPA COUNTY DEPARTMENT OF PUBLIC WORKS (DPW) AND THE MARICOPA COUNTY AIR QUALITY MANAGEMENT AGENCY...
2. REMOVAL OF NATIVE VEGETATION SHALL BE MINIMIZED...
3. TEMPORARY EROSION CONTROL MEASURES AND DETAILS AS SHOWN ON THE PLAN ARE SUGGESTED MINIMUM MEASURES...

WINTERIZATION NOTES

- 1. WINTERIZATION IS REQUIRED ON ALL CONSTRUCTION SITES WHERE ACTIVE OR INACTIVE BETWEEN OCTOBER 15 AND MAY 1...
2. ALL TEMPORARY EROSION CONTROL AND BMP FEATURES SHALL BE REPAIRED AND FUNCTIONING PRIOR TO OCTOBER 15...
3. TEMPORARY VEGETATION PROTECTION FENCING SHALL BE IN PLACE AND OPERATIONAL...

Deck Treatment

Table with columns: Deck Area, Deck Length, Deck Width, Deck Perimeter, Deck Volume, Deck Capacity.

Reviewer Comments

Table with columns: Reviewer, Comments, Date.

GENERAL NOTES

PROJECT NO: 1099-0006
DATE: 01-20-2021

SHEET NO: C1.0

Remodel for Efficiency(RFE)											
ERSP2020-2105	Land Capability Class 1b SEZ			Land Capability Class JwE (4)			Land Capability Class 7				
Total Parcel Area	Total Area (sq. ft.)	Allowed Coverage (sq. ft.)		Total Area (sq. ft.)	Allowed Coverage (sq. ft.)		Total Area (sq. ft.)	Allowed Coverage (sq. ft.)		Total Allowed Coverage	
5,265,005	1,135,228	11,352		873,004	174,601		3,256,773	977,032		1,162,985	
Facility	Existing Coverage <sup>1</sup>	Proposed Coverage	Net Change	Existing Coverage <sup>1</sup>	Proposed Coverage	Net Change	Existing Coverage	Proposed Coverage	Net Change	Total Change	Project Area Total Coverage
Buildings			0	6,808	6,246	(562)	184,946	182,628	(2,318)	(2,880)	188,874
Parking			0	30,866	30,866	0	236,143	236,143	0	0	267,009
Road			0	14,130	14,130	0	125,977	140,363	14,386	14,386	154,493
Sidewalk			0	5,428	5,428	0	58,433	52,624	(5,809)	(5,809)	58,052
Bike Path			0	1,025	1,025	0	44,451	44,451	0	0	45,476
Dirt Path	6,388	6,388	0	27,547	27,547	0	28,493	24,468	(4,025)	(4,025)	58,403
Gravel Path			0	317	317	0	6,762	6,762	0	0	7,079
Conc. Pad/Sculptures/Pavers			0	79	79	0	4,226	9,517	5,291	5,291	9,596
AC Pad/Walk			0			0	4,439	4,059	(380)	(380)	4,059
Loading Dock			0			0	2,424	2,424	0	0	2,424
Deck/Bridge/Stairs			0	74	74	0	1,339	1,175	(164)	(164)	1,249
Portable Storage			0			0	951	951	0	0	951
Playground			0			0	2,940	2,940	0	0	2,940
Lights/Utilities/Boxes			0			0	293	293	0	0	293
Decomp Granite Paving (Bike Parking)			0			0	0	1,049	1,049	1,049	1,049
Banked Coverage			0	0	562	562	208	0	(208)	354	562
	<b>6,388</b>	<b>6,388</b>	<b>0</b>	<b>86,274</b>	<b>86,274</b>	<b>0</b>	<b>702,025</b>	<b>709,847</b>	<b>7,822</b>	<b>7,822</b>	<b>802,509</b>

<sup>1</sup> Existing here is the approved proposed coverage from TRPA File ERSP2020-1334

Liberty Utility Easement: The Liberty Utilities project (ERSP2020-1334) transferred 63 SF of coverage into the newly recorded Utility Easement. This coverage may not be used by LTCC for any other purpose and does not affect LTCC allowable or existing coverage amounts.



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lpas.com

**REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION  
LAKE TAHOE COMMUNITY COLLEGE**

One College Drive South Lake Tahoe, CA 96150

NO.	ISSUE	DATE
1	ADDENDUM 2	06-23-2021
3	TRPA COMMENTS	09-10-2021

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CONSULTANT

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ENGINEERING**  
Architects • Planners • Engineers • Scientists

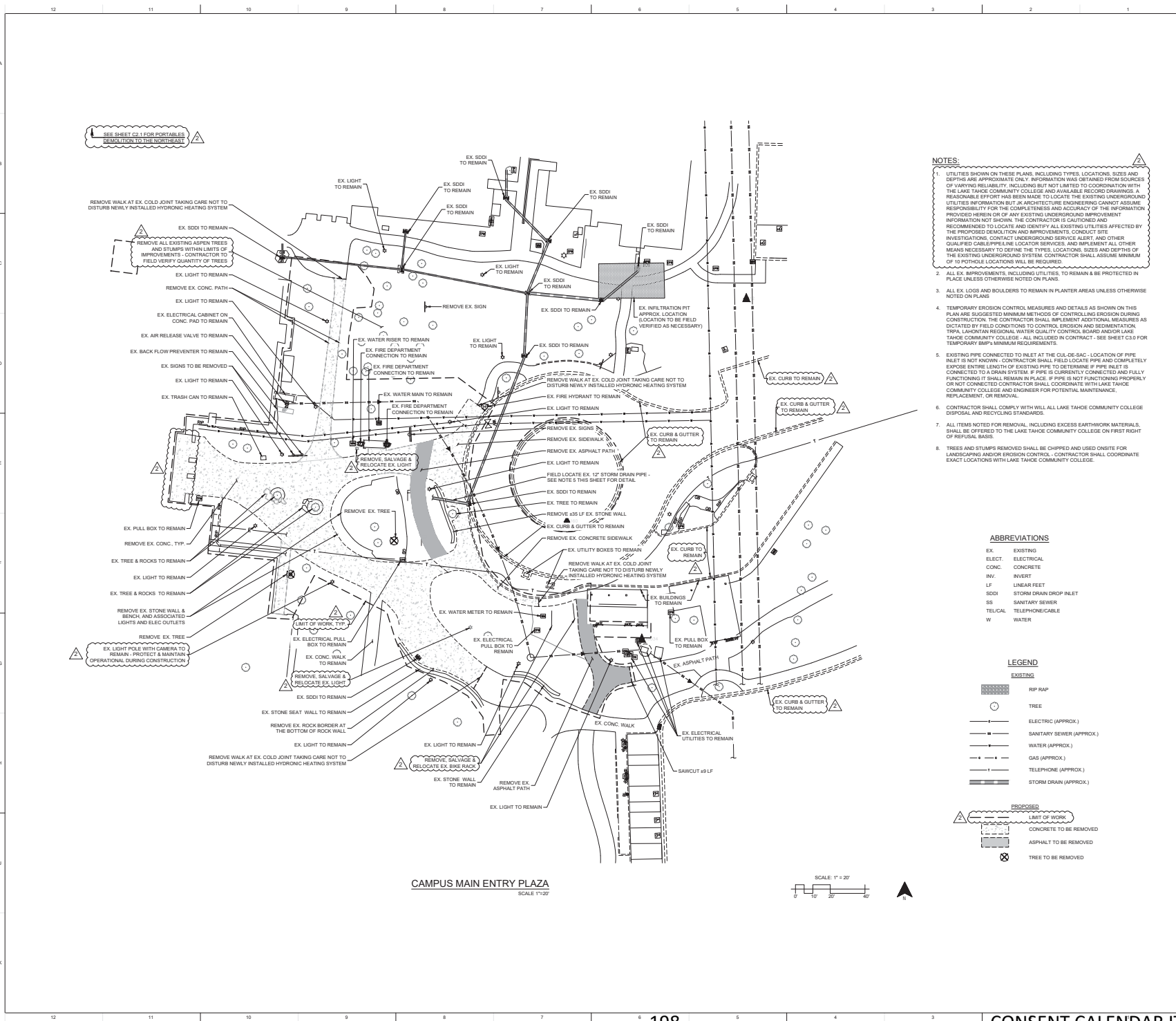


**EXISTING & DEMO PLAN**

PROJECT NO: 1099-0006  
DATE: 01-20-2021

SHEET NO:

**C2.0**



- NOTES:**
- UTILITIES SHOWN ON THESE PLANS, INCLUDING TYPES, LOCATIONS, SIZES AND DEPTHS ARE APPROXIMATE ONLY. INFORMATION WAS OBTAINED FROM SOURCES OF VARYING RELIABILITY, INCLUDING BUT NOT LIMITED TO COORDINATION WITH THE LAKE TAHOE COMMUNITY COLLEGE AND AVAILABLE RECORD DRAWINGS. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE THE EXISTING UNDERGROUND UTILITIES INFORMATION BUT AN ARCHITECTURE ENGINEERING CANNOT ASSUME RESPONSIBILITY FOR THE COMPLETENESS AND ACCURACY OF THE INFORMATION PROVIDED HEREON OR ANY EXISTING UNDERGROUND IMPROVEMENT INFORMATION NOT SHOWN. THE CONTRACTOR IS CAUTIONED AND RECOMMENDED TO LOCATE AND IDENTIFY ALL EXISTING UTILITIES AFFECTED BY THE PROPOSED DEMOLITION AND IMPROVEMENTS, CONDUCT SITE INVESTIGATIONS, CONTACT UNDERGROUND SERVICE ALERT, AND OTHER QUALIFIED CABLE/PINPOINT LOCATOR SERVICES, AND IMPLEMENT ALL OTHER MEANS NECESSARY TO DEFINE THE TYPES, LOCATIONS, SIZES AND DEPTHS OF THE EXISTING UNDERGROUND SYSTEM. CONTRACTOR SHALL ASSUME MINIMUM OF 10 FOOT DEPTHS WILL BE REQUIRED.
  - ALL EX IMPROVEMENTS, INCLUDING UTILITIES, TO REMAIN & BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED ON PLANS.
  - ALL EX LOGS AND BUILDERS TO REMAIN IN PLANTER AREAS UNLESS OTHERWISE NOTED ON PLANS.
  - TEMPORARY EROSION CONTROL MEASURES AND DETAILS AS SHOWN ON THIS PLAN ARE SUGGESTED MINIMUM METHODS OF CONTROLLING EROSION DURING CONSTRUCTION. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS DICTATED BY FIELD CONDITIONS TO CONTROL EROSION AND SEDIMENTATION. TRPA LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD AND/OR LAKE TAHOE COMMUNITY COLLEGE. ALL INCLUDED IN CONTRACT - SEE SHEET C3.0 FOR TEMPORARY BMP'S MINIMUM REQUIREMENTS.
  - EXISTING PIPE CONNECTED TO INLET AT THE CURB-DE-SAC. LOCATION OF PIPE INLET IS NOT KNOWN. CONTRACTOR SHALL FIELD LOCATE PIPE AND COMPLETELY EXPOSE ENTIRE LENGTH OF EXISTING PIPE TO BE DETERMINE IF PIPE INLET IS CONNECTED TO A DRAIN SYSTEM. IF PIPE IS CURRENTLY CONNECTED AND FULLY FUNCTIONING IT SHALL REMAIN IN PLACE. IF PIPE IS NOT FUNCTIONING PROPERLY OR NOT CONNECTED CONTRACTOR SHALL COORDINATE WITH LAKE TAHOE COMMUNITY COLLEGE AND ENGINEER FOR POTENTIAL MAINTENANCE, REPLACEMENT, OR REMOVAL.
  - CONTRACTOR SHALL COMPLY WITH ALL LAKE TAHOE COMMUNITY COLLEGE DISPOSAL AND RECYCLING STANDARDS.
  - ALL ITEMS NOTED FOR REMOVAL, INCLUDING EXCESS EARTHWORK MATERIALS, SHALL BE OFFERED TO THE LAKE TAHOE COMMUNITY COLLEGE ON FIRST RIGHT OF REFUSAL BASIS.
  - TREES AND STUMPS REMOVED SHALL BE CHIPPED AND USED ONSITE FOR LANDSCAPING AND/OR EROSION CONTROL. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH LAKE TAHOE COMMUNITY COLLEGE.

**ABBREVIATIONS**

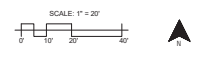
EX	EXISTING
ELECT.	ELECTRICAL
CONC.	CONCRETE
INV.	INVERT
LF	LINEAR FEET
SDDI	STORM DRAIN DROP INLET
SS	SANITARY SEWER
TEL/CAL	TELEPHONE/CABLE
W	WATER

**LEGEND**

EXISTING	
	RIP RAP
	TREE
	ELECTRIC (APPROX.)
	SANITARY SEWER (APPROX.)
	WATER (APPROX.)
	GAS (APPROX.)
	TELEPHONE (APPROX.)
	STORM DRAIN (APPROX.)

PROPOSED	
	LIMIT OF WORK
	CONCRETE TO BE REMOVED
	ASPHALT TO BE REMOVED
	TREE TO BE REMOVED

**CAMPUS MAIN ENTRY PLAZA**  
SCALE 1"=20'



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## REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION LAKE TAHOE COMMUNITY COLLEGE

One College Drive South Lake Tahoe, CA 96150

NO. 1	ISSUE	DATE
2	ADDENDUM 2	06-23-2021
3	TRPA COMMENTS	09-10-2021

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ARCHITECTS • ENGINEERS • PLANNERS

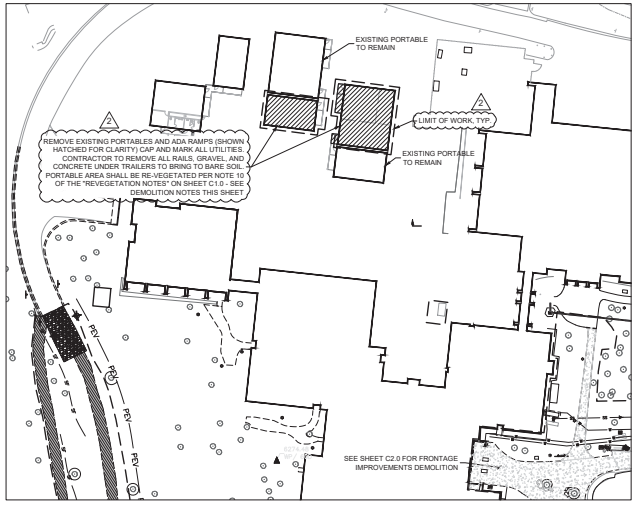
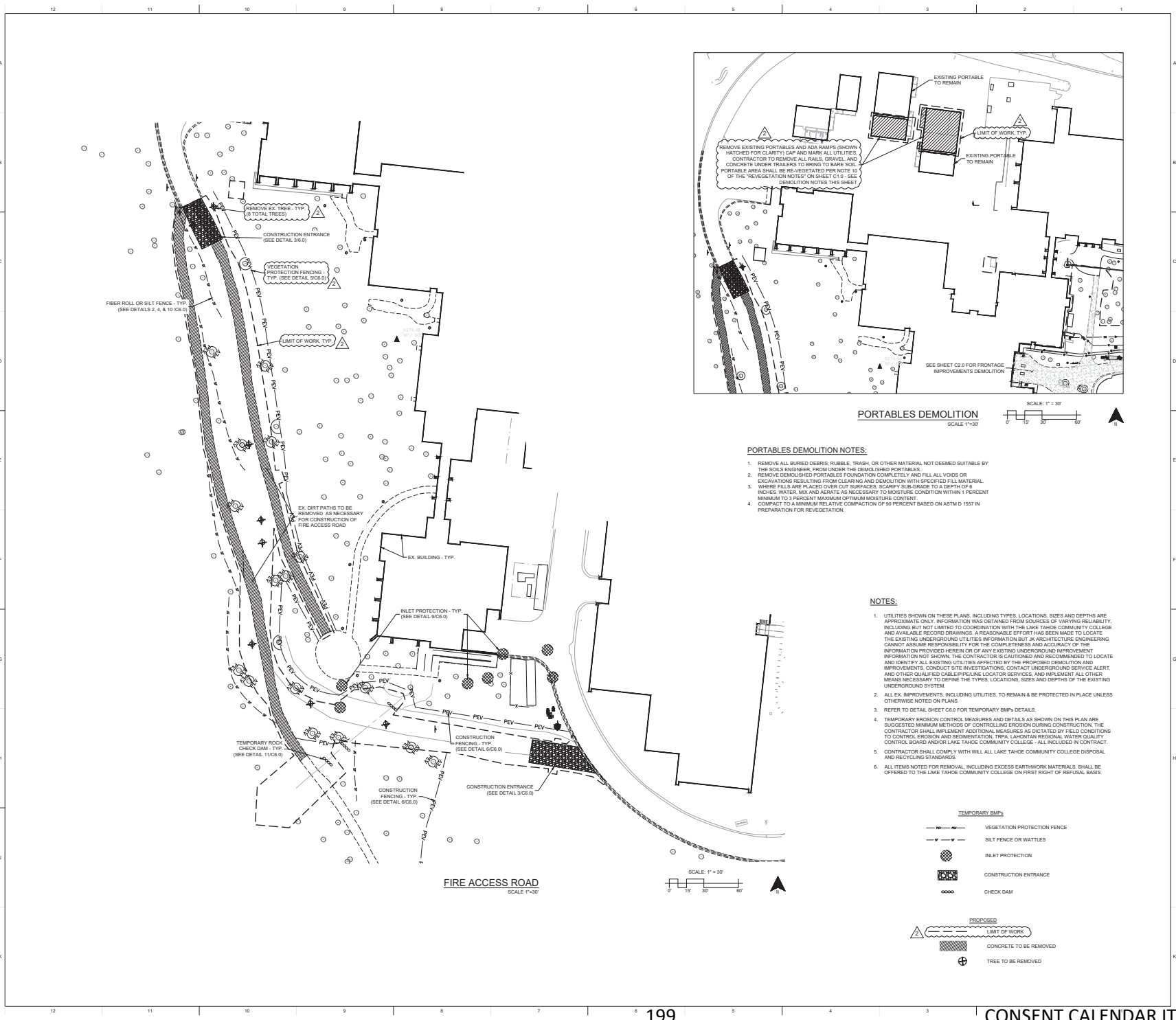


## EXISTING & DEMO PLAN

PROJECT NO: 1099-0006  
 DATE: 01-20-2021

SHEET NO:

# C2.1

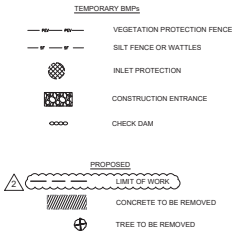


### PORTABLES DEMOLITION NOTES:

1. REMOVE ALL BURIED DEBRIS, RUBBLE, TRASH, OR OTHER MATERIAL NOT DEEMED SUITABLE BY THE SOILS ENGINEER, FROM UNDER THE DEMOLISHED PORTABLES.
2. REMOVE DEMOLISHED PORTABLES FOUNDATION COMPLETELY AND FILL ALL VOIDS OR EXCAVATIONS RESULTING FROM CLEARING AND DEMOLITION WITH SPECIFIED FILL MATERIAL.
3. WHERE FILLS ARE PLACED OVER CUT SURFACES, SCARIFY SUBSTRATE TO A DEPTH OF 6 INCHES, WATER, MIX AND AERATE AS NECESSARY TO MOISTURE CONDITION WITHIN 1 PERCENT MINIMUM TO 3 PERCENT MAXIMUM OPTIMUM MOISTURE CONTENT.
4. COMPACT TO A MINIMUM RELATIVE COMPACTION OF 90 PERCENT BASED ON ASTM D 1557 IN PREPARATION FOR REVEGETATION.

### NOTES:

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2. ALL EX. IMPROVEMENTS, INCLUDING UTILITIES, TO REMAIN & BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED ON PLANS.
3. REFER TO DETAIL SHEET C6.9 FOR TEMPORARY BMP DETAILS.
4. TEMPORARY EROSION CONTROL MEASURES AND DETAILS AS SHOWN ON THIS PLAN ARE SUGGESTED MINIMUM METHODS OF CONTROLLING EROSION DURING CONSTRUCTION. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS DICTATED BY FIELD CONDITIONS TO CONTROL EROSION AND SEDIMENTATION, TRPA, LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD AND/OR LAKE TAHOE COMMUNITY COLLEGE. ALL INCLUDED IN CONTRACT.
5. CONTRACTOR SHALL COMPLY WITH ALL LAKE TAHOE COMMUNITY COLLEGE DISPOSAL AND RECYCLING STANDARDS.
6. ALL ITEMS NOTED FOR REMOVAL, INCLUDING EXCESS EARTHWORK MATERIALS, SHALL BE OFFERED TO THE LAKE TAHOE COMMUNITY COLLEGE ON FIRST RIGHT OF REFUSAL BASIS.



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## REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION LAKE TAHOE COMMUNITY COLLEGE

One College Drive South Lake Tahoe, CA 96150

NO.	ISSUE	DATE
1	ADDENDUM 2	06-23-2021
3	TRPA COMMENTS	09-10-2021

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- ALL EXISTING IMPROVEMENTS, INCLUDING UTILITIES, TO REMAIN & BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED ON PLANS.
- ALL EXISTING LOGS AND BOLLERS TO REMAIN IN PLANTER AREAS UNLESS OTHERWISE NOTED ON PLANS.
- SEE MECHANICAL PLANS FOR OF HYDRONIC HEATING SYSTEM LAYOUT AND INSTALLATION.
- SEE ELECTRICAL PLANS FOR INSTALLATION OF LIGHTING.
- SEE SHEET C3.1 FOR ADDITIONAL SITE WORK.
- TEMPORARY EROSION CONTROL MEASURES AND DETAILS AS SHOWN ON THIS PLAN ARE SUGGESTED MINIMUM METHODS OF CONTROLLING EROSION DURING CONSTRUCTION. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS DICTATED BY FIELD CONDITIONS TO CONTROL EROSION AND SEDIMENTATION. TRPA, LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD AND/OR LAKE TAHOE COMMUNITY COLLEGE - ALL INCLUDED IN CONTRACT.
- CONTRACTOR SHALL COMPLY WITH WILL ALL LAKE TAHOE COMMUNITY COLLEGE DISPOSAL AND RECYCLING STANDARDS.
- ALL ITEMS NOTED FOR REMOVAL, INCLUDING EXCESS EARTHWORK MATERIALS, SHALL BE OFFERED TO THE LAKE TAHOE COMMUNITY COLLEGE ON FIRST RIGHT OF REFUSAL BASIS.

### ABBREVIATIONS

EX	EXISTING
ELECT.	ELECTRICAL
CONC.	CONCRETE
INV.	INVERT
LF	LINEAR FEET
SDDI	STORM DRAIN DROP INLET
SS	SANITARY SEWER
TELCAL.	TELEPHONE/CABLE
W	WATER

### LEGEND

#### EXISTING

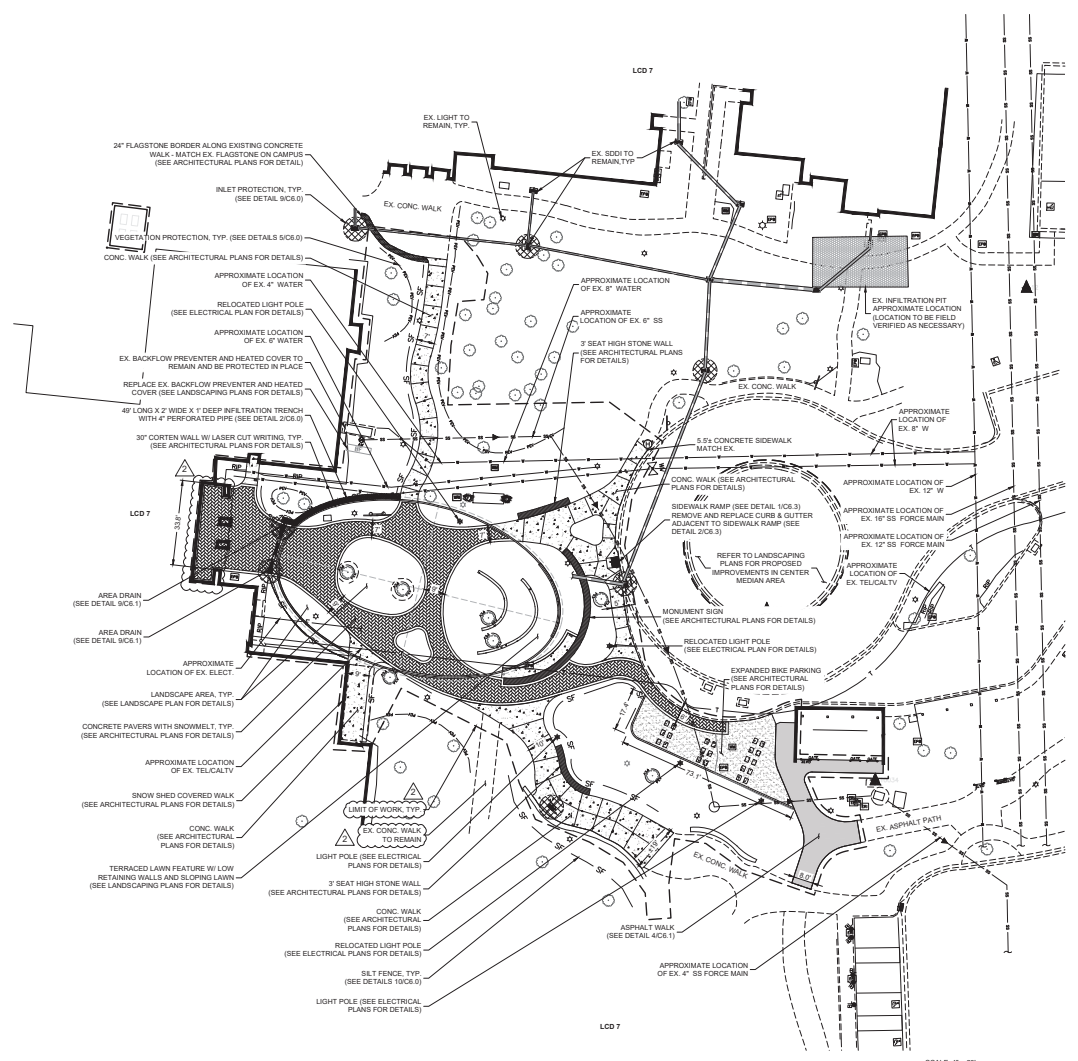
	RIP RAP
	TREE
	EDGE OF PAVEMENT/CONCRETE
	ELECTRIC (APPX.)
	SANITARY SEWER (APPX.)
	WATER (APPX.)
	GAS (APPX.)
	TELEPHONE (APPX.)
	STORM DRAIN (APPX.)

#### PROPOSED

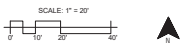
	LIMIT OF WORK
	CONCRETE
	CONCRETE PAVER
	DECOMPOSED GRANITE PAVING
	ASPHALT PAVING
	STORM DRAIN (APPX.)

#### TEMPORARY BARRIERS

	VEGETATION PROTECTION FENCE
	INLET PROTECTION



CAMPUS MAIN ENTRY PLAZA  
SCALE 1"=20'



### ARCHITECT

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ARCHITECTS & ENGINEERS  
1000 N. WASHINGTON ST. SUITE 1000  
SACRAMENTO, CA 95833  
WWW.JKARCHITECTURE.COM



## PLAZA: SITE LAYOUT & UTILITY PLAN

PROJECT NO: 1099-0006  
DATE: 01-20-2021

SHEET NO:

# C3.0



# LPAS

Architecture + Design  
2486 Natomas Park Drive Suite 100 Sacramento CA 95833  
916 443 0325  
5 Third Street Suite 1117 San Francisco CA 94103  
415 213 0335  
lpas.com

## REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION LAKE TAHOE COMMUNITY COLLEGE

One College Drive South Lake Tahoe, CA 96150

NO.	ISSUE	DATE
1	ADDENDUM 2	06-23-2021
3	TRPA COMMENTS	09-10-2021

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**JK** ARCHITECTURE  
ENGINEERING

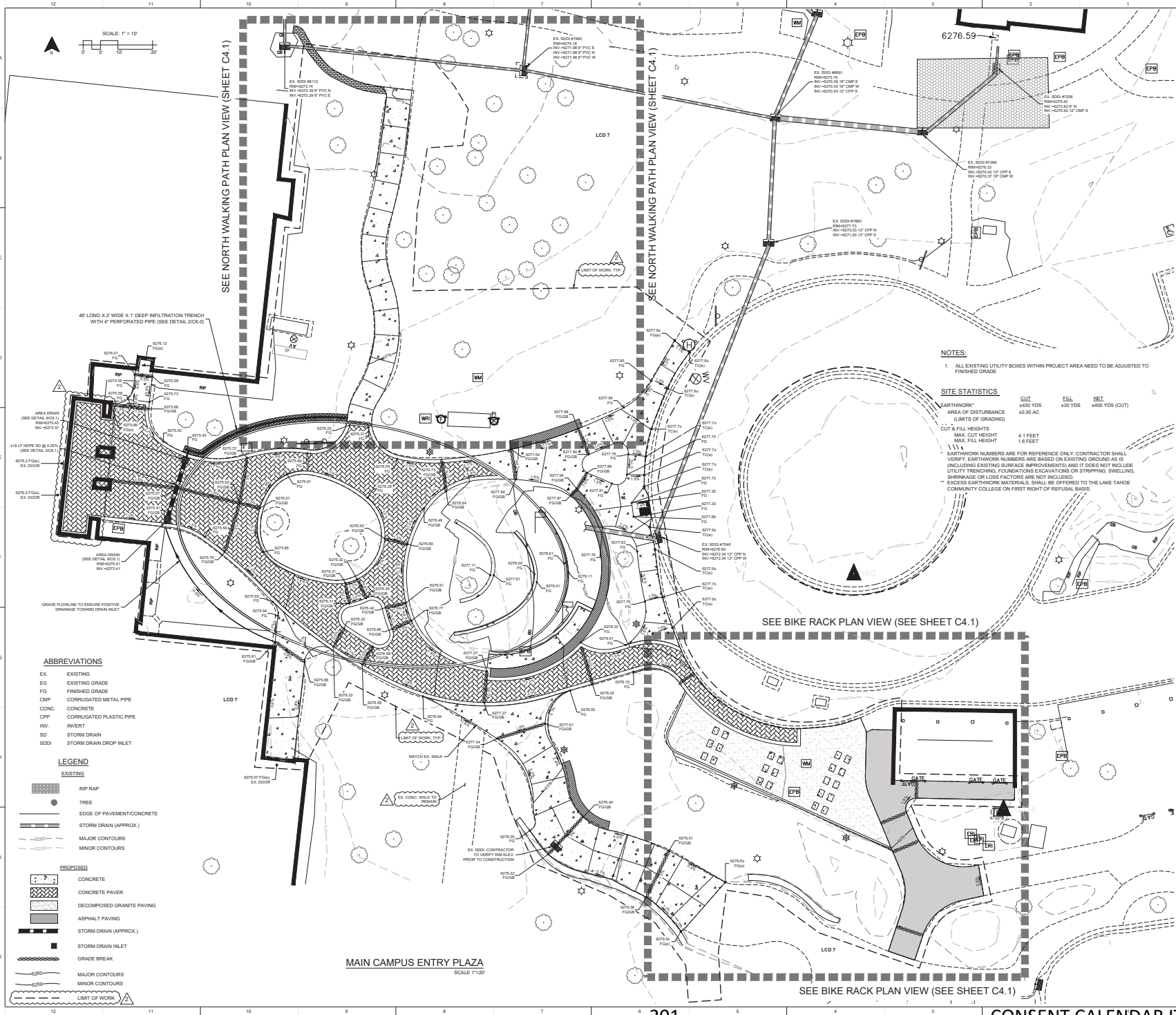


## GRADING & DRAINAGE PLAN

PROJECT NO: 1099-0006  
DATE: 01-20-2021

SHEET NO:

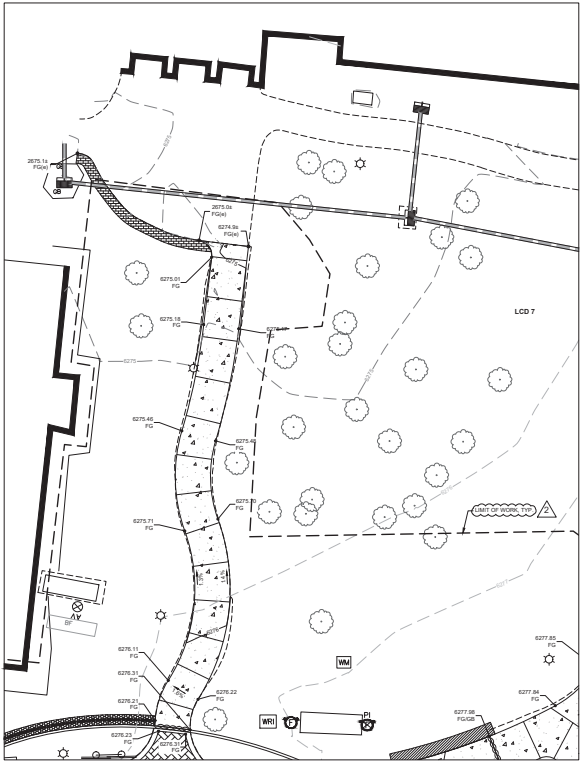
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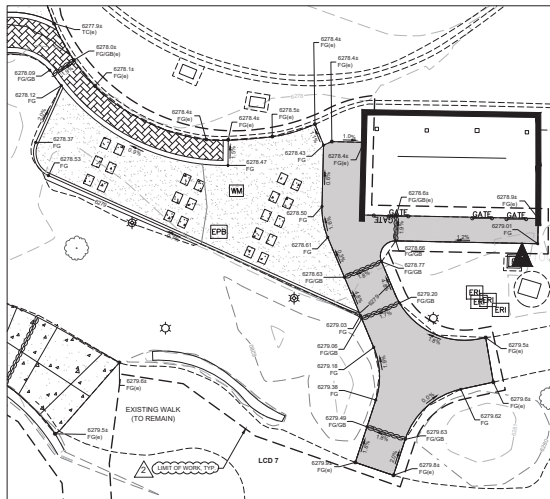
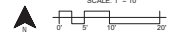
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LAKE TAHOE COMMUNITY COLLEGE

One College Drive South Lake Tahoe, CA 96150

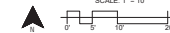
NO. 1	ISSUE	DATE
2	ADDENDUM 2	06-23-2021
3	TRPA COMMENTS	09-10-2021



**NORTH WALKING PATH**  
SCALE 1"=10'



**BIKE RACK**  
SCALE 1"=10'



**ABBREVIATIONS**

- EX. EXISTING
- EG. EXISTING GRADE
- FG. FINISHED GRADE
- CMP. CORRUGATED METAL PIPE
- CONC. CONCRETE
- CPP. CORRUGATED PLASTIC PIPE
- INV. INVERT
- SDCI. STORM DRAIN DROP INLET

**LEGEND**

**EXISTING**

- RIP RAP
- TREE
- EDGE OF PAVEMENT/CONCRETE
- STORM DRAIN (APPROX.)
- MAJOR CONTOURS
- MINOR CONTOURS

**PROPOSED**

- CONCRETE
- CONCRETE PAVER
- DECOMPOSED GRANITE PAVING
- ASPHALT PAVING
- STORM DRAIN (APPROX.)
- STORM DRAIN INLET
- GRADE BREAK
- MAJOR CONTOURS
- MINOR CONTOURS
- LIMIT OF WORK

ARCHITECT

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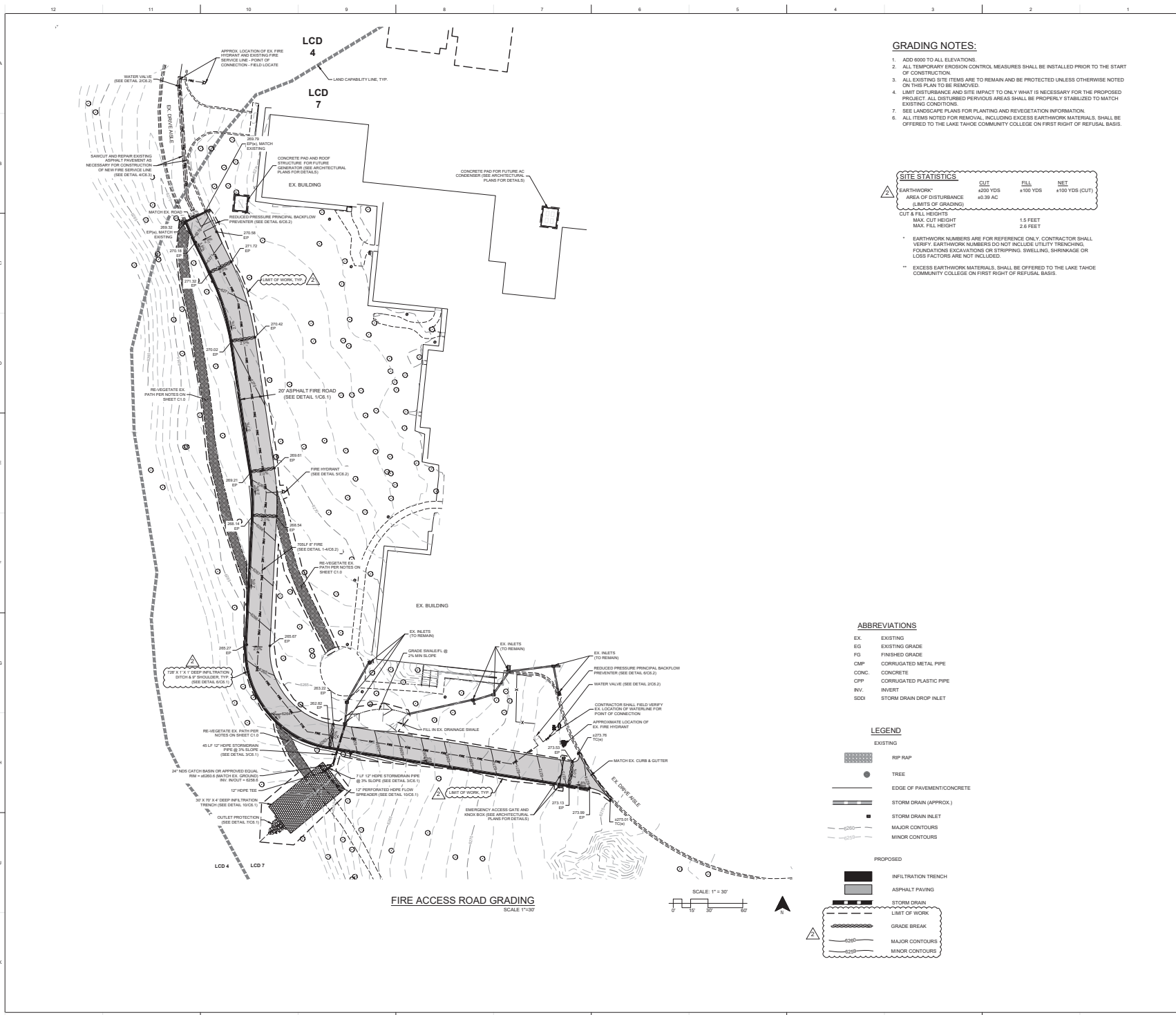
GRADING &  
DRAINAGE PLAN

PROJECT NO: 1099-0006  
DATE: 01-20-2021

SHEET NO:

**C4.1**

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- GRADING NOTES:**
1. ADD 6000 TO ALL ELEVATIONS.
  2. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.
  3. ALL EXISTING SITE ITEMS ARE TO REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED ON THIS PLAN TO BE REMOVED.
  4. LIMIT DISTURBANCE AND SITE IMPACT TO ONLY WHAT IS NECESSARY FOR THE PROPOSED PROJECT. ALL DISTURBED PERVIOUS AREAS SHALL BE PROPERLY STABILIZED TO MATCH EXISTING CONDITIONS.
  5. SEE LANDSCAPE PLANS FOR PLANTING AND REVEGETATION INFORMATION.
  6. ALL ITEMS NOTED FOR REMOVAL, INCLUDING EXCESS EARTHWORK MATERIALS, SHALL BE OFFERED TO THE LAKE TAHOE COMMUNITY COLLEGE ON FIRST RIGHT OF REFUSAL BASIS.

**SITE STATISTICS**

EARTHWORK* AREA OF DISTURBANCE (LIMITS OF GRADING)	CUT	FILL	NET
±0.39 AC	200 YDS	1100 YDS	1500 YDS (CUT)

CUT & FILL HEIGHTS:  
 MAX. CUT HEIGHT: 1.5 FEET  
 MAX. FILL HEIGHT: 2.6 FEET

\* EARTHWORK NUMBERS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY EARTHWORK NUMBERS DO NOT INCLUDE UTILITY TRENCHING, FOUNDATIONS EXCAVATIONS OR STRIPPING, SWELLING, SHRINKAGE OR LOSS FACTORS ARE NOT INCLUDED.

\*\* EXCESS EARTHWORK MATERIALS, SHALL BE OFFERED TO THE LAKE TAHOE COMMUNITY COLLEGE ON FIRST RIGHT OF REFUSAL BASIS.

- ABBREVIATIONS**
- EX. EXISTING
  - EG. EXISTING GRADE
  - FG. FINISHED GRADE
  - CMP. CORRUGATED METAL PIPE
  - CONC. CONCRETE
  - CPP. CORRUGATED PLASTIC PIPE
  - INV. INVERT
  - SDCI. STORM DRAIN DROP INLET

- LEGEND**
- EXISTING**
- RIP RAP
  - TREE
  - EDGE OF PAVEMENT/CONCRETE
  - STORM DRAIN (APPROX.)
  - STORM DRAIN INLET
  - MAJOR CONTOURS
  - MINOR CONTOURS
- PROPOSED**
- INFILTRATION TRENCH
  - ASPHALT PAVING
  - STORM DRAIN
  - LIMIT OF WORK
  - GRADE BREAK
  - MAJOR CONTOURS
  - MINOR CONTOURS



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 lpas.com

**REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION**  
 LAKE TAHOE COMMUNITY COLLEGE

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NO.	ISSUE	DATE
1	ADDENDUM 2	06-23-2021
3	TRPA COMMENTS	09-10-2021

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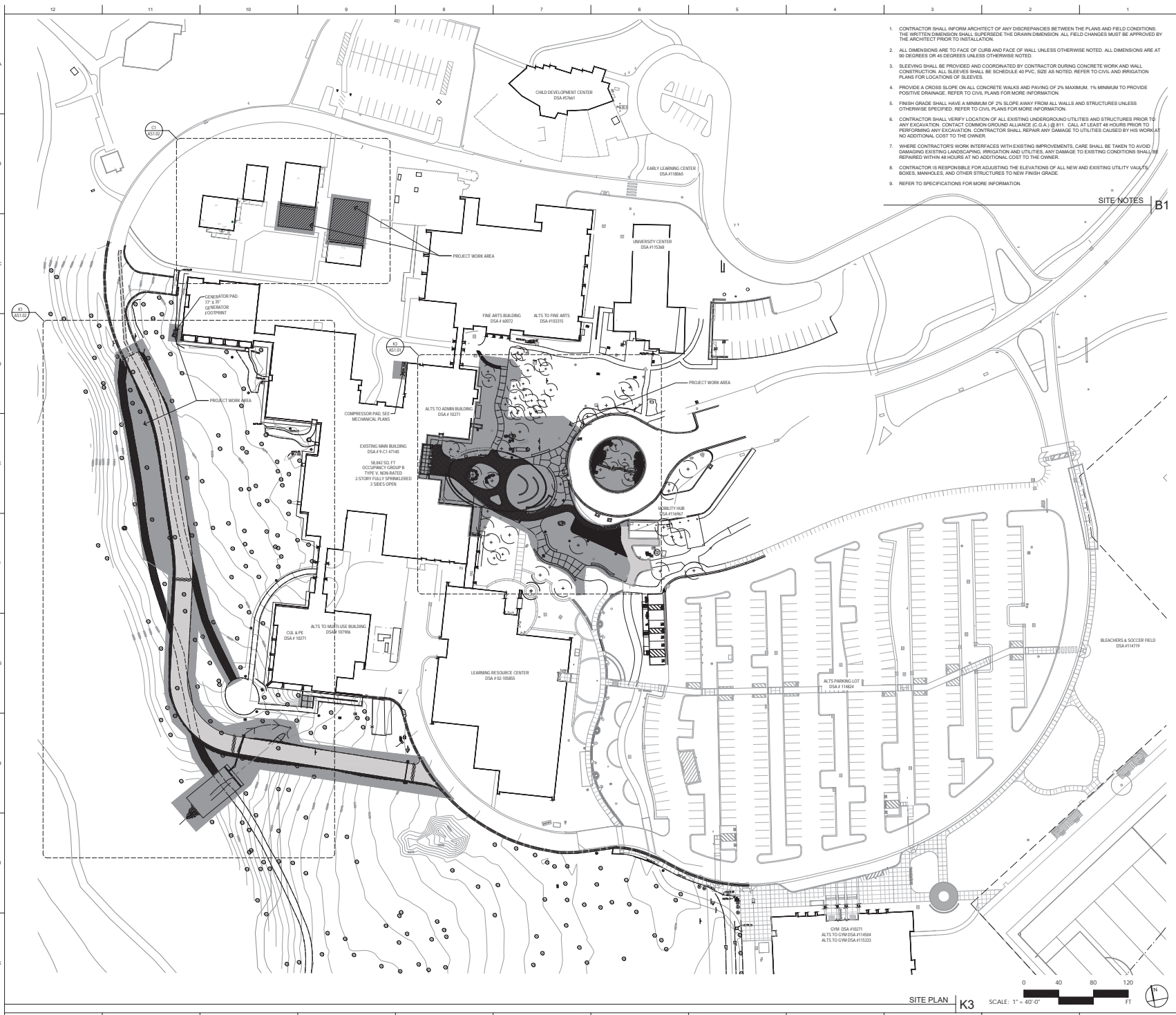


**GRADING & DRAINAGE PLAN**

PROJECT NO: 1099-0006  
 DATE: 01-20-2021

SHEET NO:

**C4.2**



1. CONTRACTOR SHALL INFORM ARCHITECT OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS. THE WRITTEN DIMENSION SHALL SUPERSEDE THE DRAWING DIMENSION. ALL FIELD CHANGES MUST BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.
2. ALL DIMENSIONS ARE TO FACE OF CURB AND FACE OF WALL UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE AT 90 DEGREES OR 45 DEGREES UNLESS OTHERWISE NOTED.
3. SLEEVING SHALL BE PROVIDED AND COORDINATED BY CONTRACTOR DURING CONCRETE WORK AND WALL CONSTRUCTION. ALL SLEEVES SHALL BE SCHEDULE 40 PIPE, SIZE AS NOTED. REFER TO CIVIL AND IRRIGATION PLANS FOR LOCATIONS OF SLEEVES.
4. PROVIDE A CROSS SLOPE ON ALL CONCRETE WALKS AND PAVING OF 2% MAXIMUM, 1% MINIMUM TO PROVIDE POSITIVE DRAINAGE. REFER TO CIVIL PLANS FOR MORE INFORMATION.
5. FINISH GRADE SHALL HAVE A MINIMUM OF 2% SLOPE AWAY FROM ALL WALLS AND STRUCTURES UNLESS OTHERWISE SPECIFIED. REFER TO CIVIL PLANS FOR MORE INFORMATION.
6. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO ANY EXCAVATION. CONTACT COMMON GROUNDS ALLIANCE (C.G.A.) @ 811. CALL AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES CAUSED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
7. WHERE CONTRACTORS WORK INTERFACES WITH EXISTING IMPROVEMENTS, CARE SHALL BE TAKEN TO AVOID DAMAGING EXISTING LANDSCAPING, IRRIGATION AND UTILITIES. ANY DAMAGE TO EXISTING CONDITIONS SHALL BE REPAIRED WITHIN 48 HOURS AT NO ADDITIONAL COST TO THE OWNER.
8. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE ELEVATIONS OF ALL NEW AND EXISTING UTILITY VALVES, BOXES, MANHOLES, AND OTHER STRUCTURES TO NEW FINISH GRADE.
9. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

SITE NOTES B1



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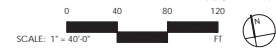
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**OVERALL SITE PLAN**

PROJECT NO: 1099-0006  
DATE: 09-10-2020

SHEET NO:

**AS1.00**



SITE PLAN K3



### REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION

#### LAKE TAHOE COMMUNITY COLLEGE

One College Drive South Lake Tahoe, CA 96150

NO. ISSUE DATE

- 1 CONCRETE INTERLOCKING PAVERS (S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S24, S25, S26, S27, S28, S29, S30, S31, S32, S33, S34, S35, S36, S37, S38, S39, S40, S41, S42, S43, S44, S45, S46, S47, S48, S49, S50, S51, S52, S53, S54, S55, S56, S57, S58, S59, S60, S61, S62, S63, S64, S65, S66, S67, S68, S69, S70, S71, S72, S73, S74, S75, S76, S77, S78, S79, S80, S81, S82, S83, S84, S85, S86, S87, S88, S89, S90, S91, S92, S93, S94, S95, S96, S97, S98, S99, S100)
- 2 PEDESTRIAN CONCRETE PAVING, NATURAL GRAY W/ LIGHT BROOM FINISH SCORE AS SHOWN. MATCH (E) FINISHES ON CAMPUS WHEN ADJACENT TO (E) CONCRETE
- 3 CONCRETE CURBS
- 4 NATURAL STONE/CONCRETE CAP BEAT WALL STONE TO MATCH (E) NEWLY INSTALLED SITE WALLS
- 5 30" CORNER WALL WITH LASER CUT VALVES, TYP.
- 6 LANDSCAPE AREA, SEE SHEET L1.00, TYP.
- 7 (E) TREES TO REMAIN, TYP.
- 8 SIGNAGE LIGHTING - SEE ELECTRICAL PLANS
- 9 TERRACED LAWN FEATURE
- 10 PRIMARY MONUMENT SIGN
- 11 PEDESTRIAN LIGHT FIXTURE WITH POLE AND LEAD TO MATCH CAMPUS STANDARD - SEE ELECTRICAL PLANS
- 12 BIKE RACK
- 13 MOBILITY HUB (TRANSIT)
- 14 SNOW SHED COVERED WALK
- 15 30' H. FLAG POLE W/ HALLYARD LIGHT
- 16 25' H. FLAG POLE W/ HALLYARD LIGHT
- 17 (E) LIGHT POLE TO REMAIN
- 18 DECOMPOSED GRANITE PAVING
- 19 (E) DRIP LINE GRAVEL TRENCH TO REMAIN, REPAIR DAMAGED PORTIONS

#### SITE KEYNOTES

- CONTRACTOR SHALL INFORM ARCHITECT OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS. THE WRITTEN DIMENSION SHALL SUPERSEDE THE DRAWN DIMENSION. ALL FIELD CHANGES MUST BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.
- ALL DIMENSIONS ARE TO FACE OF CURB AND FACE OF WALL UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE AT 90 DEGREES OR 45 DEGREES UNLESS OTHERWISE NOTED.
- SLEEVING SHALL BE PROVIDED AND COORDINATED BY CONTRACTOR DURING CONCRETE WORK AND WALL CONSTRUCTION. ALL SLEEVES SHALL BE SCHEDULED AS P.C. SEE AS NOTED. REFER TO CIVIL AND IRRIGATION PLANS FOR LOCATIONS OF SLEEVES.
- PROVIDE A CROSS SLOPE ON ALL CONCRETE WALKS AND PAVING OF 2% MAXIMUM, 1% MINIMUM TO PROVIDE POSITIVE DRAINAGE. REFER TO CIVIL PLANS FOR MORE INFORMATION.
- FINISH GRADE SHALL HAVE A MINIMUM OF 2% SLOPE AWAY FROM ALL WALLS AND STRUCTURES UNLESS OTHERWISE SPECIFIED. REFER TO CIVIL PLANS FOR MORE INFORMATION.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO ANY EXCAVATION. CONTACT COMMON GROUND ALLIANCE (C.G.A.) @ 811. CALL AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES CAUSED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
- WHERE CONTRACTOR'S WORK INTERFERES WITH EXISTING IMPROVEMENTS, CARE SHALL BE TAKEN TO AVOID DAMAGING EXISTING LANDSCAPES, IRRIGATION AND UTILITIES. ANY DAMAGE TO EXISTING CONDITIONS SHALL BE REPAIRED WITHIN 48 HOURS AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE ELEVATIONS OF ALL NEW AND EXISTING UTILITY VALVES, BOXES, MANHOLES, AND OTHER STRUCTURES TO NEW FINISH GRADE.
- REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- ALL ITEMS NOTED FOR REMOVAL SHALL BE OFFERED TO LTCCD ON FIRST RIGHT OF REFUSAL BASIS.

#### SITE NOTES

- ALL BOULDERS EXIST ON-SITE. RELOCATE AND PLACE BOULDERS PER PLAN.

#### BOULDER NOTE



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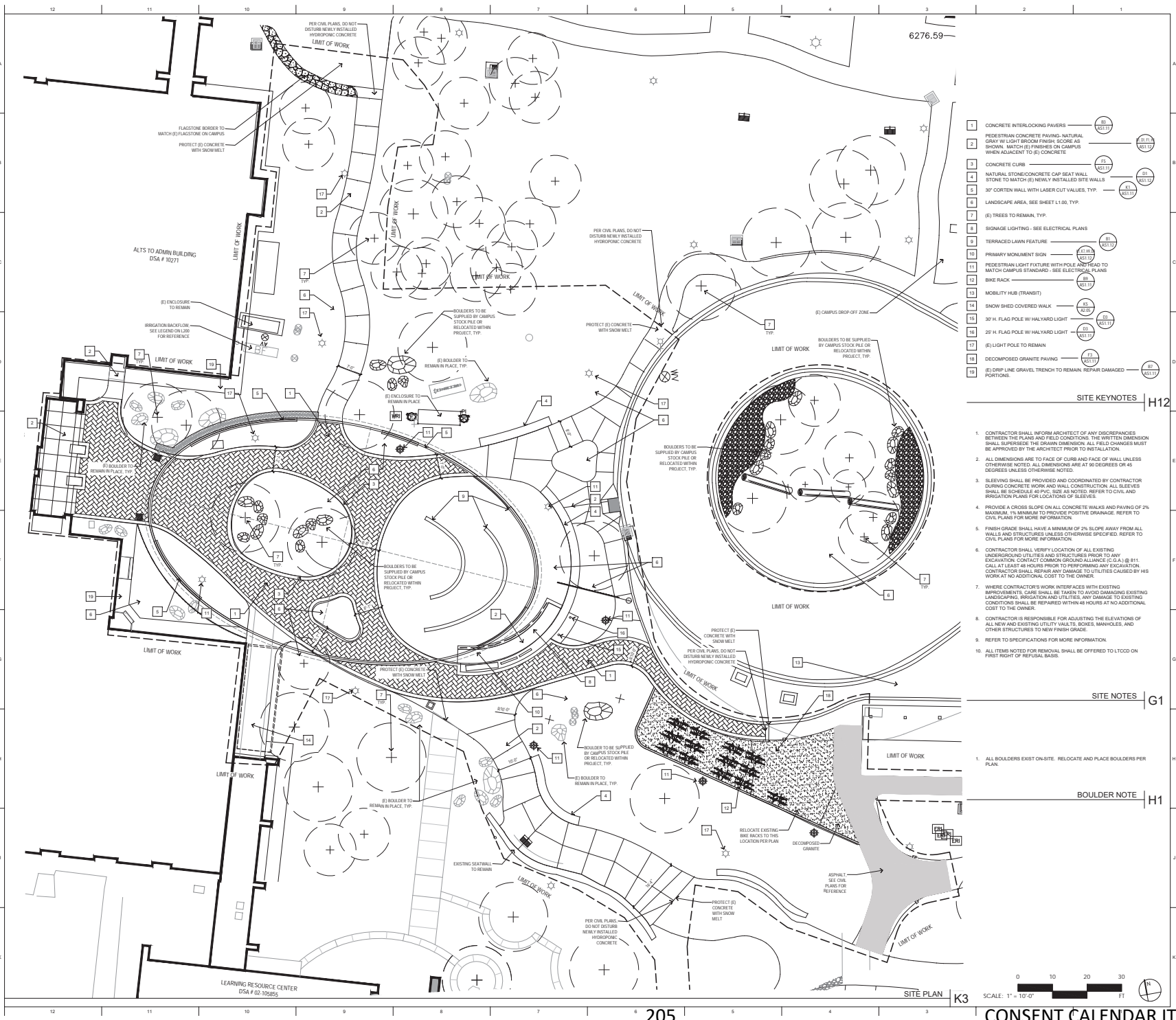
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## ENLARGED SITE PLAN

PROJECT NO: 1099-0006  
DATE: 09-10-2020

SHEET NO:  
**AS1.01**

CONSTRUCTION DOCUMENTS



### CONSENT CALENDAR ITEM NO. 3



DSA FILE #9-C1  
 DSA APP. #02-118557

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## REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION

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## ENLARGED SITE PLAN

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 DATE: 09-10-2020

SHEET NO:

# AS1.02

CONSTRUCTION DOCUMENTS

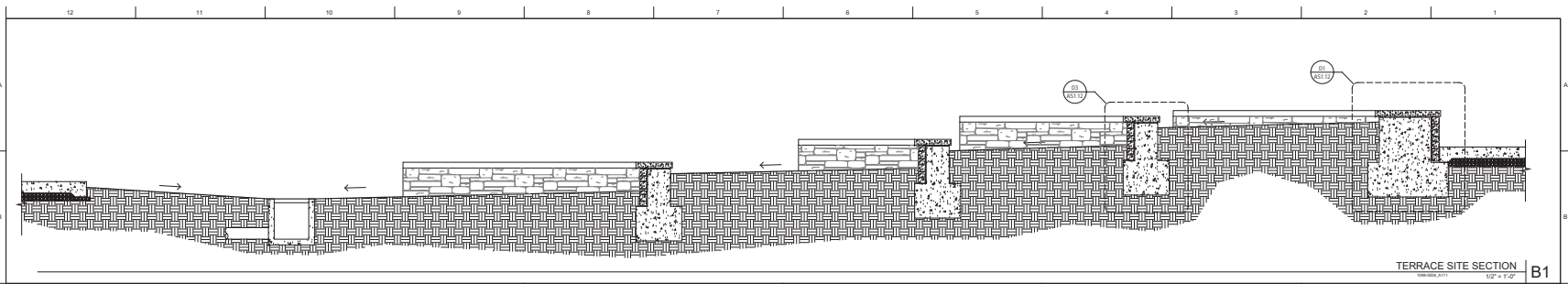


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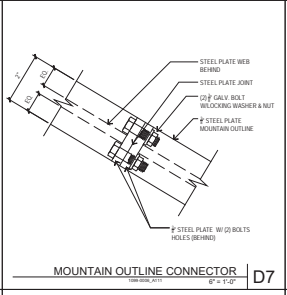
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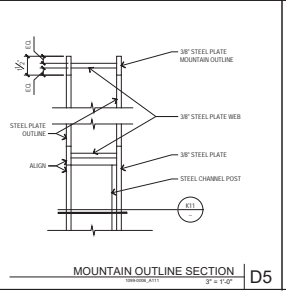
TERRACE SITE SECTION B1  
12' x 4' 1/2"



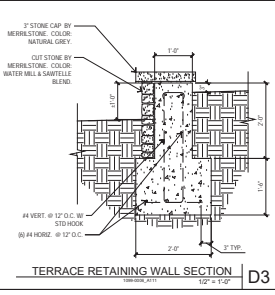
ENTRY SIGN RENDERING D9  
58' x 1' 0"



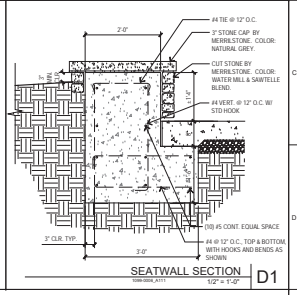
MOUNTAIN OUTLINE CONNECTOR D7  
8" x 1' 0"



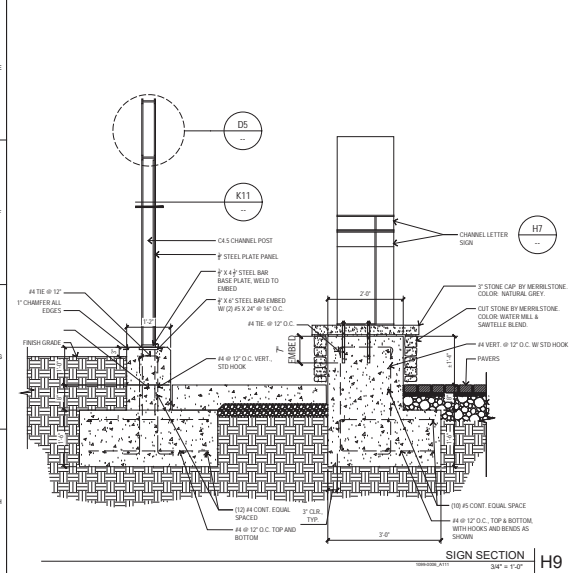
MOUNTAIN OUTLINE SECTION D5  
8" x 1' 0"



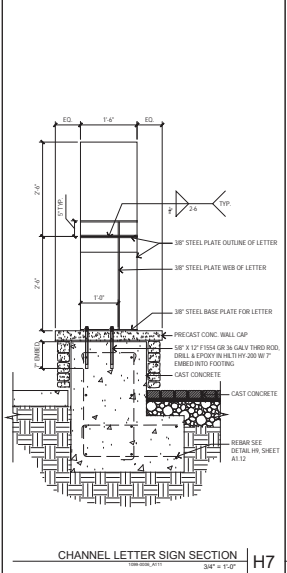
TERRACE RETAINING WALL SECTION D3  
12' x 1' 0"



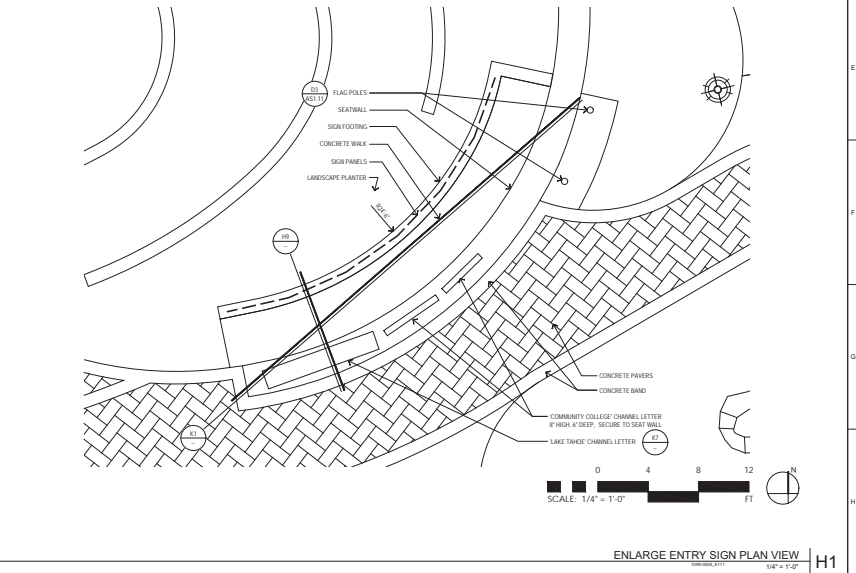
SEATWALL SECTION D1  
12' x 1' 0"



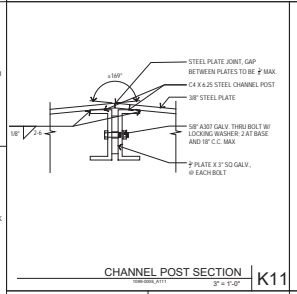
SIGN SECTION H9  
58' x 1' 0"



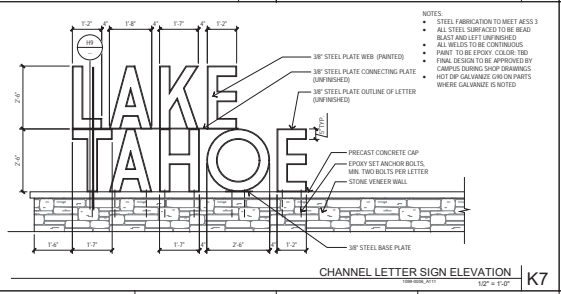
CHANNEL LETTER SIGN SECTION H7  
36" x 1' 0"



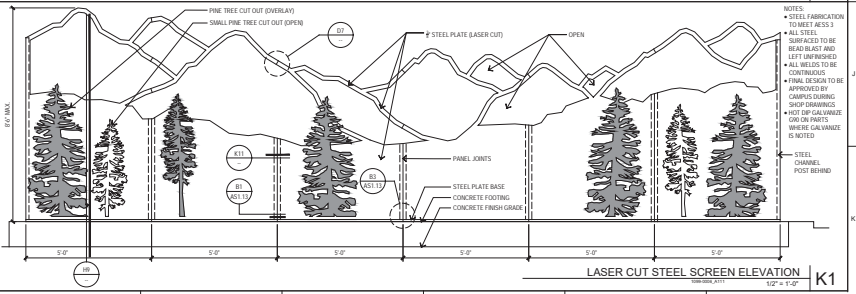
ENLARGE ENTRY SIGN PLAN VIEW H1  
58' x 1' 0"



CHANNEL POST SECTION K11  
8" x 1' 0"



CHANNEL LETTER SIGN ELEVATION K7  
58' x 1' 0"



LASER CUT STEEL SCREEN ELEVATION K1  
12' x 1' 0"



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**SITE DETAILS**

PROJECT NO: 1099-0006  
DATE: 09-10-2020

SHEET NO:

**AS1.12**

CONSTRUCTION DOCUMENTS



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### REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION

LAKE TAHOE COMMUNITY COLLEGE  
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NO. ISSUE DATE

- NUMERICAL PLANT QUANTITIES ARE FOR INFORMATION ONLY. IN CASE OF DISCREPANCY, VERIFY FROM PLAN.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO ANY EXCAVATION. CONTACT COMMON GROUND ALLIANCE (C.G.A.) @ 811. CALL AT LEAST 48 HOURS PRIOR TO PERFORMING EXCAVATION. CONTRACTOR SHALL REPAIR ANY DAMAGE TO UTILITIES CAUSED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
- SLOPE ALL PLANTING AREAS A MINIMUM OF 2% TO PROVIDE POSITIVE DRAINAGE.
- IMPORTED TOPSOIL SHALL BE TESTED BY AN APPROVED SOIL TESTING SERVICE AND TOPSOIL SHALL BE AMENDED PER THE RECOMMENDATIONS CONTAINED IN THAT SOIL REPORT. REFER TO SPECIFICATIONS FOR MORE INFORMATION ON SOILS TEST AND AMENDMENTS.
- TOP DRESS ALL SHRUB AND GROUNDCOVER AREAS, (NOT LAWN) WITH A 3" LAYER OF 2" SHREDED FIR BARK MULCH PER SPECIFICATIONS. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD BY THE LANDSCAPE ARCHITECT TO SUIT SITE REQUIREMENTS.
- SOIL CONDITIONS CAUSING THE RETENTION OF WATER IN PLANTING PITS FOR MORE THAN 2 HOURS SHALL BE CORRECTED PRIOR TO PLANTING TO PROVIDE POSITIVE DRAINAGE, AT NO ADDITIONAL COST TO THE OWNER.
- ALL PLANT MATERIALS SHALL COMPLY WITH SPECIFICATIONS OF ANSI Z60.1 "STANDARD FOR NURSERY STOCK"
- CONTRACTOR SHALL SECURE PLANT MATERIALS AS SPECIFIED IMMEDIATELY UPON BID AWARD. IF PLANT MATERIALS ARE NOT AVAILABLE, CONTACT LANDSCAPE ARCHITECT FOR APPROVAL OF SUBSTITUTIONS. NO SUBSTITUTIONS FOR PLANT MATERIAL WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
- INSTALL ROOT BARRIERS FOR ALL TREES LOCATED IN SQUARE PARKING LOT PLANTERS, LINEAR PARKING LOT PLANTERS, AND IN SQUARE SIDEWALK PLANTERS ONLY. REFER TO PLANTING DETAILS AND SPECIFICATIONS. FOR MORE INFORMATION.
- REFER TO PLANTING DETAILS AND SPECIFICATIONS FOR MORE INFORMATION.
- ALL ITEMS NOTED FOR REMOVAL SHALL BE OFFERED TO LCCO ON FIRST RIGHT OF REFUSAL BASIS.

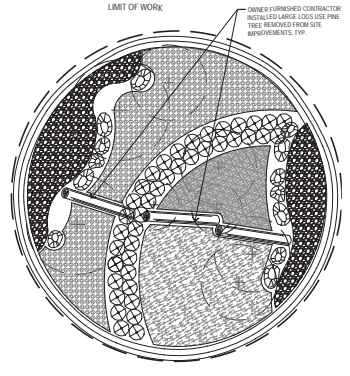
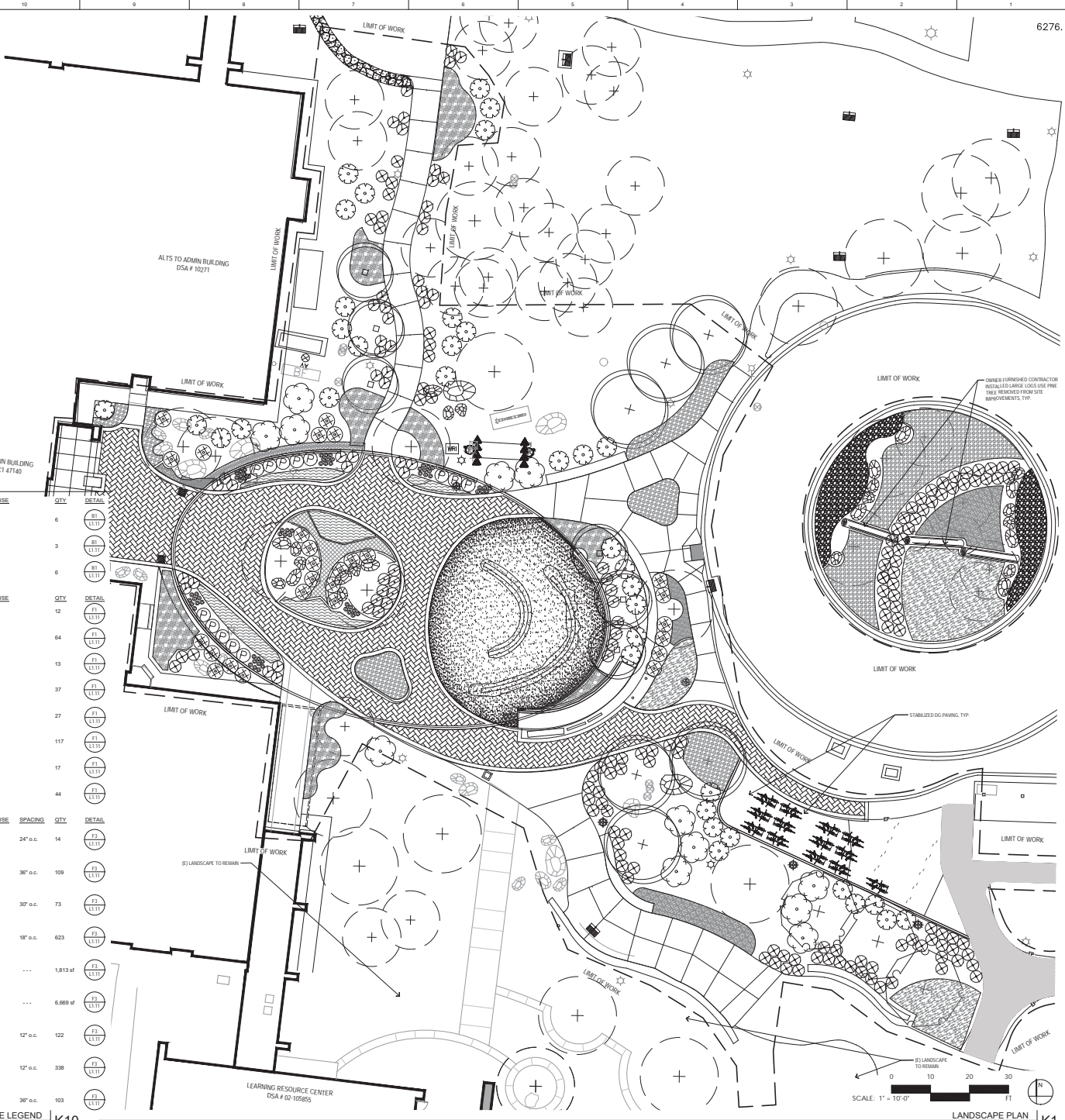
#### LANDSCAPE NOTES C11

- ALL BOULDERS EXIST ON-SITE. RELOCATE AND PLACE BOULDERS PER PLAN.

#### BOULDER NOTE D11

PLANT SCHEDULE						
TREES	BOTANICAL / COMMON NAME	CONT.	WATER USE	QTY	DETAIL	
+	<i>Abies magnifica</i> California Red Fir	5 gal	Med	6	(P) (11)	
+	<i>Calocedrus decurrens</i> Incense Cedar	15 gal	Med	3	(P) (11)	
+	<i>Picea pungens</i> 'Glauca' Colorado Blue Spruce	5 gal	Med	6	(P) (11)	
SHRUBS	BOTANICAL / COMMON NAME	CONT.	WATER USE	QTY	DETAIL	
+	<i>Amelanchier alnifolia</i> Snowberry	5 gal	Low	12	(P) (11)	
+	<i>Aquilegia formosa</i> Western Columbine	5 gal	Med	64	(P) (11)	
+	<i>Penstemon spectabilis</i> Showy Penstemon	5 gal	Low	13	(P) (11)	
+	<i>Rhamnus rubra</i> Sierra Coffeeberry	5 gal	Low	37	(P) (11)	
+	<i>Ribes nevadense</i> Sierra Currant	5 gal	Med	27	(P) (11)	
+	<i>Rosa woodii</i> Mountain Rose	5 gal	Low	117	(P) (11)	
+	<i>Spiraea densiflora</i> Sub-alpine Spiraea	5 gal	Med	17	(P) (11)	
+	<i>Wyethia mollis</i> Woody Mule Ears	5 gal	Low	44	(P) (11)	
GROUND COVERS	BOTANICAL / COMMON NAME	CONT.	WATER USE	SPACING	QTY	DETAIL
■	<i>Achillea millefolium</i> Common Yarrow	1 gal	Low	24" o.c.	14	(P) (11)
■	<i>Arctostaphylos uva-ursi</i> 'Woods Compact' Kornblauk	1 gal	Low	36" o.c.	109	(P) (11)
■	<i>Erigeron umbellatum</i> Sulfurflower Buckwheat	1 gal	Low	30" o.c.	73	(P) (11)
■	<i>Festuca idahoensis</i> Idaho Fescue	1 gal	Low	18" o.c.	623	(P) (11)
■	<i>Festuca</i> x 'Bolero Plus' Bolero Fescue	500	High	---	1,813 sf	(P) (11)
■	Hydroseed Native Grass and Wildflowers Comstock Seed	hydroseed	Very Low	---	6,869 sf	(P) (11)
■	<i>Sayrimum californicum</i> Yellow Eyed Grass	1 gal	Med	12" o.c.	122	(P) (11)
■	<i>Sayrimum idahoensis</i> Idaho Blue Eyed Grass	1 gal	Med	12" o.c.	338	(P) (11)
■	<i>Symphoricarpos mollis</i> Creeping Snowberry	1 gal	Low	36" o.c.	103	(P) (11)

#### LANDSCAPE LEGEND K10



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### LANDSCAPE PLAN

PROJECT NO: 1099-0006  
DATE: 09-10-2020

SHEET NO:

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PLANT SCHEDULE

GROUND COVER	BOTANICAL / COMMON NAME	CNT	WATER USE	SPACING	QTY	DETAIL
	Hydroseeded Native Grass and Wildflowers Corncock Seed	hydroseed	Very Low	...	6,699 sf	

LANDSCAPE LEGEND | F10



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LANDSCAPE  
PLAN

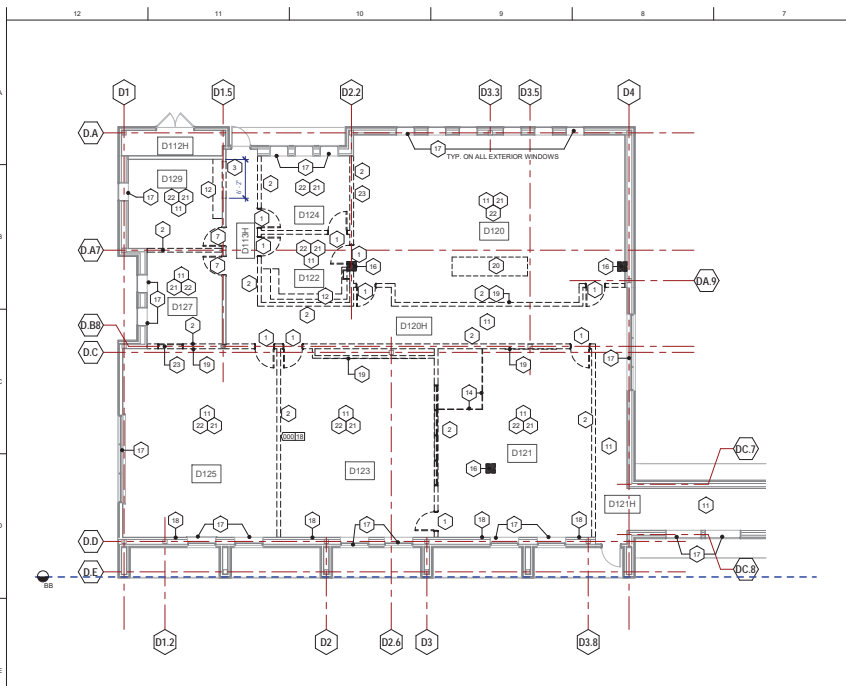
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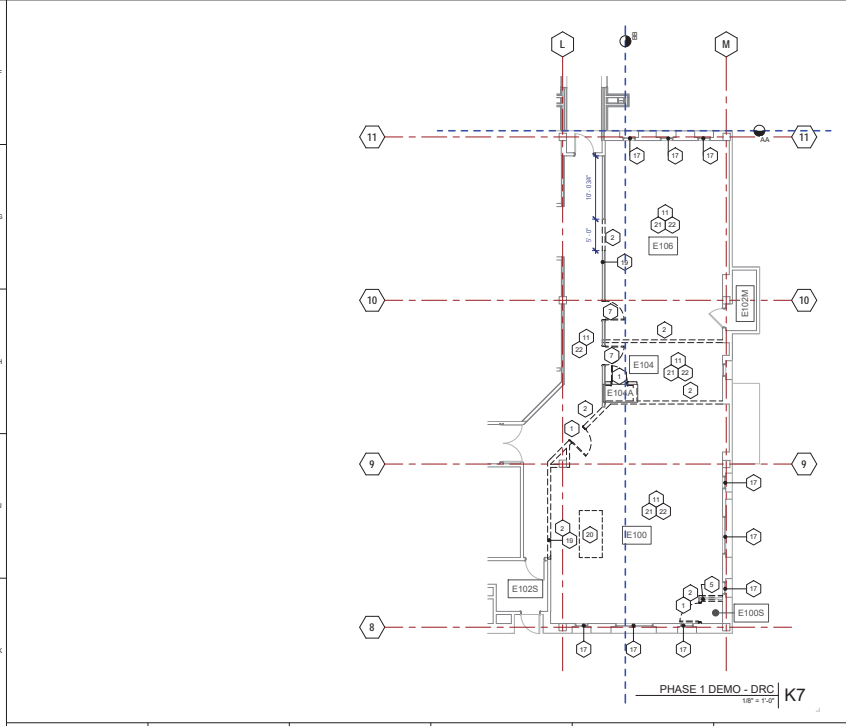
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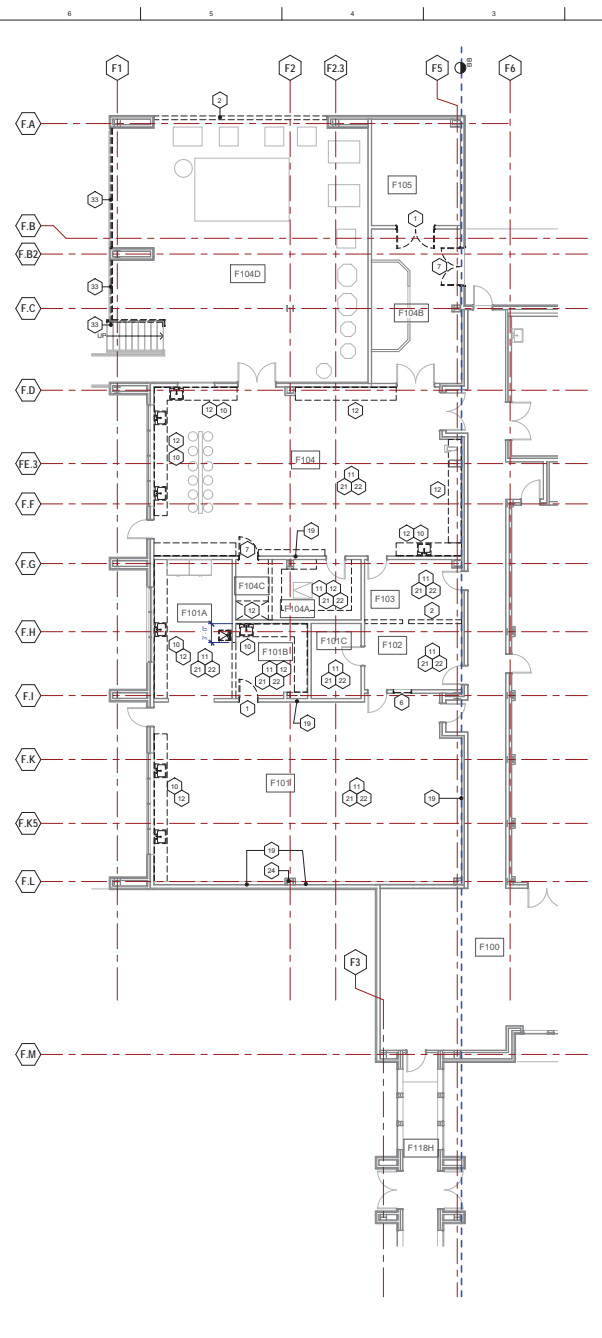
LANDSCAPE PLAN  
1" = 20'-0" K1



PHASE 1 DEMO - TECHNOLOGY WING  
1/8" = 1'-0" E7



PHASE 1 DEMO - DRC  
1/8" = 1'-0" K7



PHASE 1 DEMO - FINE ARTS  
1/8" = 1'-0" K2

— NEW WALL CONSTRUCTION  
- - - - - WALL OR OBJECT TO BE DEMOLISHED  
— EXISTING WALL OR OBJECT TO REMAIN

**DEMOLITION FLOOR PLAN GENERAL NOTES**

- OWNER RESERVES FIRST RIGHT OF REFUSAL ON ALL ITEMS TO BE REMOVED.
- ALL FURNITURE TO BE REMOVED BY OWNER UNLESS OTHERWISE NOTED.
- REMOVE ANY PROJECTIONS (I.E. WALLS, HAUBERGS) FROM WALLS AND CEILING.
- REMOVE FLOORING, WALL BASE AND ANY FLOOR-MOUNTED OBJECTS SUCH I.E. DOORSTOPS, ETC. PATCH FIRST 1" OF WALL WHERE BASE IS REMOVED.
- REMOVE WINDOW COVERINGS.
- REMOVE ALL EXISTING WIRE MISC WHERE OCCURS. PATCH WALL AS NEEDED.
- ANY UNDESIRABLE PENETRATIONS IN CEILING AND WALL TO BE PATCH BY CONTRACTOR. COORDINATE PENETRATIONS WITH OWNER.
- REMOVE ALL WALL MOUNTED ITEMS IN PROJECT AREA.
- REMOVAL OF ALL FURNISHING AND EQUIPMENT. MECHANICALLY FASTENED TO THE WALLS AND CEILING ARE THE SCOPE OF THE CONTRACTOR. DISTRICT RESERVES THE RIGHT OF FIRST REFUSAL FOR ALL ITEMS REMOVED.

**DEMOLITION KEYNOTES**

- REMOVE EXISTING DOOR, HARDWARE AND FRAME.
- REMOVE EXISTING WALL, WALL FINISH & FRAMING MEMBERS.
- REMOVE EXISTING INTERIOR WALL TO EXTENT OF NEW DOOR OR WINDOW OPENING. SEE PLAN.
- REMOVE FLOOR HATCH; INFILL FLOOR SLAB.
- INFILL FLOOR SLAB.
- REMOVE EXISTING INTERIOR WINDOW, INFILL AND PATCH WALL TO MATCH EXISTING.
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- REMOVE EXISTING DRINKING FOUNTAIN, PREP FOR NEW FIXTURE.
- REMOVE EXISTING RAISED FLOOR, RAMP AND RAILINGS.
- REMOVE ALL EXISTING PLUMBING FIXTURES & CAP ALL PIPING.
- REMOVE FLOOR FINISH AND WALL BASE. PREPARE SLAB FOR NEW FINISH.
- REMOVE EXISTING CASEWORK AND COUNTERTOP.
- REMOVE SHEETROCK AND FRAMING MEMBERS DOWN TO MAIN STRUCTURAL MEMBERS. HEADER OFF AS NEEDED.
- REMOVE ALL PARTITIONS, HARDWARE AND ASSOCIATED ACCESSORIES.
- REMOVE ALL LAB CASEWORK AND CAP ALL UTILITIES. EXISTING CASEWORK TO BE SALVAGED AND REUSED BY COLLEGE IN SWING SPACE.
- REMOVE FLOOR DECK AND REINFORCE OPENING. FOR REPLACEMENT OF NEW STRUCTURAL COLUMN. SEE STRUCTURAL.
- PROTECT WOOD TRIM AROUND WINDOW. PREPARE WOOD TRIM FOR NEW FINISH. PROTECT HEATER AND VENT WHERE OCCURS. REMOVE ALL WINDOW TREATMENTS AND SALVAGE FOR FUTURE USE.
- REMOVE EXISTING WALL FINISH. PREPARE WALL FOR NEW FINISH.
- REMOVE WHITE BOARD, TACK BOARDS, PROJECTOR SCREENS AND ANY WALL MOUNTED EQUIPMENT.
- REMOVE INSTRUCTOR'S DESK, AND CAP ALL UTILITIES, WHERE OCCURS.
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- KEEP GYPSUM WALL BOARD AROUND COLUMN. PROTECT FROM DAMAGE.
- REMOVE ANY EXISTING FIRE EXTINGUISHER AND SALVAGE FOR FUTURE USE.
- EXISTING WINDOW TO REMAIN. PROTECT FROM DAMAGE.
- REMOVE EQUIPMENT PAD.
- REMOVE AC UNIT IN WINDOW.
- REMOVE, PROTECT, AND REINSTALL SHELVING AFTER PAINTING WALLS.
- REMOVE EXISTING DRINKING FOUNTAIN. CAP ALL PIPING.
- PROTECT WOOD VENEER WALL AND SOFFIT DURING CONSTRUCTION.
- PROTECT EXISTING FLOOR FINISH DURING CONSTRUCTION.
- REMOVE RAILING AND SUPPORT.



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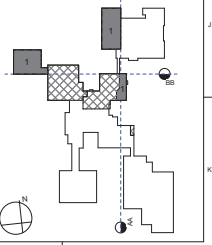
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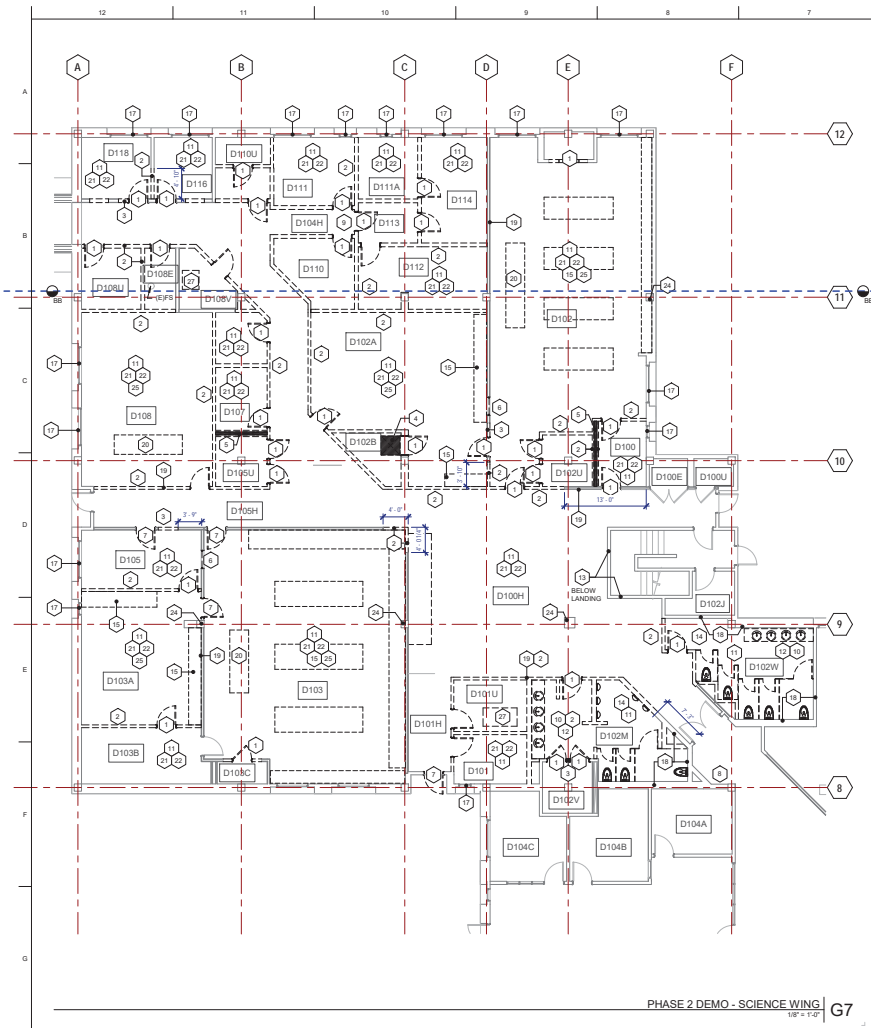
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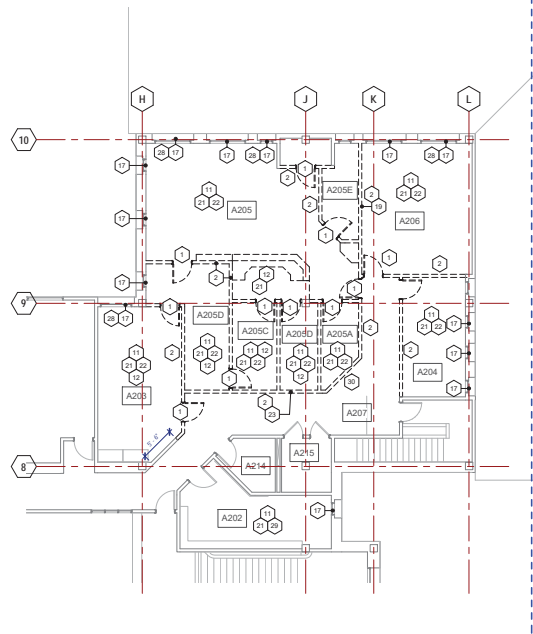
**AD2.11**

CONSTRUCTION DOCUMENTS





PHASE 2 DEMO - SCIENCE WING  
1/8" = 1'-0" G7



PHASE 2 DEMO - SECOND FLOOR OFFICES  
1/8" = 1'-0" G3

NEW WALL CONSTRUCTION  
WALL OR OBJECT TO BE DEMOLISHED  
EXISTING WALL OR OBJECT TO REMAIN

- DEMOLITION FLOOR PLAN GENERAL NOTES**
- OWNER RESERVES FIRST RIGHT OF REFUSAL ON ALL ITEMS TO BE REMOVED.
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  - REMOVE ANY PROJECTIONS (I.E. WALLS, HANGERS) FROM WALLS AND CEILING.
  - REMOVE FLOORING, WALL BASE AND ANY FLOOR-MOUNTED OBJECTS SUCH I.E. DOORSTOPS, ETC. PATCH FIRST F' OF WALL WHERE BASE IS REMOVED.
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  - REMOVE ALL EXISTING WIRE/MOLD WHERE OCCURS. PATCH WALL AS NEEDED.
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  - REMOVE ALL WALL MOUNTED ITEMS IN PROJECT AREA.
  - REMOVAL OF ALL FURNISHING AND EQUIPMENT MECHANICALLY FASTENED TO THE WALLS AND CEILING ARE THE SCOPE OF THE CONTRACTOR. DISTRICT RESERVES THE RIGHT OF FIRST REFUSAL FOR ALL ITEMS REMOVED.
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  - REMOVE EXISTING DRINKING FOUNTAIN, CAP ALL PIPING.
  - PROTECT WOOD VENEER WALL AND SOFFIT DURING CONSTRUCTION.
  - PROTECT EXISTING FLOOR FINISH DURING CONSTRUCTION.
  - REMOVE RAILING AND SUPPORT.

DSA FILE #9-C1  
DSA APP. #02-118557



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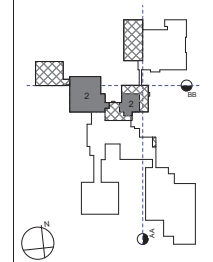
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**PHASE 2A - DEMOLITION PLANS**

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DATE: 09-10-2020

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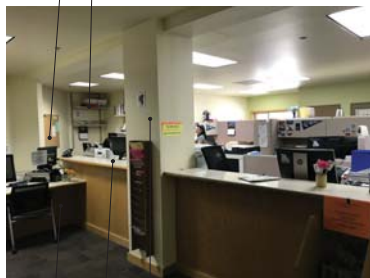
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- 1 REMOVE EXISTING DOOR, HARDWARE AND FRAME
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- 11 PROTECT WOOD VENEER WALL AND SOFFIT DURING CONSTRUCTION

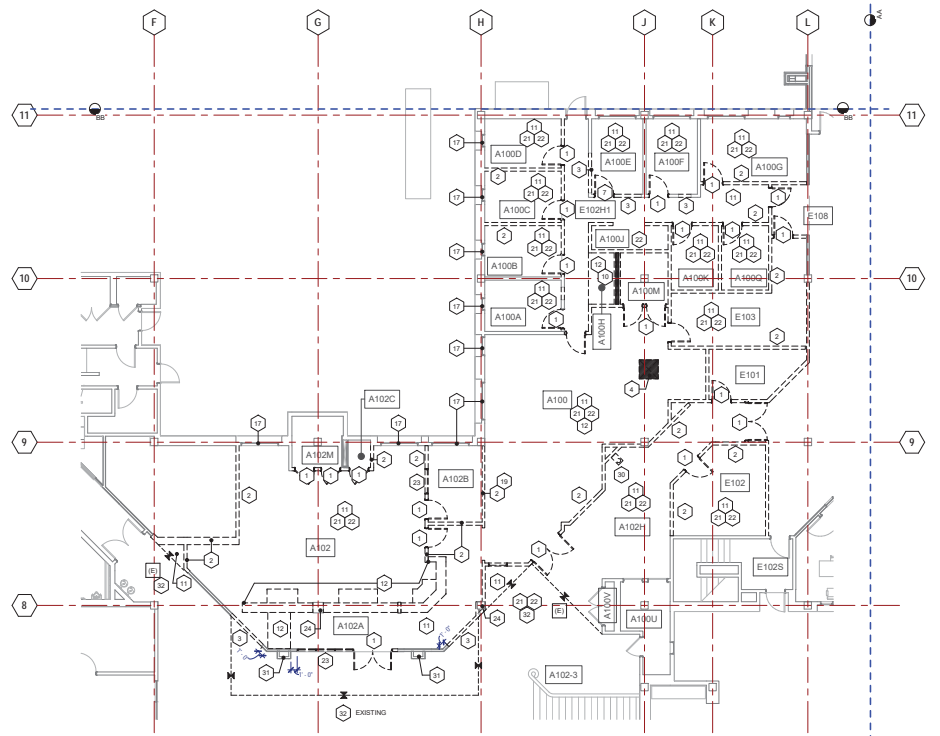
ENTRY AT ONE STOP



- 22 REMOVE ALL WALLMOUNTED CASEWORK AND ROOM ACCESSORIES

- 24 KEEP GYPSUM WALL BOARD AROUND COLUMN. PROTECT FROM DAMAGE
- 24 REMOVE EXISTING CASEWORK AND COUNTERTOP

DEMO PHOTOS - PHASE 2B 1/4" = 1'-0"



PHASE 3 DEMO - ADMIN ONE STOP | F3 1/8" = 1'-0"

- NEW WALL CONSTRUCTION
- - - - - WALL OR OBJECT TO BE DEMOLISHED
- EXISTING WALL OR OBJECT TO REMAIN

DEMOLITION FLOOR PLAN GENERAL NOTES

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8. REMOVE ALL WALL MOUNTED ITEMS IN PROJECT AREA.
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DEMOLITION KEYNOTES

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- 28 REMOVE EXISTING DRINKING FOUNTAIN. CAP ALL PIPING.
- 21 PROTECT WOOD VENEER WALL AND SOFFIT DURING CONSTRUCTION
- 21 PROTECT EXISTING FLOOR FINISH DURING CONSTRUCTION.
- 21 REMOVE RAILING AND SUPPORT



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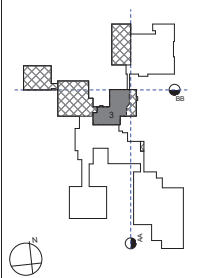
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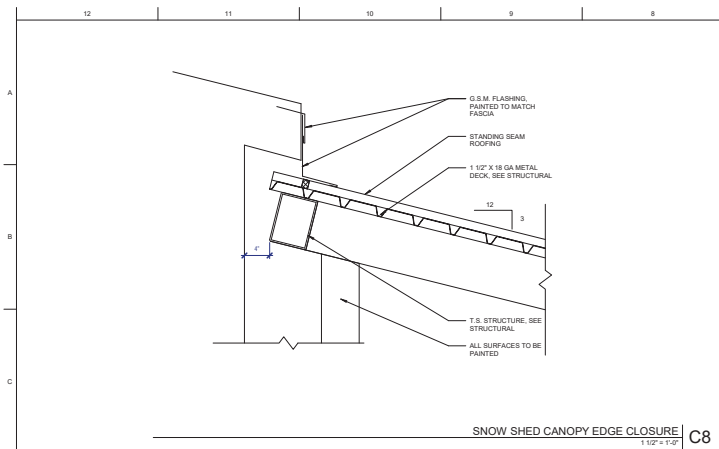
PHASE 2B - DEMOLITION PLANS

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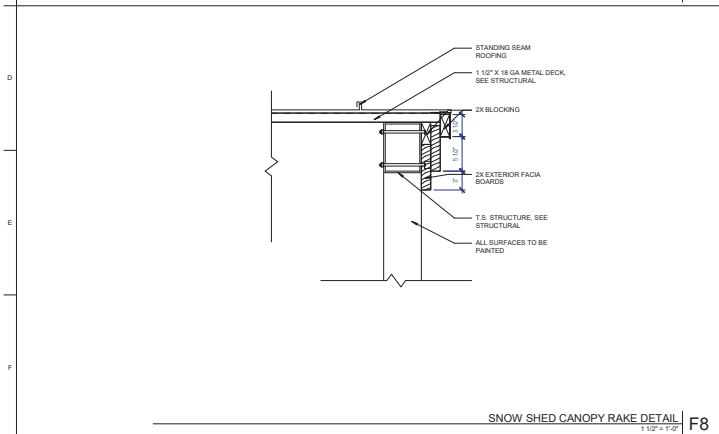
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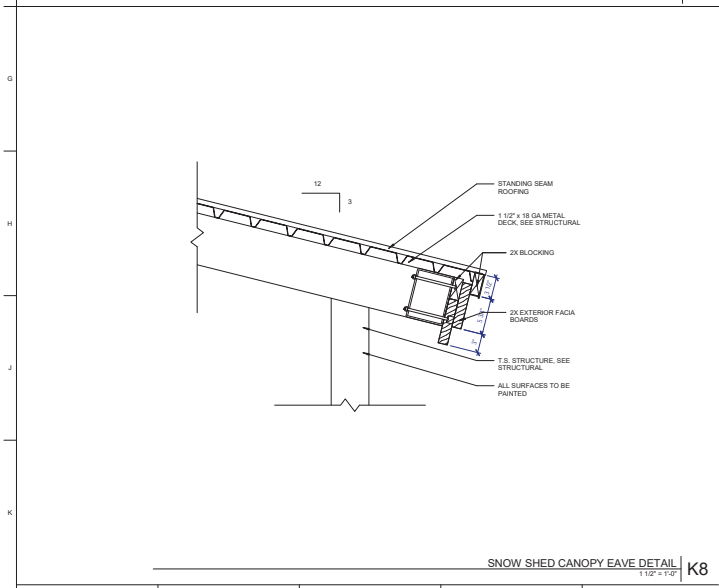




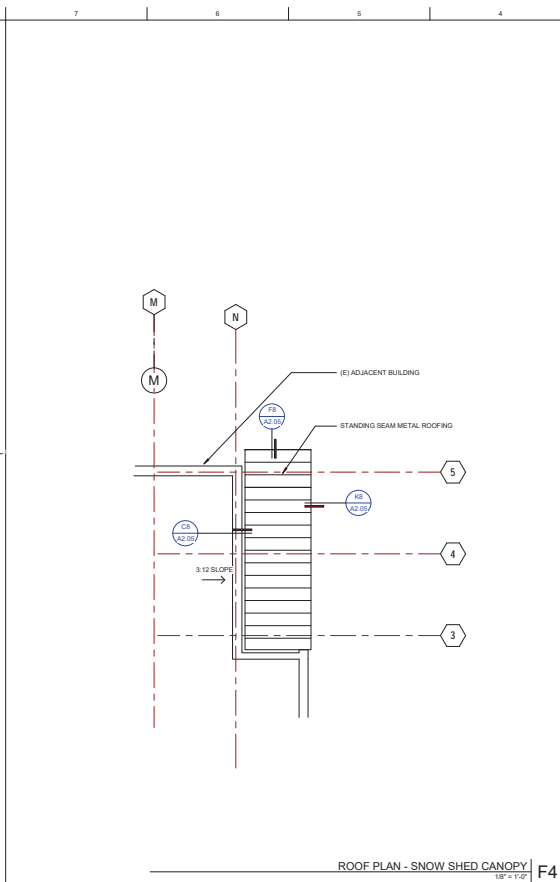
SNOW SHED CANOPY EDGE CLOSURE | C8  
1/12" = 1'-0"



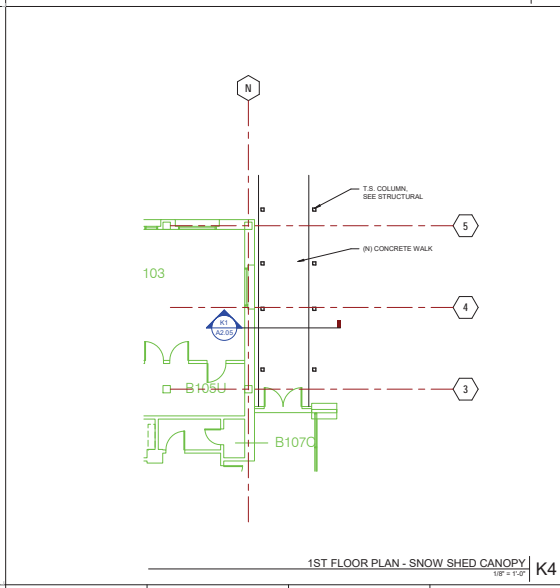
SNOW SHED CANOPY RAKE DETAIL | F8  
1/12" = 1'-0"



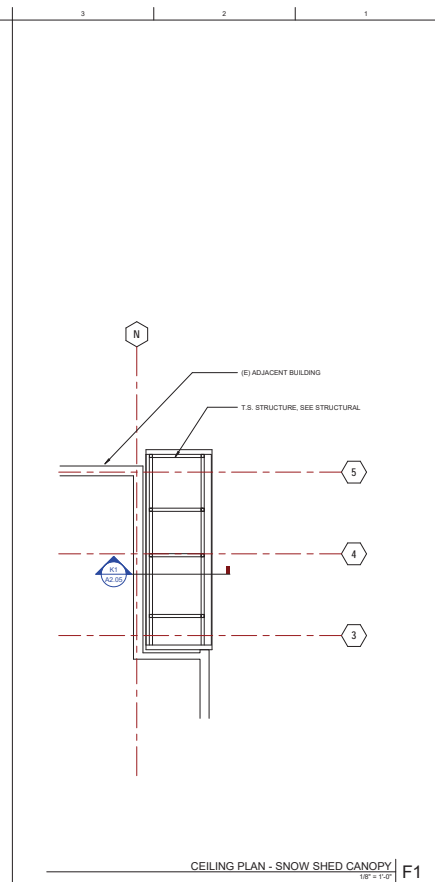
SNOW SHED CANOPY EAVE DETAIL | K8  
1/12" = 1'-0"



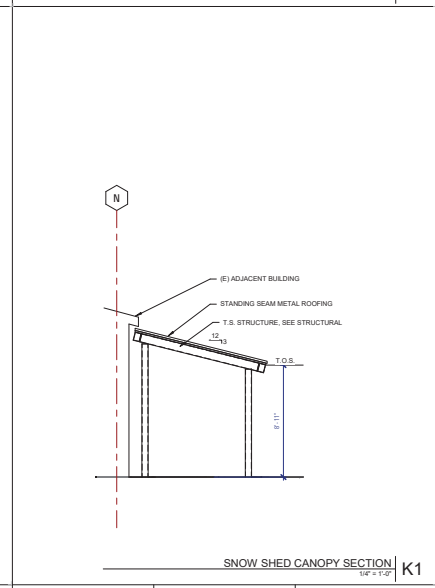
ROOF PLAN - SNOW SHED CANOPY | F4  
1/8" = 1'-0"



1ST FLOOR PLAN - SNOW SHED CANOPY | K4  
1/8" = 1'-0"



CEILING PLAN - SNOW SHED CANOPY | F1  
1/8" = 1'-0"



SNOW SHED CANOPY SECTION | K1  
1/8" = 1'-0"

DSA FILE #9-C1  
DSA APP. #02-118557

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## REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION LAKE TAHOE COMMUNITY COLLEGE

One College Drive South Lake Tahoe, CA 96150

NO. ISSUE DATE



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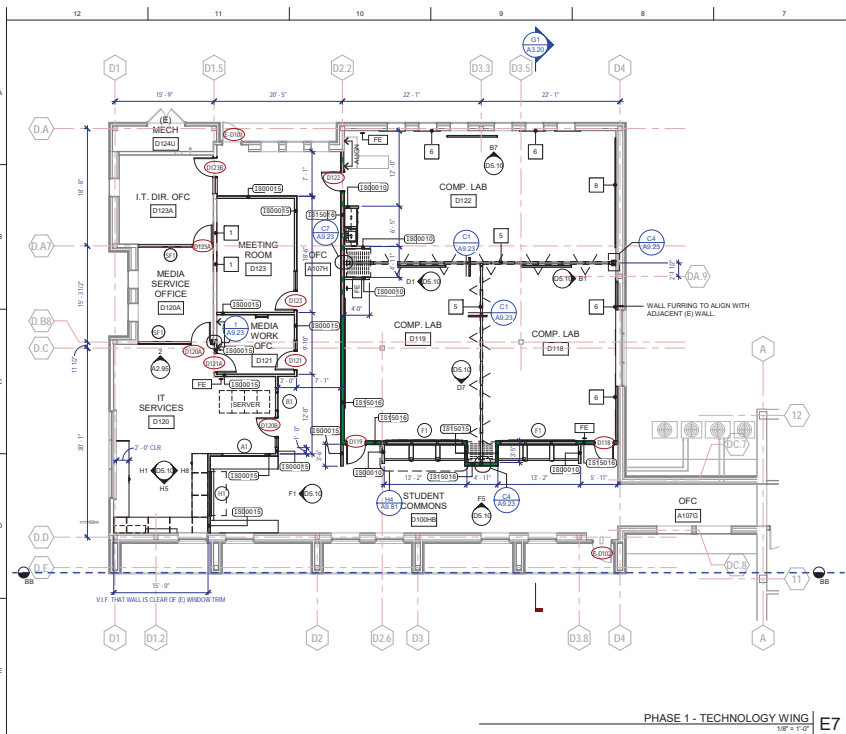
ALTERNATE #B-6

### SNOW SHED CANOPY

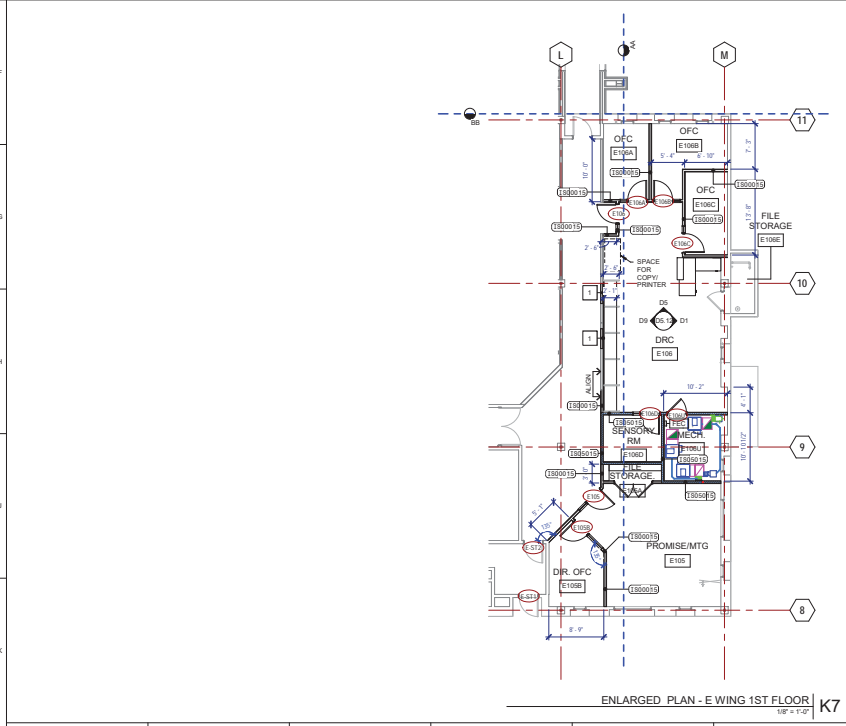
PROJECT NO: 1099-0006  
DATE: 09-10-2020

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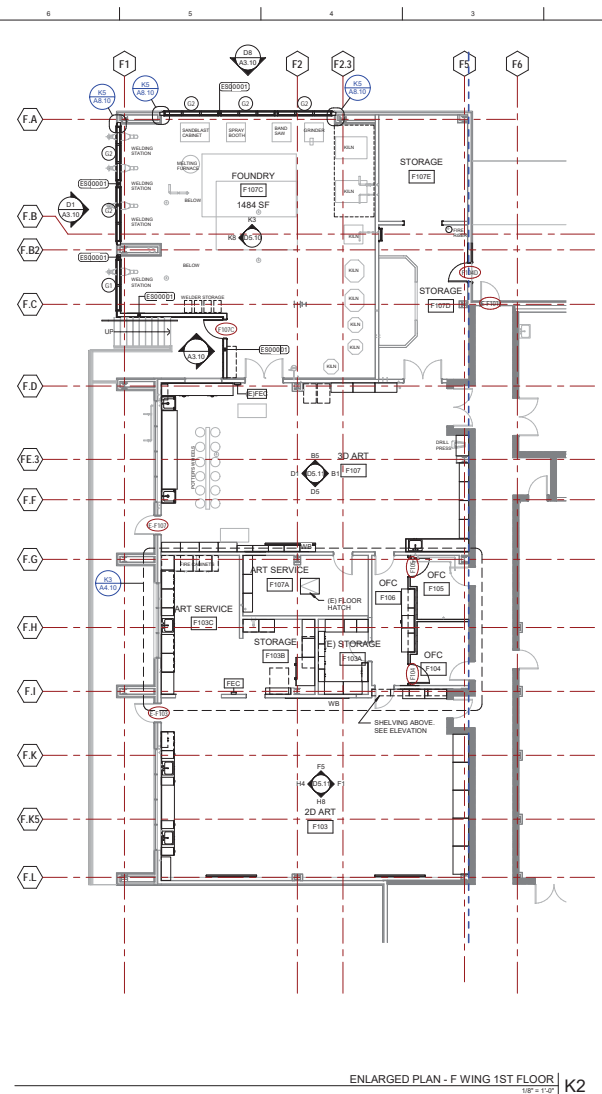
# A2.05



PHASE 1 - TECHNOLOGY WING | E7  
1/8" = 1'-0"



ENLARGED PLAN - E WING 1ST FLOOR | K7  
1/8" = 1'-0"



ENLARGED PLAN - F WING 1ST FLOOR | K2  
1/8" = 1'-0"

**FLOOR PLAN GENERAL NOTES**

- DIMENSIONS NOTED AS "CLEAR (CLR)" ARE TO BE ASSURED AT THE OUTERMOST POINT OF WALL-FINISH TRIM, CASEWORK OR OTHER ITEMS ADJACENT TO THE "CLEAR" AREA.
- REFER TO SHEET 00-20 FOR TYPICAL MOUNTING HEIGHTS, CLEARANCES AND OTHER ACCESSIBLE REQUIREMENTS.
- WHERE NEW WALL TYPE DOES NOT ALIGN WITH ADJACENT EXISTING WALL, ADD A LAYER OF APPROPRIATELY THICK GYPSUM BOARD TO ENSURE WALL FINISH IS FLUSH AND CONTINUOUS.
- ALL DOORS SHALL BE 6" MINIMUM FROM ADJACENT WALL U.O.A.
- PROVIDE GLASS MATH-FACED GYPSUM BOARD OR BACKER BOARD AT ENTIRE WALL WHERE PLUMBING FEATURES OCCUR.
- REFER TO FINISH PLAN & INTERIOR ELEVATIONS FOR FINISH AND MATERIAL CALL-OUTS.
- SEE EGRESS PLAN FOR SEM-RECESSED FIRE EXTINGUISHER LOCATIONS.
- MOUNT DOOR STOPS ON DOORS WHEN NO WALL IS AVAILABLE. PROVIDE BACKING IN WALLS AT ALL DOOR STOPS.
- PROVIDE SMOKE ALARMS PER STATE AND LOCAL REQUIREMENTS.
- PROVIDE VISIBLE ALARMS FOR THE HEARING IMPAIRED PER STATE AND LOCAL REQUIREMENTS.
- SEE LAB DRAWINGS FOR ADDITIONAL INFORMATION ON LABS & LAB SERVICE SPACE.
- ALL INFILL WALLS TO MATCH EXISTING ADJACENT WALL.
- MAINTAIN EXISTING FIRE PROTECTION AROUND EXISTING COLUMNS.

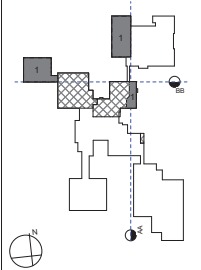
**FLOOR PLAN KEYNOTES**

- INFLILL WALL FINISH/TEXTURE TO MATCH ADJACENT EXISTING WALL.
- PROVIDE NEW CASEWORK, COUNTERTOP AND SINK.
- MAINTAIN EXISTING FIRE PROTECTION AROUND COLUMNS. PATCH AND REPAIR DAMAGED SURFACES TO LIKE-NEW CONDITION.
- CHAINLINK FENCE AND GATE.
- MOVABLE PARTITION WALL WITH WHITE BOARD SURFACE EA. SIDE.
- WHITE BOARD HANG ON BY-PASS DOOR TRACKS. SEE DETAIL XXXXX.
- PROJECTION SCREEN.
- FLAT PANEL TV.
- PROVIDE POWER FOR INTERACTIVE SANDBOX.
- EXISTING FIRE RISER.
- 4"X REINFORCED CONCRETE HOUSEKEEPING PAD.

- (E)FEC EXISTING FIRE EXTINGUISHER CABINET
- FE FIRE EXTINGUISHER PORTABLE
- FEC FIRE EXTINGUISHER CABINET
- NEW STC RATED WALL
- NEW 1HR RATED WALL
- NEW WALL CONSTRUCTION
- EXISTING WALL OR OBJECT TO REMAIN
- (E) 1 HR RATED WALL
- (E) 2 HR RATED WALL

- WALL TAG LEGEND**
- STC RATING
  - IDENTIFIER, NUMBER DESIGNATION
  - FIRE RATING, 1HR, 2HR, ETC.
  - MATERIAL: "S" = STEEL, "W" = WOOD
  - LOCATION: "I" = INTERIOR, "E" = EXTERIOR

SEE SHEET AS SH FOR WALL TYPES AND ASSEMBLIES



DSA FILE #9-C1  
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**REMODEL FOR EFFICIENCY & SCIENCE MODERNIZATION  
LAKE TAHOE COMMUNITY COLLEGE**

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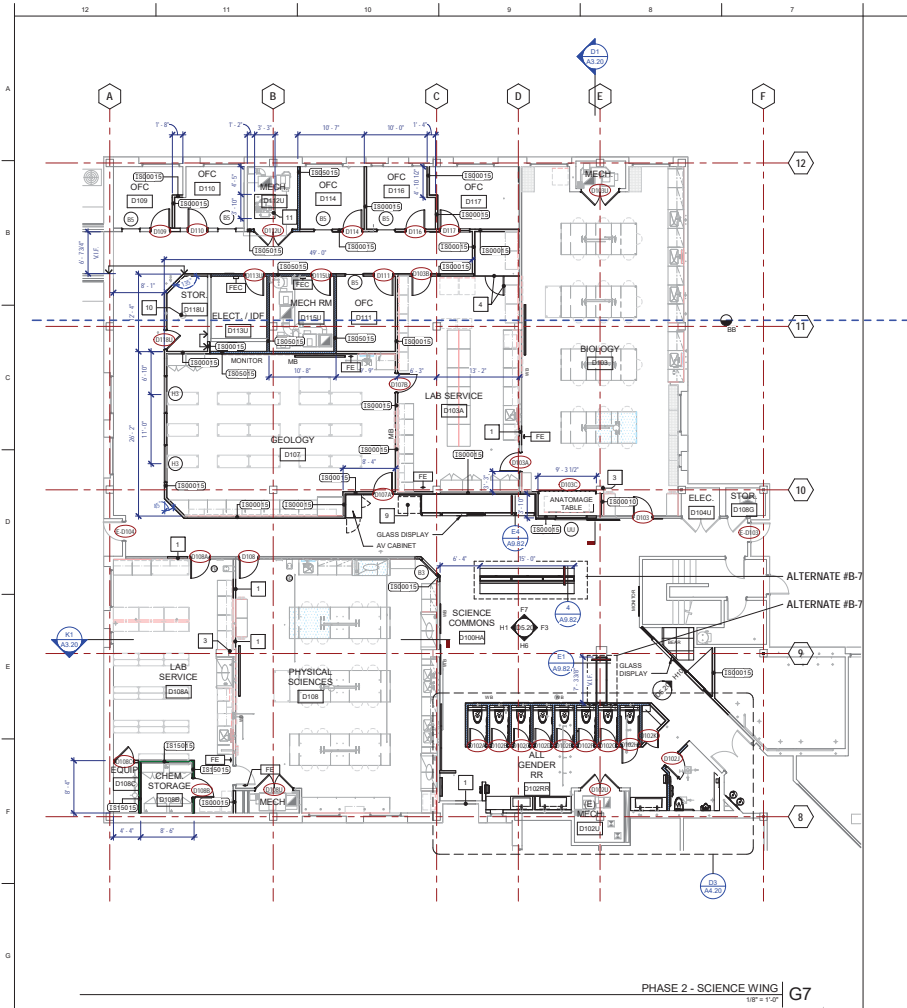
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**PHASE 1 FLOOR PLANS**

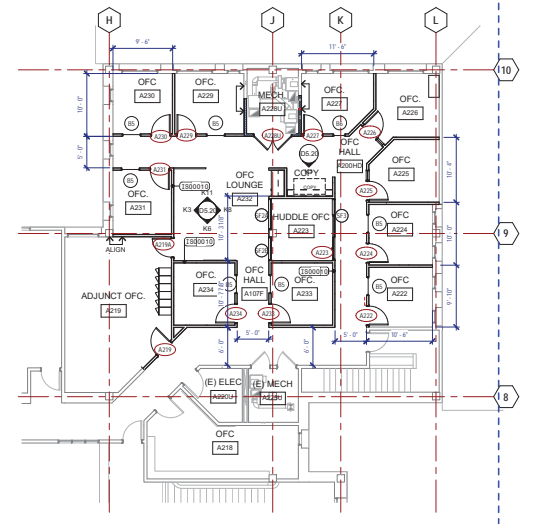
PROJECT NO: 1099-0006  
DATE: 09-10-2020

SHEET NO:

**A2.11**



PHASE 2 - SCIENCE WING  
1/8" = 1'-0" G7



PHASE 2 - SECOND FLOOR ADMIN OFFICES  
1/8" = 1'-0" G2

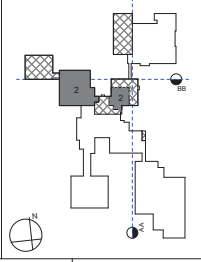
- FLOOR PLAN GENERAL NOTES**
- DIMENSIONS NOTED AS "CLEAR CLIP" ARE TO BE ASSUMED AT THE OUTERMOST POINT OF WALL FINISH. THIS CASEWORK OR OTHER ITEMS ADJACENT TO THE "CLEAR AREA".
  - REFER TO SHEET G0-20 FOR TYPICAL MOUNTING HEIGHTS, CLEARANCES AND OTHER ACCESSIBLE REQUIREMENTS.
  - WHERE NEW WALL TYPE DOES NOT ALIGN WITH ADJACENT EXISTING WALL, ADD A LAYER OF APPROPRIATELY THICK GYPSUM BOARD TO ENSURE WALL FINISH IS FLUSH AND CONTINUOUS.
  - ALL DOORS SHALL BE 4" MINIMUM FROM ADJACENT WALL U.O.A.
  - PROVIDE GLASS-MAT FACED GYPSUM BOARD OR BACKER BOARD AT ENTRY WALL WHERE PLUMBING FIXTURES OCCUR.
  - REFER TO FINISH PLAN & INTERIOR ELEVATIONS FOR FINISH AND MATERIAL CALL-OUTS
  - SEE EGRES PLAN FOR SEMI-RECESSED FIRE EXTINGUISHER LOCATIONS.
  - MOUNT DOOR STOPS ON DOORS WHEN NO WALL IS AVAILABLE. PROVIDE BRACKIN W WALLS AT ALL DOOR STOPS.
  - PROVIDE SMOKE ALARMS PER STATE AND LOCAL REQUIREMENTS.
  - PROVIDE VISIBLE ALARMS FOR THE HEARING IMPAIRED PER STATE AND LOCAL REQUIREMENTS.
  - SEE LAB DRAWINGS FOR ADDITIONAL INFORMATION ON LABS & LAB-SERVICES SPACE.
  - ALL INFILL WALLS TO MATCH EXISTING ADJACENT WALL.
  - MAINTAIN EXISTING FIRE PROTECTION AROUND EXISTING COLUMNS.

- FLOOR PLAN KEYNOTES**
- INFL WALL FINISH TEXTURE TO MATCH ADJACENT EXISTING WALL.
  - PROVIDE NEW CASEWORK, COUNTERTOP AND SINK.
  - MAINTAIN EXISTING FIRE PROTECTION AROUND COLUMN, PATCH AND REPAIR DAMAGED SURFACES TO LIKE-NEW CONDITION.
  - CHAINLINK FENCE AND GATE.
  - MOVABLE PARTITION WALL WITH WHITE BOARD SURFACE EA. SIDE.
  - WHITE BOARD MOUNTING ON IN-DOOR DOOR TRACKS. SEE DETAIL XXXXXX.
  - PROJECTION SCREEN.
  - FLAT PANEL TV.
  - PROVIDE POWER FOR INTERACTIVE SANDBOX.
  - EXISTING FIRE RISER.
  - 4"X4" REINFORCED CONCRETE HOUSEKEEPING PAD.

- WALL TAG LEGEND**
- EXISTING FIRE EXTINGUISHER CABINET
  - FIRE EXTINGUISHER PORTABLE
  - FIRE EXTINGUISHER CABINET
  - NEW STC RATED WALL
  - NEW 1HR RATED WALL
  - NEW WALL CONSTRUCTION
  - EXISTING(E) WALL OR OBJECT TO REMAIN
  - (E) 1HR RATED WALL
  - (E) 2 HR RATED WALL

- WALL TAG LEGEND**
- STC RATING
  - IDENTIFIER, NUMBER DESIGNATION
  - FIRE RATING: 1 HR, 2 HR, ETC.
  - MATERIAL: "S" = STEEL, "W" = WOOD
  - LOCATION: "I" = INTERIOR, "E" = EXTERIOR

SEE SHEET A2-01 FOR WALL TYPES AND ASSEMBLIES



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LAKE TAHOE COMMUNITY COLLEGE

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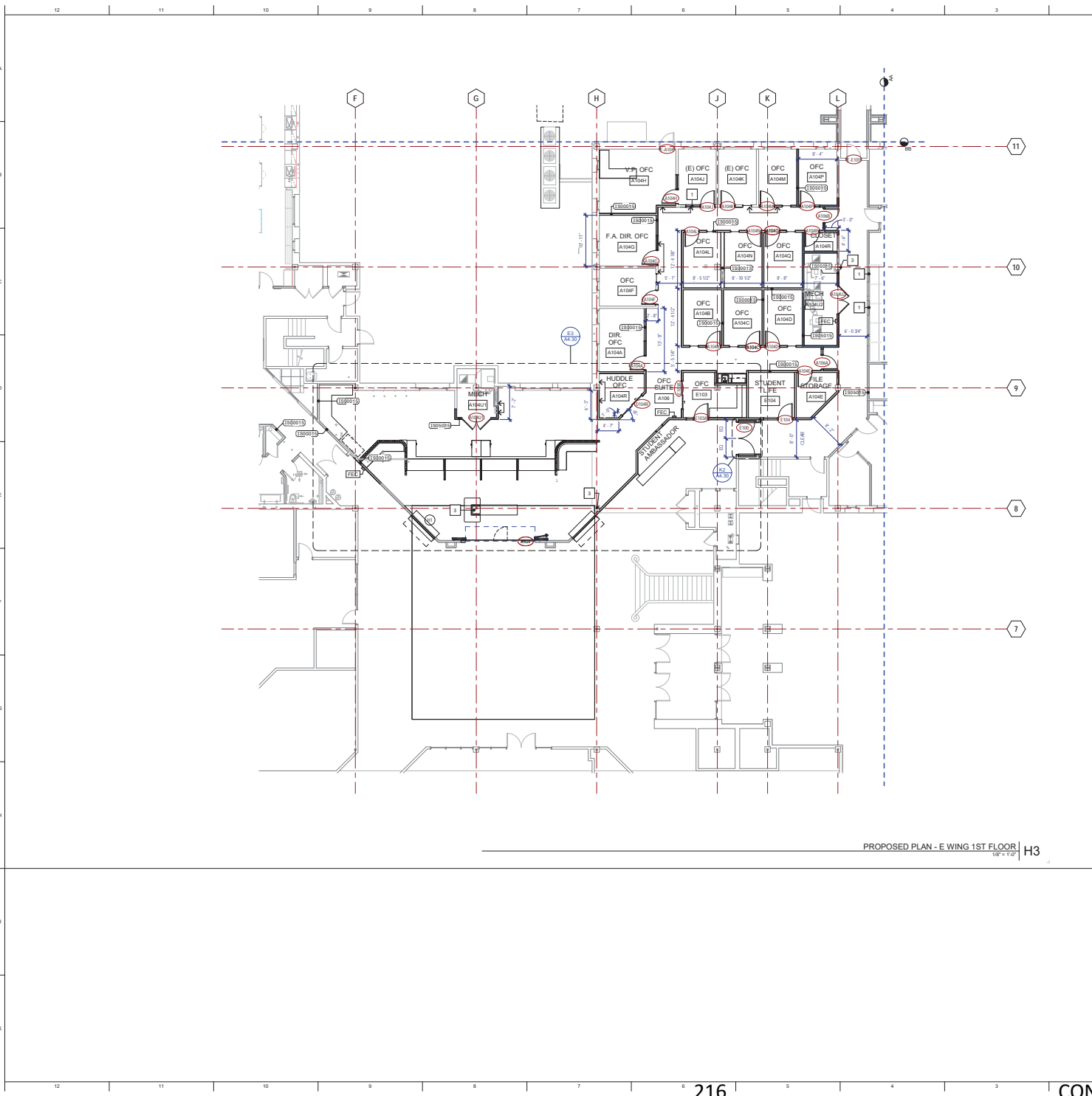
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**PHASE 2A FLOOR PLANS**

PROJECT NO: 1099-0006  
DATE: 09-10-2020

SHEET NO:

**A2.21**



PROPOSED PLAN - E WING 1ST FLOOR  
10'-0" = 1" H3

- FLOOR PLAN GENERAL NOTES**
1. DIMENSIONS NOTED AS "CLEAR CLS" ARE TO BE ASSUMED AT THE OUTERMOST POINT OF WALL FINISH TRIM, CASEWORK OR OTHER ITEMS ADJACENT TO THE "CLEAR" AREA.
  2. REFER TO SHEET 00.20 FOR TYPICAL MOUNTING HEIGHTS, CLEARANCES AND OTHER ACCESSIBLE REQUIREMENTS.
  3. WHERE NEW WALL TYPE DOES NOT ALIGN WITH ADJACENT EXISTING WALL, ADD A LAYER OF APPROPRIATELY THICK GYPSUM BOARD TO ENSURE WALL FINISH IS FLUSH AND CONTINUOUS.
  4. ALL DOORS SHALL BE 4" MINIMUM FROM ADJACENT WALL U.O.N.
  5. PROVIDE GLASS-MAT-FACED GYPSUM BOARD OR BACKER BOARD AT ENTIRE WALL WHERE PLUMBING FIXTURES OCCUR.
  6. REFER TO FINISH PLAN INTERIOR ELEVATIONS FOR FINISH AND MATERIAL CALL-OUTS.
  7. SEE EGRESS PLAN FOR SEMI-RECESSED FIRE EXTINGUISHER LOCATIONS.
  8. MOUNT DOOR STOPS ON DOORS WHEN NO WALL IS AVAILABLE. PROVIDE BACKING W WALLS AT ALL DOOR STOPS.
  9. PROVIDE SMOKE ALARMS PER STATE AND LOCAL REQUIREMENTS.
  10. PROVIDE VISIBLE ALARMS FOR THE HEARING IMPAIRED PER STATE AND LOCAL REQUIREMENTS.
  11. SEE LAB DRAWINGS FOR ADDITIONAL INFORMATION ON LAB AND LAB SERVICES SPACE.
  12. ALL INFILL WALLS TO MATCH EXISTING ADJACENT WALL.
  13. MAINTAIN EXISTING FIRE PROTECTION AROUND EXISTING COLUMNS.
- FLOOR PLAN KEYNOTES**
- 1 INFILL WALL FINISH/TEXTURE TO MATCH ADJACENT EXISTING WALL
  - 2 PROVIDE NEW CASEWORK, COUNTERTOP AND SINK. MAINTAIN EXISTING FIRE PROTECTION AROUND COLUMN. PATCH AND REPAIR DAMAGED SURFACES TO LIKE-NEW CONDITION.
  - 3 CHAINLINK FENCE AND GATE
  - 4 MOVABLE PARTITION WALL WITH WHITE BOARD SURFACE EA SIDE
  - 5 WHITE BOARD HUNG ON BY-PASS DOOR TRACKS. SEE DETAIL XXXXX
  - 6 PROJECTION SCREEN
  - 7 FLAT PANEL TV
  - 8 PROVIDE POWER FOR INTERACTIVE SANDBOX
  - 9 EXISTING FIRE RISER
  - 10 4" REINFORCED CONCRETE HOUSEKEEPING PAD
- WALL TAG LEGEND**
- (E)FEC EXISTING FIRE EXTINGUISHER CABINET  
 FE FIRE EXTINGUISHER PORTABLE  
 FEC FIRE EXTINGUISHER CABINET  
 NEW STC RATED WALL  
 NEW 1HR RATED WALL  
 NEW WALL CONSTRUCTION  
 (E) 1HR RATED WALL  
 (E) 2HR RATED WALL
- WALL TAG LEGEND**
- STC RATING  
 (E)FEC IDENTIFIER NUMBER DESIGNATION  
 FIRE RATING: 1 HR, 2 HR, ETC.  
 MATERIAL: "S" = STEEL, "W" = WOOD  
 LOCATION: "I" = INTERIOR, "E" = EXTERIOR
- SEE SHEET A9.01 FOR WALL TYPES AND ASSEMBLIES

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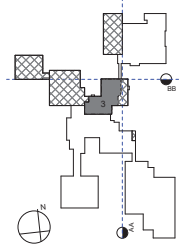
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CONSULTANT



## PHASE 2B FLOOR PLANS

PROJECT NO: 1099-0006  
 DATE: 09-10-2020

SHEET NO:  
**A2.31**



Attachment D

Initial Environmental Checklist



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New Applications Until 3:00 pm

Print Form

**INITIAL ENVIRONMENTAL CHECKLIST  
FOR DETERMINATION OF ENVIRONMENTAL IMPACT**

I. Assessor's Parcel Number (APN)/Project Location

Project Name  County/City

**Brief Description of Project:**

The Lake Tahoe Community College District (LTCCD) has initiated the design of the Remodel for Efficiency and Science Modernization (RFE) Project. The RFE Project is the latest LTCCD Master Plan effort. This project will include significant renovations to the interior campus buildings, an improved campus entry with landscaping and flatwork, and an emergency fire and maintenance access road along the western edge of the campus footprint.

The following questionnaire will be completed by the applicant based on evidence submitted with the application. All "Yes" and "No, With Mitigation" answers will require further written comments. Use the blank boxes to add any additional information. If more space is required for additional information, please attach separate sheets and reference the question number and letter.

**II. ENVIRONMENTAL IMPACTS:**

**1. Land**

Will the proposal result in:

a. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?

- Yes                       No  
 No, With Mitigation       Data Insufficient

b. A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?

- Yes                       No  
 No, With Mitigation       Data Insufficient

c. Unstable soil conditions during or after completion of the proposal?

**Soils within the project area will be disturbed during construction; Temporary BMPs will be implemented to mitigate this issue. Site will be completely stabilized upon completion of the project.**

- Yes                       No  
 No, With Mitigation       Data Insufficient

d. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?

**The project will require excavation in excess of 5 feet below grade in order to install concrete piers for the snow shed roof. Excavation to a depth of 8 feet will be necessary to install the piers (sheet S3.02).**

- Yes                       No  
 No, With Mitigation       Data Insufficient

Soils/Hydro File LCAP2017-0081 previously authorized excavation of up to 10 feet bng for the nearby University Center Building project. TRPA has confirmed this authorization is sufficient for this project.- TAvance 2-2-22

e. The continuation of or increase in wind or water erosion of soils, either on or off the site?

- Yes                       No  
 No, With Mitigation       Data Insufficient

f. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake?

- Yes  No  
 No, With Mitigation  Data Insufficient

g. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards?

- Yes  No  
 No, With Mitigation  Data Insufficient

## 2. Air Quality

Will the proposal result in:

a. Substantial air pollutant emissions?

- Yes  No  
 No, With Mitigation  Data Insufficient

b. Deterioration of ambient (existing) air quality?

- Yes  No  
 No, With Mitigation  Data Insufficient

c. The creation of objectionable odors?

- Yes  No  
 No, With Mitigation  Data Insufficient

d. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?

- Yes  No  
 No, With Mitigation  Data Insufficient

e. Increased use of diesel fuel?

- Yes
- No
- No, With Mitigation
- Data Insufficient

**3. Water Quality**

Will the proposal result in:

a. Changes in currents, or the course or direction of water movements?

- Yes
- No
- No, With Mitigation
- Data Insufficient

b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site?

- Yes
- No
- No, With Mitigation
- Data Insufficient

c. Alterations to the course or flow of 100-yearflood waters?

- Yes
- No
- No, With Mitigation
- Data Insufficient

d. Change in the amount of surface water in any water body?

- Yes
- No
- No, With Mitigation
- Data Insufficient

e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?

- Yes
- No
- No, With Mitigation
- Data Insufficient

f. Alteration of the direction or rate of flow of ground water?

- Yes       No  
 No, With Mitigation       Data Insufficient

g. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?

- Yes       No  
 No, With Mitigation       Data Insufficient

h. Substantial reduction in the amount of water otherwise available for public water supplies?

- Yes       No  
 No, With Mitigation       Data Insufficient

i. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches?

- Yes       No  
 No, With Mitigation       Data Insufficient

j. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality?

- Yes       No  
 No, With Mitigation       Data Insufficient

k. Is the project located within 600 feet of a drinking water source?

- Yes       No  
 No, With Mitigation       Data Insufficient

#### 4. Vegetation

Will the proposal result in:

- a. Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?

- Yes  No  
 No, With Mitigation  Data Insufficient

- b. Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?

- Yes  No  
 No, With Mitigation  Data Insufficient

- c. Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species?

- Yes  No  
 No, With Mitigation  Data Insufficient

- d. Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)?

- Yes  No  
 No, With Mitigation  Data Insufficient

- e. Reduction of the numbers of any unique, rare or endangered species of plants?

- Yes  No  
 No, With Mitigation  Data Insufficient

f. Removal of stream bank and/or backshore vegetation, including woody vegetation such as willows?

- Yes       No  
 No, With Mitigation       Data Insufficient

g. Removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications?

- Yes       No  
 No, With Mitigation       Data Insufficient

h. A change in the natural functioning of an old growth ecosystem?

- Yes       No  
 No, With Mitigation       Data Insufficient

## 5. Wildlife

Will the proposal result in:

a. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)?

- Yes       No  
 No, With Mitigation       Data Insufficient

b. Reduction of the number of any unique, rare or endangered species of animals?

- Yes       No  
 No, With Mitigation       Data Insufficient



c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?

- Yes       No  
 No, With Mitigation       Data Insufficient

d. Deterioration of existing fish or wildlife habitat quantity or quality?

- Yes       No  
 No, With Mitigation       Data Insufficient

## 6. Noise

Will the proposal result in:

a. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan?

- Yes       No  
 No, With Mitigation       Data Insufficient

b. Exposure of people to severe noise levels?

- Yes       No  
 No, With Mitigation       Data Insufficient

c. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold?

- Yes       No  
 No, With Mitigation       Data Insufficient

d. The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible?

- Yes       No  
 No, With Mitigation       Data Insufficient

e. The placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses?

- Yes       No  
 No, With Mitigation       Data Insufficient

f. Exposure of existing structures to levels of ground vibration that could result in structural damage?

- Yes       No  
 No, With Mitigation       Data Insufficient

## 7. Light and Glare

Will the proposal:

- a. Include new or modified sources of exterior lighting?

**New exterior lighting will be consistent with TRPA requirements.**

- Yes  No  
 No, With Mitigation  Data Insufficient

- b. Create new illumination which is more substantial than other lighting, if any, within the surrounding area?

- Yes  No  
 No, With Mitigation  Data Insufficient

- c. Cause light from exterior sources to be cast off -site or onto public lands?

- Yes  No  
 No, With Mitigation  Data Insufficient

- d. Create new sources of glare through the siting of the improvements or through the use of reflective materials?

- Yes  No  
 No, With Mitigation  Data Insufficient

## 8. Land Use

Will the proposal:

- a. Include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan?

- Yes  No  
 No, With Mitigation  Data Insufficient

b. Expand or intensify an existing non-conforming use?

- Yes  No  
 No, With Mitigation  Data Insufficient

## 9. Natural Resources

Will the proposal result in:

a. A substantial increase in the rate of use of any natural resources?

- Yes  No  
 No, With Mitigation  Data Insufficient

b. Substantial depletion of any non-renewable natural resource?

- Yes  No  
 No, With Mitigation  Data Insufficient

## 10. Risk of Upset

Will the proposal:

a. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions?

- Yes  No  
 No, With Mitigation  Data Insufficient

b. Involve possible interference with an emergency evacuation plan?

- Yes  No  
 No, With Mitigation  Data Insufficient

## 11. Population

Will the proposal:

- a. Alter the location, distribution, density, or growth rate of the human population planned for the Region?

- Yes       No  
 No, With Mitigation       Data Insufficient

- b. Include or result in the temporary or permanent displacement of residents?

- Yes       No  
 No, With Mitigation       Data Insufficient

## 12. Housing

Will the proposal:

- a. Affect existing housing, or create a demand for additional housing?

To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions:

- (1) Will the proposal decrease the amount of housing in the Tahoe Region?

- Yes       No  
 No, With Mitigation       Data Insufficient

- (2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households?

- Yes       No  
 No, With Mitigation       Data Insufficient

Number of Existing Dwelling Units: 0

Number of Proposed Dwelling Units: 0

b. Will the proposal result in the loss of housing for lower-income and very-low-income households?

- Yes  No  
 No, With Mitigation  Data Insufficient

### 13. Transportation/Circulation

Will the proposal result in:

a. Generation of 100 or more new Daily Vehicle Trip Ends (DVTE)?

- Yes  No  
 No, With Mitigation  Data Insufficient

b. Changes to existing parking facilities, or demand for new parking?

- Yes  No  
 No, With Mitigation  Data Insufficient

c. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities?

- Yes  No  
 No, With Mitigation  Data Insufficient

d. Alterations to present patterns of circulation or movement of people and/or goods?

- Yes  No  
 No, With Mitigation  Data Insufficient

e. Alterations to waterborne, rail or air traffic?

- Yes  No  
 No, With Mitigation  Data Insufficient

f. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?

- Yes                       No  
 No, With Mitigation       Data Insufficient

**14. Public Services**

Will the proposal have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?

a. Fire protection?

- Yes                       No  
 No, With Mitigation       Data Insufficient

b. Police protection?

- Yes                       No  
 No, With Mitigation       Data Insufficient

c. Schools?

**Project will improve school facilities for college students and staff at Lake Tahoe Community College. These improvements will not require new or altered governmental services.**

- Yes                       No  
 No, With Mitigation       Data Insufficient

d. Parks or other recreational facilities?

- Yes                       No  
 No, With Mitigation       Data Insufficient

e. Maintenance of public facilities, including roads?

- Yes                       No  
 No, With Mitigation       Data Insufficient

f. Other governmental services?

- Yes       No  
 No, With Mitigation       Data Insufficient

**15. Energy**

Will the proposal result in:

a. Use of substantial amounts of fuel or energy?

- Yes       No  
 No, With Mitigation       Data Insufficient

b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?

- Yes       No  
 No, With Mitigation       Data Insufficient

**16. Utilities**

Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:

a. Power or natural gas?

- Yes       No  
 No, With Mitigation       Data Insufficient

b. Communication systems?

- Yes       No  
 No, With Mitigation       Data Insufficient

c. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider?

- Yes       No  
 No, With Mitigation       Data Insufficient



d. Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider?

- Yes             No  
 No, With Mitigation     Data Insufficient

e. Storm water drainage?

- Yes             No  
 No, With Mitigation     Data Insufficient

f. Solid waste and disposal?

- Yes             No  
 No, With Mitigation     Data Insufficient

**17. Human Health**

Will the proposal result in:

a. Creation of any health hazard or potential health hazard (excluding mental health)?

- Yes             No  
 No, With Mitigation     Data Insufficient

b. Exposure of people to potential health hazards?

- Yes             No  
 No, With Mitigation     Data Insufficient

18. Scenic Resources/Community Design

Will the proposal:

a. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe?

- Yes
- No
- No, With Mitigation
- Data Insufficient

b. Be visible from any public recreation area or TRPA designated bicycle trail?

**Project will be visible from Lake Tahoe Community College (Class 1) bike trail.**

- Yes
- No
- No, With Mitigation
- Data Insufficient

c. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area?

- Yes
- No
- No, With Mitigation
- Data Insufficient

d. Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan?

- Yes
- No
- No, With Mitigation
- Data Insufficient

e. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines?

- Yes
- No
- No, With Mitigation
- Data Insufficient

**19. Recreation**

Does the proposal:

a. Create additional demand for recreation facilities?

- Yes
- No
- No, With Mitigation
- Data Insufficient

b. Create additional recreation capacity?

- Yes
- No
- No, With Mitigation
- Data Insufficient

c. Have the potential to create conflicts between recreation uses, either existing or proposed?

- Yes
- No
- No, With Mitigation
- Data Insufficient

d. Result in a decrease or loss of public access to any lake, waterway, or public lands?

- Yes
- No
- No, With Mitigation
- Data Insufficient

**20. Archaeological/Historical**

a. Will the proposal result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?

- Yes
- No
- No, With Mitigation
- Data Insufficient

b. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records?

- Yes  No  
 No, With Mitigation  Data Insufficient

c. Is the property associated with any historically significant events and/or sites or persons?

- Yes  No  
 No, With Mitigation  Data Insufficient

d. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?

- Yes  No  
 No, With Mitigation  Data Insufficient

e. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area?

- Yes  No  
 No, With Mitigation  Data Insufficient

**21. Findings of Significance.**

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory?

- Yes  No  
 No, With Mitigation  Data Insufficient

b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)

- Yes                       No  
 No, With Mitigation       Data Insufficient

c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?)

- Yes                       No  
 No, With Mitigation       Data Insufficient

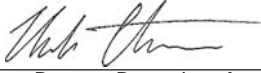
d. Does the project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly?

- Yes                       No  
 No, With Mitigation       Data Insufficient

**DECLARATION:**

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signature: (Original signature required.)



Person Preparing Application

At El Dorado County  
County

Date: 12/17/20

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**Applicant Written Comments:** (Attach additional sheets if necessary)

Print Form

**FOR OFFICE USE ONLY**

Date Received: \_\_\_\_\_ By: \_\_\_\_\_

Determination:

On the basis of this evaluation:

- a. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure.

Yes

No

- b. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules and Procedures.

Yes

No

- c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with Chapter 3 of the TRPA Code of Ordinances and the Rules of Procedure.

Yes

No

Theresa Avance

Signature of Evaluator

Date: February 8, 2022

Senior Planner

Title of Evaluator







**Mail**

PO Box 5310  
Stateline, NV 89449-5310

**Location**

128 Market Street  
Stateline, NV 89449

**Contact**

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STAFF REPORT

Date: February 16, 2022

To: TRPA Governing Board

From: TRPA Staff

Subject: Discussion and possible action/recommendation of Forest Health Code Language Regarding Mechanical Ground-based Equipment on 30-50% Slopes, Chapter 61 Vegetation and Forest Health- Sections 61.1.6.B. through 6.1.1.6.D

Summary and Staff Recommendation:

Chapter 61 of the TRPA Code of Ordinances addresses vegetation management and forest health. Staff will present an overview of and potential amendments to Section 61.1.6.B. through 61.1.6.D. regarding Minimum Standards for Tree Removal including the use of ground-based mechanical equipment on 30% to 50% slopes. Staff seeks Governing Board discussion and recommendation to TRPA Governing Board for adoption of the proposed Chapter 61.1.6 Code amendments.

Motion:

To recommend adoption of the ordinance amendments, Governing Board must make the following motion(s), based on the staff summary:

- 1) A motion to recommend approval of the Required Findings, as described in Attachment B, including a Finding of No Significant Effect, for adoption of the Code of Ordinance amendments as described in the staff summary; and,
- 2) A motion to recommend adoption of the Ordinance 2022 - \_\_\_\_, amending Ordinance 87-9, to amend the Code of Ordinances as shown in Attachment A.

For the motions to pass, an affirmative vote of four members from each state is required.

These proposed amendments were approved and recommended for consideration by the Forest Health and Wildfire Committee in November 2021 and by the Regional Plan Implementation Committee in January 2022. In February 2022, the Advisory Planning Commission (APC) recommended these amendments for Governing Board review and approval with changes to Table 61.1.6.-4 to reference the correct code sections. Additionally, in response to comments from the APC, TRPA Staff adjusted the analysis in the IEC on Scenic Resources/Community Design (Sections 18a and 18b) to reflect that there may be visible impacts during and after treatment; however, scenic impacts from the projects will be positive and representative of reduced stand densities indicative of healthy, resilient forests.

Proposed Revisions to Section 61.1.6.B. Logging Roads, Skid Trails, and Landings through 61.1.6.D. Skidding and Ground-Based Vehicle Systems:

Active forest management and treatments are critical to increase forest and ecosystem resilience to disturbance such as fire, insects and disease, and climate change. There are a variety of ways to accomplish forest treatments including mechanical ground-based equipment and thinning, broadcast burning, and hand thinning and subsequent pile burning. Currently, under the TRPA Code of Ordinances implementors use ground-based mechanical equipment for thinning treatments on slopes up to 30%. For slopes above 30%, implementors must hand treat acres, usually leaving hand piles for burning in later years. Hand treatment and pile burning are often more costly, labor intensive, and less ecologically beneficial than mechanical thinning and subsequent broadcast prescribed burning. Additionally, limiting ground-based mechanical equipment to only slopes 30% or less limits the pace and scale of treatment, which is counterproductive to increased forest resilience and decreased risk of catastrophic wildfire.

In July 2021, Staff and partner scientists presented to the Forest Health and Wildfire Committee findings from the Water Erosion Prediction Project (WEPP) analysis regarding the erosion risk and water quality impacts from ground-based mechanical equipment and treatment on slopes 30% to 50% within the basin. This research and report found that potential erosion and sedimentation risk could be mitigated through environmental protection measures including remaining ground cover post-treatment, buffers, use low impact equipment and technology, and varying slope length for treatment. Additionally, the erosion risk associated with a high-severity wildfire on slopes 30% to 50% in many areas of the basin substantially higher than erosion risk associated with the use of ground-based mechanical equipment.

Ultimately, analyzing the soil erosion as an average for all the hillslopes and modeled conditions in the basin, the researchers found, overall, all thinning scenarios narrowly increased sediment and phosphorus yields but not as much as a moderate or high severity fire. Results show that managers would need to apply thinning treatments more than 50 times within 60 years to generate erosion that would eliminate the benefits of reducing wildfire severity from moderate to low. Additionally, the researchers found most sediment yield on slopes between 30% and 50% comes from areas covered by shrubs and grasses and not from forested areas. The report demonstrated that on hillslopes between 30% and 50% thinning will increase the risk of erosion, but when thinned hillslopes erode, the sediment yield is no different when compared to an untreated hillslope.

Based on this research, staff proposes amendments to 61.1.6.B. Logging Roads, Skids Trails, and Landings through 61.1.6.D. Skidding and Ground-Based Vehicle Systems to allow mechanical ground-based equipment and treatments on slopes 30% to 50%. The proposed amendments have been collaboratively discussed and designed with the Tahoe Fire and Fuels Team's Regulations Working Group and include modifying code language and adding clarification where necessary.

Proposed Amendments for clarification and standardization with current code:

1. Inclusion of "over frozen ground" tree removal.
2. Refinement of equipment definitions to reflect current technology and practices.

Proposed Amendments to expand treatments:

1. Refinement of Table 61.1.6-3 to reflect California Practice Act water break spacing on slopes up to 50%.
2. Refinement of Table 61.1.6-4 to reflect expanded treatment practices (use of ground-based mechanical equipment) on Land Capability Districts 1a, 1c, 2 (areas over 30% slopes).

AGENDA ITEM NO. VI.A.

3. Inclusion of language that allows for skidding and the use of ground-based mechanical equipment on 30% to 50% slopes with TRPA approval when slope erosion is minimized.

Environmental Review:

The Code amendments have been reviewed in an Initial Environmental Checklist (IEC) pursuant to Chapter 3: Environmental Documentation of the TRPA Code of Ordinances and Article VI of the Rules of Procedure. The IEC finds that the proposed amendments would not result in significant effects on the environment (see Attachment C).

Regional Plan Compliance:

The proposed amendments to the Code of Ordinances are consistent with the Vegetation Sub-element, a component of the Regional Plan's Conservation Element.

Contact Information:

For questions regarding this agenda item, please contact Kathleen McIntyre, at (775) 589-5268 or [kmcintyre@trpa.org](mailto:kmcintyre@trpa.org).

Attachments:

- A. Adopting Ordinance  
Exhibit 1: Tracked Code Amendments
- B. Required Findings/Rationale
- C. Initial Environmental Checklist (IEC)
- D. Dobre et al. 2021. *"Assessing the Effects of Forest Treatments and Wildfires on Sediment Yield in the Lake Tahoe Basin."* Draft WEPP Analysis Report.

Attachment A  
Adopting Ordinance

**Attachment A**

TAHOE REGIONAL PLANNING AGENCY  
ORDINANCE 2022-

AN AMENDMENT TO ORDINANCE NO. 87-9, AS AMENDED, TO AMEND THE TRPA CODE OF ORDINANCES, CHAPTER 61 REGARDING VEGETATION PROTECTION AND MANAGEMENT.

The Governing Board of the Tahoe Regional Planning Agency does ordain as follows:

Section 1.00 Findings

- 1.10 It is desirable to amend TRPA Ordinance 87-9, as previously amended, by amending the TRPA Code of Ordinances to further implement the Regional Plan pursuant to Article VI (a) and other applicable provisions of the Tahoe Regional Planning Compact.
- 1.20 The TRPA Code of Ordinances Chapter 61.1 amendments were the subject of an Initial Environmental Checklist (IEC), which was processed in accordance with Chapter 3: *Environmental Documentation* of the TRPA Code of Ordinances and Article VI of the Rules of Procedure. The TRPA Code of Ordinances amendments have been determined not to have a significant effect on the environment, and are therefore exempt from the requirement of an Environmental Impact Statement (EIS) pursuant to Article VII of the Compact.
- 1.30 The Advisory Planning Commission (APC) and the Governing Board have each conducted a noticed public hearing on the proposed TRPA Code of Ordinances Chapter 61.1 amendments. The APC has recommended Governing Board adoption of the necessary findings and adopting ordinance. At these hearings, oral testimony and documentary evidence were received and considered.
- 1.40 The Governing Board finds that the TRPA Code of Ordinances amendments adopted hereby will continue to implement the Regional Plan, as amended, in a manner that achieves and maintains the adopted environmental threshold carrying capacities as required by Article V(c) of the Compact.
- 1.50 Prior to the adoption of this ordinance, the Governing Board made the findings required by Section 4.5 of the TRPA Code of Ordinances, and Article V(g) of the Compact.
- 1.60 Each of the foregoing findings is supported by substantial evidence in the record.

Section 2.00 TRPA Code of Ordinances Amendments

Ordinance 87-9, as previously amended, is hereby amended by amending Chapter 61.1 of the TRPA Code of Ordinances, as set forth in Exhibit 1.

Section 3.00 Interpretation and Severability

The provisions of this ordinance amending the TRPA Code of Ordinances adopted hereby shall be liberally construed to affect their purposes. If any section, clause, provision or portion thereof is declared unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance and the amendments to the Regional Plan Package shall not be affected thereby. For this purpose, the provisions of this ordinance and the amendments to the Regional Plan Package are hereby declared respectively severable.

Section 4.00 Effective Date

The provisions of this ordinance amending the TRPA Code of Ordinances shall become effective on (Insert Month) XX, 2022.

PASSED AND ADOPTED by the Governing Board of the Tahoe Regional Planning Agency at a regular meeting held on (Insert Month) XX, 2022, by the following vote:

Ayes:

Nays:

Abstentions:

Absent:

---

Mark Bruce, Chair  
Tahoe Regional Planning Agency,  
Governing Board

Attachment A: Exhibit 1  
Tracked Code Amendments

# CHAPTER 61: VEGETATION AND FOREST HEALTH

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## 61.1. TREE REMOVAL

### 61.1.1. Purpose

The purpose of this section is to regulate the management of forest resources to achieve and maintain the environmental threshold standards for species and structural diversity, to promote the long-term health of natural resources, to restore and maintain suitable habitats for native wildlife species, and to reduce accumulations of hazardous fuels in order to decrease the likelihood of catastrophic wildfire events.

### 61.1.2. Applicability

TRPA requires the protection and maintenance of all native vegetation types. TRPA may require the preparation and implementation of a remedial vegetation management plan for any parcel where the need for remedial vegetation management has been identified for purposes of environmental threshold maintenance or attainment. The use, protection, and maintenance of vegetation are also addressed in the following chapters of the Code of Ordinances:

- A. 2: *Applicability of the Code of Ordinances;*
- B. 30: *Land Coverage;*
- C. 33: *Grading and Construction;*
- D. 36: *Design Standards;*
- E. 53: *Individual Parcel Evaluation System;*
- F. 60: *Water Quality;*
- G. 61: *Vegetation and Forest Health;*
- H. 62: *Wildlife Resources;*
- I. 63: *Fish Resources;*
- J. 64: *Livestock Grazing;*
- K. 80: *Review of Projects in the Shorezone and Lakezone;*
- L. 84: *Development Standards Lakeward of High Water, and*
- M. 90: *Definitions.*

### 61.1.3. Delegation of Project Review and Permit Determination

Qualified agencies, or third party designees, may be delegated authority for permit determinations set forth in this chapter. Stream environment zone areas (SEZ's) may be excluded from the delegation. TRPA may, on a case-by-case basis, designate the review of SEZ's if the agency or third party has demonstrated expertise in hydrology, ecology, botany, restoration, soil science, or similar scientific disciplines and are qualified to evaluate and prevent negative impacts to SEZ's and water quality. If TRPA delegates these review and permitting functions, these agencies will also be responsible for ensuring compliance with all other provisions of the Compact, Regional Plan, and Code of Ordinances.



#### **61.1.4. Reasons for Tree Removal**

Except for trees identified for retention under subsection 61.3.7, tree removal shall incorporate measures and prescriptions that promote a range of threshold standards and SEZs pursuant to subsection 61.3.3.C. Trees may be removed for the reasons provided below.

##### **A. Hazardous Tree Removal**

To protect lives and property, trees reported by a qualified forester to be hazardous to property or lives may be removed upon approval by TRPA unless otherwise exempt through a Memorandum of Understanding. Other vegetation shall be protected during removal operations to prevent their damage.

##### **1. Fire Hazard Tree Removal**

Trees identified and marked by a qualified forester as a fire hazard may be removed upon approval by TRPA or pursuant to a TRPA MOU Authorization. Trees identified and marked by a defensible space assessor for defensible space purposes associated with a building or structure may be removed upon approval by TRPA or pursuant to a TRPA MOU Authorization. Fuel reduction projects shall consider multiple threshold objectives. As an alternative to tree removal, the defensible space assessor may approve the limbing of trees that are determined to be a fire hazard, consistent with defensible space requirement of the applicable fire agency. (See Chapter 90 for definition of "fuels management.")

##### **2. Emergency Tree Removal**

When a tree constitutes a physical emergency (e.g., imminent threat of falling on occupied or substantial structures or people), the tree may be removed, but the land owner or manager shall provide photographic documentation and all applicable paperwork and fees to TRPA within ten working days of removal of the hazardous tree.

##### **3. Tree Removal During Emergency Fire Suppression Activities**

Trees may be removed when an emergency fire suppression need exists as determined by the local, state, or federal fire suppression agency involved in a fire suppression activity.

##### **B. Ecosystem Management Goals and EIP Projects**

##### **1. Management Objectives**

Trees may be removed to meet ecosystem management goals:

- a. Restoration and expansion of stream environment zones and riparian vegetation;
- b. Improvement of the structural diversity of all forests based on judgement of a qualified forester;
- c. Enhancement of native wildlife species and/or native wildlife habitat diversity;
- d. Enhancement and protection of tree species of limited occurrence, such as aspen, black cottonwood, ponderosa pine, Douglas-fir, incense-cedar, sugar pine, western white pine, mountain hemlock, whitebark pine, and western juniper;
- e. Protection of sensitive lands;
- f. Minimization of construction of new roads;

- g. Revegetation of existing temporary roads;
  - h. Avoidance of disturbance of stream environment zones, unless such project is to enhance the health of stream environment zones through projects intended to thin trees or prescribe burn within SEZ in accordance with subparagraph 61.3.3.C;
  - i. Utilization of existing openings or disturbed areas as landings where appropriate;
  - j. The promotion of a diversity of seral stages, species diversity, and age class;
  - k. Fuels management for fire hazard reduction; and
  - l. Forest health and resilience to drought, insects, disease, and climate change.
2. **Dead, Dying, or Diseased Tree Removal**  
To enhance forest health, dying, or diseased trees may be removed upon approval by TRPA. Dead trees less than or equal to 30 inches in westside forest types and less than or equal to 24 inches in eastside forest types may be removed without TRPA approval pursuant to subsection 2.3.2.E.
3. **Tree Removal for Early Successional Stage Vegetation Management**  
Tree removal may be permitted when it has been determined by TRPA that it is appropriate to convert an area to, and/or maintain an area in, an early successional stage vegetation type. (See Chapter 90 for definition of "early successional stage vegetation management.") Where soil stabilization is required and/or the replacement of removed vegetation, the applicant shall provide a revegetation or soil stabilization plan in accordance with subsection 61.4.5.
4. **Tree Removal for Enhancement of Forest Health and Diversity**  
Tree removal may be permitted where the species or structural diversity of an area is not in accordance with management objectives. TRPA shall apply the criteria below in reviewing tree removal to enhance forest health and diversity.
- a. A management plan that demonstrates the need for the project and the means of accomplishing the objectives listed below shall be prepared by a qualified forester.
    - (i) Removal of trees shall not result in less than minimum stocking levels required by the applicable state or federal forestry agency.
    - (ii) If improved structural diversity is the objective, removal of trees shall be linked to a reforestation program that provides for the establishment of younger-aged trees, or be accompanied by a report from a qualified forester that states the reasons why a reforestation plan is not necessary to achieve structural diversity objectives.
    - (iii) If improved species diversity is the objective, removal of trees shall be linked to a reforestation program that provides for the establishment of native species other than the local dominant, or be accompanied by a report from a qualified forester that states the reasons why a reforestation plan is not necessary to achieve species diversity objectives.
    - (iv) On parcels of three acres or less, the tree removal permit may serve as the management plan.

- b. The site proposed for tree removal for forest diversity shall be within a contiguous area of at least three acres in which a single tree species of similar age class dominates. There is no minimum acreage when removing trees for forest health or for successional management of stream environment zones.

**C. Tree Removal for Solar Access**

Removal of healthy trees to maximize efficiency of solar energy systems may be permitted according to the standards below.

- 1. TRPA may approve the removal of healthy trees provided TRPA finds that the trees unreasonably impede the operation of a solar energy system and that the solar energy system is properly located so as to minimize the need for tree removal.
- 2. The number of healthy trees that may be removed for the system's operation shall be the minimum necessary.
- 3. The only trees that shall be considered for removal for an active or passive solar energy system are those that lie generally south of the proposed solar collector and are in the sun's path between an 18° vertical angle measured from the base of the solar collector and a 70° vertical angle from the same base measurement. Trees on adjacent properties may be removed provided a contractual agreement to allow for such removal is signed by the affected parties. Tree removal may be conditioned upon replacement elsewhere on the property.

**D. Public Utility Rights-of-Way**

The removal of trees within utility and public rights-of-way may be allowed if TRPA finds that the removal is for public health and safety. When a tree-related emergency exists, the utility or public agency may remove the trees and advise TRPA of the action on the next business day. At that time TRPA may issue an emergency permit in accordance with its Rules of Procedure.

**E. Tree Removal for Ski Areas**

For expansion of ski areas, including but not limited to, the widening of runs and the addition or replacement of lifts, only the minimum number of trees necessary for the operation of the ski area shall be removed.

**F. Tree Removal for Development**

Tree removal for development in conjunction with a TRPA permit shall be in accordance with the provisions of this chapter and Section 33.6.

**G. Tree Removal to Enhance Scenic View Points from Public Roadways**

Select trees may be removed to enhance scenic viewpoints from scenic turnouts located on highways, public right-of-ways and other public lands immediately adjacent to highway corridors.

**61.1.5. General Tree Removal Standards**

The cutting, moving, removing, killing, or materially damaging of live trees, and the attachment of appurtenances to trees, shall comply with this subsection. The removal of trees 14 inches dbh or less shall be exempt from TRPA approval under subparagraph 2.3.2.M and requirements of this chapter, except as provided herein. Removal of trees greater than 14 inches dbh shall require approval by TRPA except as provided in subparagraphs 61.1.4.A.2 and 61.1.4.A.3. Removal of trees greater than six inches dbh on lakefront properties where the trees to be removed provide vegetative screening of existing structures as viewed from Lake Tahoe requires TRPA approval, except as

provided in subsections 61.1.4.A.2 and 61.1.4.A.3. Permits shall be granted or denied in conformity with the provisions of this chapter.

**A. Additional Code Standards**

Such tree-related projects and activities also shall conform to the provisions of the Code as provided below.

1. If vegetative screening is required by an existing permit for any property, the vegetative screening shall not be removed without prior approval from TRPA except for defensible space purposes pursuant to subparagraph 61.3.6.D.
2. If tree and/or vegetation removal to occur on any property where existing permit conditions require retention of vegetation, including tree and/or vegetation removal for defensible space purposes pursuant to subparagraph 61.3.6.D, alternative scenic mitigation shall be proposed to TRPA within 30 days of vegetation removal and shall be subject to review and approval by TRPA notwithstanding the permit exemption in subparagraph 2.3.2.M.

**B. Findings**

Before tree-related projects and activities are approved by TRPA, TRPA shall find, based on a report from a qualified forester, that the project or activity is consistent with this chapter and the Code. TRPA may delegate permit issuance to a federal, state, or other qualified agency through a memorandum of understanding.

**C. Harvest or Tree Removal Plan**

In cases of substantial tree removal, as set forth in subparagraph 61.1.8, the applicant shall submit a harvest plan or tree removal plan prepared by a qualified forester. The plan shall set forth prescriptions for tree removal, water quality protection, vegetation protection, residual stocking levels, reforestation, slash disposal, fire protection, and other appropriate considerations. The plan, as approved by TRPA, shall become a part of the project and prescriptions contained in the plan shall be conditions of approval. TRPA may consider plans developed pursuant to the California Forest Practice Rules or other CEQA documents completed by a qualified forester to meet the intention of this section provided all the required elements are addressed.

**61.1.6. Minimum Standards for Tree Removal**

The minimum standards for tree removal shall be as provided below.

**A. Cutting Practices**

The following cutting practice standards apply:

1. Sufficient trees shall be reserved and left uncut and undamaged to meet the minimum acceptable stocking standards of the appropriate state or federal forestry agency, except in cases of early successional stage management;
2. Group selections shall be limited to use for achieving management objectives based on the judgement of a qualified forester. Group selections shall be limited in size to less than five acres (See subparagraph 61.1.6);
3. All live trees to be cut shall be marked on bole and stump with paint by, or under the supervision of, a qualified forester prior to TRPA approval.

Trees to be removed or protected may be designated by other means in situations involving clear cuts or thinning of exceptionally dense thickets, or other situations that warrant an alternate method of designation. The alternate method shall be stated in the plans and must be approved by TRPA;

4. Damage to unmarked trees and residual vegetation shall be avoided to the extent feasible;
5. All trees shall be felled in line with the skidding direction wherever possible;
6. All trees shall be limbed on all sides where feasible and topped prior to skidding except where whole tree skidding is less disruptive to the forest resources;
7. Stumps shall be cut as low as can be done safely and to the extent that is feasible for harvesting equipment;
8. If stump removal will result in greater than three cubic yards of soil disturbance, a grading permit shall be obtained from TRPA prior to removal of stumps;
9. Green stumps shall be treated to prevent the spread of root disease as specified by a qualified forester; and
10. Insect-infested wood and wood susceptible to insect infestation shall be treated or disposed of as specified by a qualified forester.

**B. Logging Roads, Skid Trails, and Landings**

All logging roads, skid trails, and landings shall be constructed or otherwise created and maintained in accordance with the requirements of this chapter and the *Handbook of Best Management Practices*. Existing roads, skid trails, and landings shall be used whenever possible. New roads shall be approved only if TRPA finds that all alternatives have been explored and determines that the construction of new roads, skid trails, or landings would be the preferred alternative. In accordance with subparagraph 60.1.3.B, existing roads and landings may be accessed in the winter to help prepare for over-snow **and over frozen ground** tree removal. Such preparation **for winter operations** shall be limited to ~~packing snow over the roadways to obtain a firm snow base and allowing~~ movement of logs and equipment without disturbance of the soil. The standards provided below also shall apply.

1. The requirements and standards for design, grade, tree felling in right-of-way, slash cleanup, width, and maintenance, by road type as determined by TRPA, shall be as shown in Tables 61.1.65-1 and 61.1.65-2.

TABLE 61.1.65-1: LOGGING ROADS AND SKID TRAILS: DESIGN AND GRADE		
Road Type	Design	Maximum Grade
Permanent administrative roads	Plans and specifications	10%
Limited use roads remaining open	Plans and specifications	10% with occasional 15%
Limited use roads closed after logging	Plans and specifications	10% with occasional 15%
Temporary roads	Flag line	20%
Tractor roads and main skid trails	Flag line	<del>30</del> 50%
Secondary skid trail	None	<del>30</del> 50%

**TABLE 61.1.65-2: LOGGING ROADS AND SKID TRAILS: OTHER STANDARDS**

Road Type	Right of Way Tree Falling	Minimum Slash Cleanup	Maximum Width	Maintenance
Permanent administrative roads	Prefall	Removal within 50 feet of road	30 feet*	As determined by TRPA
Limited use roads remaining open	Prefall	Removal within 50 feet of road	15 feet 2/turnouts*	Annual maintenance required**
Limited use roads closed after logging	Prefall	Lop and scatter	15 feet 2/turnouts*	Close to vehicle use and revegetate
Temporary roads	Prefall	Lop and scatter	15 feet*	Close to vehicle use and revegetate
Tractor roads and main skid trails	Concurrent	Lop and scatter	15 feet	Close to vehicle use and revegetate
Secondary skid trails	Concurrent	Lop and scatter	15 feet	Close to vehicle use and revegetate

\* Unless TRPA finds that greater width is necessary for feasible use or safety.

\*\* "Annual Maintenance" includes activities such as restoring drainage features and making other road repairs as necessary.

2. Skid trails shall be located so as to protect residual stands through utilization of natural openings and topographic characteristics. The number of skid trails shall be kept to the minimum necessary and their width shall be 15 feet or less **shall be the minimum size needed**. Directional felling shall be used whenever possible to minimize skid trail density. Main skid trails shall be flagged in advance of felling operations and shall require approval by TRPA.
3. Best Management Practices shall be installed on all skid trails, landings, and roads, no later than 15 days following completion of operations within a particular treatment unit, or at the time of seasonal shutdown, whichever is sooner.
4. Water breaks shall be spaced as provided below.
  - a. The maximum slope distance in feet by **estimated hazard rating and land capability district** shall be according to Table 61.1.65-3 **unless exceptions to water break spacing are requested and approved by TRPA as equally or more protective of water quality**.

**TABLE 61.1.5-3: MAXIMUM SLOPE DISTANCE IN FEET BY LAND CAPABILITY DISTRICT**

Gradient	5-7	3-4
Less Than 10%	200	200
10-20%	150	90
21-30%	90	50

TABLE 61.1.6-3: WATER BREAK SPACING REQUIREMENTS BY ESTIMATED HAZARD RATING			
Estimated Hazard Rating	U.S. Equivalent Measure Road or Trail Gradient (10 or less percent)	U.S. Equivalent Measure Road or Trail Gradient (11-25 percent)	U.S. Equivalent Measure Road or Trail Gradient (26-50 percent)
Extreme	100 ft.	75 ft.	50 ft.
High	150 ft.	100 ft.	75 ft.
Moderate	200 ft.	150 ft.	100 ft.
Low	300 ft.	200 ft.	150 ft.

- b. Water breaks shall be placed at lesser intervals as necessary to prevent soil erosion caused by firebreaks, trails, or landings.
- c. Construction of water breaks shall be kept current with operations or at the time of seasonal shutdown, whichever is sooner. Erosion control work, including the design and interval of water breaks, shall require TRPA approval **unless addressed under a Memorandum of Understanding.**
- d. Landing areas shall be properly drained in a manner to prevent soil erosion and stream pollution.

**C. Removal Methods**

Only the tree removal methods shown in Table 61.1.65-4 shall be used on lands located within the land capability districts shown **unless other removal methods are shown to have the same practical effect as removal methods below:**

TABLE 61.1.65-4: TREE REMOVAL METHODS	
Land Capability District	Removal Method
1a, 1c, or 2	Aerial removal, hand carry, and use of existing roads, in conformance with subsection 61.1.6. Over-snow and <b>over frozen ground</b> removal may be approved pursuant to subparagraph 61.1.6.F.1. <b>Ground-based equipment and skidding may be used pursuant to 61.1.6.D.1. through 61.1.6.D.5. with approval by the TRPA.</b>
1b (Stream Environment Zone)	As permitted in Land Capability District 1a, end lining may be approved when site conditions are dry and stable, or when winter conditions are adequate for end lining operations so as to avoid adverse impacts to the soil and vegetation. The use of "innovative technology" vehicles and/or "innovative techniques" for removing trees from SEZs may be considered pursuant to subparagraph <del>61.1.6.C.1.b.</del> <b>61.3.3.C.1.c.</b>
3	As permitted in Land Capability District 1b, Ground skidding pursuant to subparagraph 61.1.6. <del>D.F.2</del> may be approved.
4 - 7, Inclusive	As permitted in Land Capability District 1b. Ground skidding, as well as pickup and removal by conventional construction equipment, may be approved. Ground-based vehicle systems for removing trees without skidding may be approved pursuant to subparagraph 61.1.6. <del>D.F.5</del> .

**D. Skidding and Ground Based Vehicle Systems**

Skidding is the act of dragging **or partially suspending** a tree or log along the ground, ~~or snow,~~ **or frozen ground** by cable systems or by mobile equipment. Ground skidding is the act of skidding a log or tree in full contact with the ground

behind mobile equipment. End lining is dragging a log or tree in full contact with the ground by a winch. Cable yarding is the act of removing a log or tree by cable with one end of the log or tree in contact with the ground **or fully suspended**. Ground based vehicle systems **include** ~~are all in one "process at the stump"~~ harvesters **and machines** that cut, process, and remove trees **and may require** ~~without any~~ ground skidding.

1. Skidding over snow **or frozen ground** is preferred to **unfrozen** ground skidding. The depth of the snow shall be sufficient to prevent disturbance of the soil beneath the snow as determined by site-specific field observations. ~~Skidding operations shall cease when soil becomes visible on the surface of the snow.~~
2. **Ground skidding may be permitted on slopes under 30%. Ground skidding on slopes between 30% and 50% requires TRPA review and approval to ensure that environmental protective measures (e.g., water breaks, vegetative buffers, slope length limitations, and remaining ground cover post-treatment, erodible soil avoidance) will be in place to minimize slope erosion. Ground skidding shall be limited to Land Capability Districts 3, 4, 5, 6, and 7.**
3. Logs shall only be skidded endwise.
4. No logging arches, other than integral arch equipment, shall be permitted.
5. Ground-based vehicle systems for removing trees without skidding, such as harvester and forwarder combinations, may be used **on slopes below 30 percent**. ~~approved by TRPA for use in Land Capability Districts 4, 5, 6, and 7.~~ **On slopes between 30% and 50%, ground-based vehicle systems for tree removal requires TRPA review and approval to ensure that environmental protective measures (e.g., water breaks, vegetative buffers, slope length limitations, and remaining ground cover post-treatment, erodible soil avoidance) will be in place to minimize slope erosion. The use of "innovative technology" vehicles and/or "innovative techniques" for removing trees without skidding may be considered in Land Capability District 1b and 3 pursuant to subparagraph 61.3.3.C.1.c.61.1.6.C.1 and subparagraph 61.1.6.CE.**

**E. Slash Disposal**

Slash shall be disposed of according to an approved slash disposal plan.

1. Lop and scatter, pile and burn or broadcast burn (consistent with Sections 61.2 and 65.1), chip, or haul away. All burns shall be located beyond approved buffers from any stream channel, unless it can be demonstrated, using best available science, that slash burning within the approved buffer of a channel will not cause adverse environmental impacts.
2. Cull logs and other material shall be disposed of as required by the permit.

**F. Erosion Control**

The adequacy of all required BMPs shall be confirmed at the time of the TRPA pre-operations inspection. Any modifications to the required BMPs as determined by TRPA shall be incorporated into the project permit at that time or



as determined to be necessary throughout forest management operations. The following erosion control standards apply:

1. The following Temporary BMPs are required to be installed prior to the commencement of any forest management or equipment operations:
  - a. Temporary erosion controls and vegetation protection measures.
  - b. Equipment exclusion area boundary markings or fencing, as necessary to comply with the TRPA-approved forest management plan.
2. Excavated material shall be stored upslope from the excavated areas to the extent possible. No material shall be stored in any SEZ, wet area, or stream buffer zone.
3. Projects must have design criteria to avoid tracking soil off the project site. Equipment operations shall cease when a violation of this condition exists. The site shall be cleaned and the road right-of-way swept clean when necessary.
4. No equipment or vehicle repairs, other than necessary maintenance of harvest equipment, shall be permitted in the project area unless authorized by TRPA. The discharge of petroleum products, construction waste and litter (including sawdust), or earthen materials to the surface waters of the Lake Tahoe Basin is prohibited. Spill containment and absorbent materials shall be kept on site at all times. All petroleum products and hazardous waste shall be removed from the project area and disposed of at an approved location.

#### **61.1.7. Commercial Tree Removal**

##### **A. General Standard**

Trees may be removed as a commercial enterprise pursuant to the tree removal practices of subsection 61.1.6.

##### **B. Cutting and Cultivation of Christmas Trees**

Legally existing Christmas tree cultivation operations, when certified by a qualified forester to be utilizing native species and proper silvicultural methods, may continue upon approval by TRPA. New Christmas tree farm operations meeting the above conditions may be permitted if TRPA finds them to be in compliance with the Code and the applicable plan area statements.

#### **61.1.8. Substantial Tree Removal**

Substantial tree removal shall be activities on project areas of three acres or more and proposing the removal of more than 100 live trees 14 inches dbh or larger, or proposing tree removal that as determined by TRPA after a joint inspection with appropriate state or federal Forestry staff does not meet the minimum acceptable stocking standards set forth in subparagraph 61.1.6.H. Substantial tree removal projects shall be processed by the appropriate state and federal agencies in coordination with TRPA as required below.

##### **A. Private Parcels**

The review process for private parcels shall include the following:

1. Harvest plan shall be written by a qualified forester;

2. Harvest plan shall be submitted to the appropriate state and federal agencies and TRPA with an initial environmental checklist or environmental assessment;
  3. Preparation of environmental impact statement if necessary;
  4. Pre-approval field review;
  5. Approval of project by TRPA;
  6. Pre-harvest field review; and
  7. Post-harvest review.
- B. Public Parcels**
1. The review process for substantial tree removal for public parcels administered by public land management agencies may be determined according to a Memorandum of Understanding (MOU) between the partner agency and the TRPA. For agencies without an MOU with the TRPA, the process shall be the same as for private parcels listed above.

## **61.2. PRESCRIBED BURNING**

### **61.2.1. Purpose**

This section sets forth standards and regulations pertaining to the use of fire in controlled circumstances for vegetation management.

### **61.2.2. Applicability**

The standards and regulations in this section apply to all intentional burning for the purpose of vegetation management, unless otherwise exempt from TRPA review under the provisions of Chapter 2: *Applicability of the Code of Ordinances*.

### **61.2.3. Prescribed Burning**

#### **A. Prescribed Burning Allowed**

Persons who own or manage forests or range lands may use prescribed burning, consistent with the standards and regulations set forth in this section, to maintain forest health and diversity and to reduce the risk of wildfire.

### **61.2.4. Performance Standards**

The use of prescribed burning for vegetation management shall comply with the standards provided below.

#### **A. Location of Prescribed Burning**

The use of prescribed burning shall be limited to those areas where the plan area statements designate as a permissible use one or more of the following uses:

1. Nonstructural wildlife habitat management;
2. Range improvement;
3. Fuels management; or
4. Prescribed fire management.

#### **B. Extent of Prescribed Burning**

Each prescribed burn shall be limited to the minimum area necessary to achieve the purpose of the prescription.

**C. Timing of Prescribed Burning**

Prescribed burning shall be limited to time periods for which TRPA finds that atmospheric conditions normally will allow complete dispersion of the smoke from the prescribed burn during each day of the burn.

**D. Responsible Persons**

A qualified expert, experienced in the use of fire for vegetation management, shall prepare a burning prescription for review and, if appropriate, approval by TRPA. The expert shall certify that the prescription meets the standards of this section. The expert shall oversee the conduct of the burn.

**E. Standards of Other Government Agencies**

All prescribed burning shall comply with applicable standards of other government agencies with appropriate jurisdiction, including but not limited to the following agencies: the El Dorado County Air Pollution Control District; the Placer County Air Pollution Control District; the California Air Resources Board; the California State Water Resources Control Board; the California Regional Water Quality Control Board; the Nevada Division of Environmental Protection; the California and Nevada Departments of Forestry; and the United States Forest Service. Where TRPA standards conflict with another agency's standards, the most stringent standard shall control.

**61.2.5. Compliance Program**

To achieve compliance with the standards in subsection 61.2.4, TRPA shall apply the following provisions:

**A. Consistency with Primary Use**

TRPA shall review and, if appropriate, approve applications to conduct prescribed burns consistent with the provisions of Chapter 21: *Permissible Uses*, regarding allowed and special uses for those uses listed in subparagraph 61.2.4.A.

**B. Burn Prescription**

All applications to conduct prescribed burning shall be accompanied by a burn prescription. A burn prescription shall include the following items:

1. Detailed statement of the purpose of the prescribed burn;
2. Description, including a map at an appropriate scale of the location and a real extent of the prescribed burn. Such description shall allow TRPA to determine whether the proposed burn complies with subparagraphs 61.2.4.A and 61.2.4.B;
3. Description of the timing of the prescribed burn, and meteorological information that demonstrates that the timing of the prescribed burn will normally allow complete dispersion of the smoke from the burn during each day of the burn;
4. A list of the applicable standards of TRPA and other government agencies with jurisdiction over the burn, and a discussion of how the proposed prescription complies with those standards;
5. A detailed description of the proposed burning operation, including a description of all safety procedures that will be used to prevent wildfire;
6. A certification by a qualified expert experienced in the use of fire for vegetation management that the burn prescription complies with this

section; and that the expert shall oversee the conduct of the burn to ensure that the prescription is followed; and

## **61.3. VEGETATION PROTECTION AND MANAGEMENT**

### **61.3.1. Purpose**

In accordance with the Vegetation Conservation Element of the Regional Plan Goals and Policies, this section provides for the protection of Stream Environment Zone (SEZ) vegetation, other common vegetation, uncommon vegetation, and sensitive plants. It also provides for remedial management of vegetation to achieve and maintain environmental thresholds for plant species and structural diversity, and the maintenance of vegetation health. The management and protection of vegetation shall, at a minimum, consider the diversity of plant species and landscape pattern of plant communities, and their attributes in relationship to wildlife and fisheries habitat, scenic quality, recreation use, soil conservation, and water quality.

### **61.3.2. Applicability**

TRPA requires the protection and maintenance of all native vegetation types. TRPA may require the preparation and implementation of a remedial vegetation management plan for any parcel where the need for remedial vegetation management has been identified for purposes of environmental threshold maintenance or attainment.

### **61.3.3. Protection of Stream Environment Zones**

#### **A. General Requirement**

Unless excepted in B below, no project or activity shall be undertaken in an SEZ (Land Capability District 1b) that converts SEZ vegetation to a non-native or artificial state or that negatively impacts SEZ vegetation through action including, but not limited to, reducing biomass, removing vegetation, or altering vegetation composition.

#### **B. Exceptions**

The activities below are exceptions to the general requirement in A above.

1. Manipulation or management of SEZ vegetation may be permitted in accordance with the Code for purposes of SEZ vegetation health or wildlife or fish habitat improvements, and after approval of a vegetation management plan pursuant to subparagraph 61.3.5.B, or as provided in Section 30.5, subsection 30.4.4, subparagraph 30.4.6.D.3, Section 63.3, or Sections 61.1 or 61.2.
2. Maintenance of landscaping that was installed prior to the creation of TRPA, or installed for the purpose of scenic quality pursuant to Chapter 36: *Design Standards*, or pursuant to a TRPA permit, or under a TRPA exemption prior to August 1, 1997, provided that fertilizer use is restricted in accordance with the BMP Handbook and described in subparagraph 60.1.8.A, unless a remedial action pursuant to subsection 61.3.4 has been taken by TRPA.
3. Removal of vegetation may be permitted pursuant to subparagraphs 2.3.2.E, or 2.3.6.A.8, Section 33.6, Chapter 64: *Livestock Grazing*, or under defensible-space guidelines approved by TRPA.

#### **C. Tree Cutting Within Stream Environment Zones**

Tree cutting within stream environment zones may be permitted to allow for early successional stage vegetation management, sanitation salvage cuts, fuels management for fire hazard reduction, maintenance of utility rights-of-way, restoration or enhancement of ecosystem health and diversity, and fish and

wildlife habitat improvement projects, in accordance with the standards provided below. TRPA -approved reasons for removal of trees over 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types within an SEZ are the same as TRPA-approved reasons for removal of trees over 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types as listed in Sections 61.3.7.A.1 through Section 61.3.7.A.10.

**1. Vehicle Restrictions**

All vehicles shall be restricted to areas outside of the SEZ or to existing roads within SEZs, except for tree removal over-snow or frozen ground with hard frozen soil conditions or use of low impact technology where permanent disturbance does not occur.

The following criteria shall apply:

- a. TRPA may permit the use of vehicles in/on frozen ground with hard frozen soil conditions or over-snow tree removal operations. A qualified forester will ensure that conditions are suitable to prevent visible or permanent soil disturbance and/or significant vegetation damage; and
- b. Winter ground-based equipment operations would take place on portions of the treatment unit where adequate snow or frozen ground with hard frozen soil conditions are present. The following criteria will be applied in determining equipment operations:
  - (i) Frozen soil operations are permitted where operated vehicles, tractors and equipment can travel without sinking into soil, road, and/ or landing surfaces to a depth of more than 2 inches for a distance of more than 25 feet. Temperatures must also remain low enough to preclude thawing of the soil surface.
  - (ii) For over-snow operations, maintain approximately 12 inches of compacted snow/ice on undisturbed ground, and 6 inches of compacted snow/ice on existing disturbed surfaces. For over-the-snow and frozen soil operations in SEZs, exclude ground- based equipment from the 25- foot buffer around perennial and intermittent watercourse channels.
- c. TRPA shall review site-specific proposals for and may permit the use of "innovative technology" vehicles and/or "innovative techniques" for the purpose of fire hazard reduction in SEZs provided that no significant soil disturbance or significant vegetation damage will result from the use of equipment. (See Chapter 90: *Definitions*, for definitions of "innovative technology" vehicles and "innovative techniques.") Project proposals should be developed within an adaptive management framework that will result in data that can be used to support and/or improve on equipment and techniques. TRPA shall conduct a pre-operation inspection of the site to decide if vehicle use is appropriate for the given situation, to verify the boundaries of the SEZ, and to identify other areas of concern. The following minimum conditions shall apply:

- (i) Project proponents shall provide documentation substantiating that the use of such vehicles will not cause significant soil disturbance or significant vegetation damage. Documentation must take into account soil types, hydrology, vegetation type and cover, and other ecosystem characteristics, relevant to the use of such vehicles in similar environments. Documentation can include relevant scientific research, monitoring studies, and other supporting analyses;
- (ii) Operations using “innovative technology” vehicles in SEZs shall be limited to the management of common conifer species (e.g., lodgepole pine, white fir), however, incidental hardwoods that need to be removed from within a conifer vegetation type may also be removed using the vehicles;
- (iii) Operations shall be limited to times of the year when soils are sufficiently dry to avoid and/or minimize compaction and sufficiently stable to avoid and/or minimize erosion;
- (iv) Erosion control measures (BMPs) shall be implemented both during and after operations to avoid soil detachment and transport wherever possible, and to minimize erosion wherever soil disturbance cannot be avoided;
- (v) To prevent sediment delivery to surface waters, including wetlands, more stringent setbacks from watercourses than the setbacks set forth in other regulations regulating timber harvests, such as the California Forest Practice Rules and Nevada State Statutes, may be designated if deemed necessary by TRPA;
- (vi) Operations shall incorporate appropriate measures to avoid impacts to wildlife during critical wildlife nesting and denning periods in accordance with Chapter 62: *Wildlife Resources*;
- (vii) Operations shall incorporate measures to protect historic resources in accordance with Chapter 67: *Historic Resource Protection*; and
- (viii) Projects shall be monitored to ensure that the SEZ has not sustained any significant damage to soil or vegetation function. Along with the project proposal, adaptive management concepts should be applied to the monitoring plan. A monitoring plan shall be submitted with all project proposals, including at a minimum: a list of sites and attributes to be monitored; specification of who will be responsible for conducting the monitoring and reporting; a narrative for implementing corrective actions when monitoring determines such corrective action is necessary; and a monitoring and reporting schedule.
- (ix) Once an innovative technology has been deemed acceptable by TRPA, all partners or permittees may utilize that technology.

**2. Soil Conditions**

All work within stream environment zones shall be limited to times of the year when soil conditions are dry and stable, or when conditions are adequate for frozen ground with hard frozen soil conditions or over-snow tree removal operations without causing significant soil disturbance and/or significant vegetation damage

**3. Trees and Debris Kept from Streams**

Felled trees and harvest debris shall be kept out of all watercourses. If deposited in the stream, the material shall be promptly removed unless

it is determined that such logs and woody material adds structural diversity pursuant to fish and wildlife habitat improvements in accordance with Chapter 62: *Wildlife Resources*, and Chapter 63: *Fish Resources*. This determination shall be approved by TRPA. Logs or other woody material may be placed in streams to provide woody structure pursuant to fish or wildlife habitat improvement programs approved by TRPA in accordance with Chapter 63.

**4. Stream Crossings**

The crossing of perennial streams or other wet areas shall be limited to improved crossings meeting Best Management Practices or to temporary bridge spans that can be removed upon project completion or at the end of the work season, whichever is sooner. Any damage or disturbance to the stream environment zone associated with a temporary crossing shall be restored within one year of its removal. In no instance shall any method requiring the placing of rock and earthen material into the stream or streambed be considered an improved crossing. Other temporary measures may be permitted for dry stream crossings in accordance with the *Handbook of Best Management Practices*.

**5. Special Conditions**

Special conditions shall be placed on all tree harvests within stream environment zones or within the transition or edge zone adjoining stream environment zones, as necessary to protect in-stream aquatic habitat values and wildlife habitat integrity and diversity.

**61.3.4. Remedial Vegetation Management**

TRPA and resource management agencies, including the states' forestry departments, shall identify areas where remedial management of vegetation is necessary to achieve and maintain environmental thresholds for health and diversity in vegetation. Requests by TRPA to prepare and implement a remedial vegetation management plan for a specified area shall follow the procedures set forth in Section 5.12: *Remedial Action Plans*.

**61.3.5. Preparation of Remedial Vegetation Management Plans**

At the request of TRPA, remedial vegetation management plans shall be prepared by the property owners of areas identified for remedial vegetation management in cooperation with TRPA and appropriate resource management agencies.

**A. Plan Content**

Remedial vegetation management plans shall contain, at a minimum, the following information:

1. Purpose of the management plan, including a list of objectives;
2. Description of existing vegetation, including the abundance, distribution, and age class of tree species;
3. Remedial measures necessary to achieve the stated objectives, including details of harvest and revegetation plans (see Section 61.4); and
4. An implementation schedule, including a monitoring program to report progress on monitoring of vegetation.

**B. Plan Approval**

TRPA may approve a remedial vegetation management plan provided the plan is necessary to achieve, and can reasonably be expected to achieve, the purposes set forth in subsection 61.3.4.

**61.3.6. Sensitive and Uncommon Plant Protection and Fire Hazard Reduction**

**A. Purpose**

This subsection sets forth standards for the preservation and management of vegetation of significant scenic, recreational, educational, scientific, or natural values of the region, and for management of vegetation to prevent the spread of wildfire.

**B. Applicability**

This subsection applies to all projects and activities that could have a detrimental effect on designated sensitive plants or uncommon plant communities, and to all areas where vegetation may contribute to a significant fire hazard.

**C. Sensitive Plants and Uncommon Plant Communities**

Designation of plants for special significance is based on such values as scarcity and uniqueness. The following standards shall apply to all sensitive plants and uncommon plant communities referenced in the environmental thresholds, and to other plants or plant communities identified later for such distinction. The general locations of sensitive plant habitat and uncommon plant communities are depicted on the TRPA Special Species map layers. The special species map layers indicate the location of habitat for threatened, endangered, rare, and special interest species and where populations of sensitive or uncommon plants have been observed.

**1. Sensitive Plants**

**a. List of Sensitive Plants**

The sensitive plants are:

- (i) *Rorippa subumbellata* (Tahoe yellow cress);
- (ii) *Arabis rigidissima* var. *demote* (Galena Creek rock cress);
- (iii) *Lewisia longipetala* (long-petaled lewisia);
- (iv) *Draba asterophora* v. *macrocarpa* (Cup Lake draba); and
- (v) *Draba asterophora* v. *asterophora* (Tahoe draba).

**b. Standards for Sensitive Plants**

Projects and activities in the vicinity of sensitive plants or their associated habitat shall be regulated to preserve sensitive plants and their habitat. All projects or activities that are likely to harm, destroy, or otherwise jeopardize sensitive plants or their habitat shall fully mitigate their significant adverse effects. Projects and activities that cannot fully mitigate their significant adverse effects are prohibited. Measures to protect sensitive plants and their habitat include, but are not limited to:

- (i) Fencing to enclose individual populations or habitat;
- (ii) Restrictions on access or intensity of use;
- (iii) Modifications to project design as necessary to avoid adverse impacts;



(iv) Dedication of open space to include entire areas of suitable habitat;  
or

(v) Restoration of disturbed habitat.

**2. Uncommon Plant Communities**

**a. List of Uncommon Plant Communities**

The uncommon plant communities are:

(i) The deepwater plants of Lake Tahoe, Grass Lake (sphagnum fen);

(ii) Osgood Swamp, Hell Hole (sphagnum fen);

(iii) Pope Marsh, Taylor Creek Marsh, Upper Truckee Marsh; and

(iv) The Freel Peak cushion plant community.

**b. Standards for Uncommon Plant Communities**

Uncommon plant communities shall be managed and protected to preserve their unique ecological attributes and other associated values. Projects and activities that significantly adversely impact uncommon plant communities, such that normal ecological functions or natural qualities of the community are impaired, shall not be approved.

**D. Vegetation Management to Prevent the Spread of Wildfire**

Within areas of significant fire hazard, as determined by local, state, or federal fire agencies, flammable or other combustible vegetation shall be removed, thinned, or manipulated in accordance with local and state law. Revegetation with approved species or other means of erosion control including soil stabilization may be required where vegetative ground cover has been eliminated or where erosion problems may occur.

**61.3.7. Old Growth Enhancement and Protection**

The standards in this subsection shall govern forest management activities and projects.

**A. Standards for Conservation and Recreation Lands**

Within lands classified by TRPA as conservation or recreation land use, any live, dead, or dying tree larger than 30 inches diameter at breast height (dbh) in westside forest types shall not be cut, and any live, dead or dying tree larger than 24 inches diameter at breast height in eastside forest types shall not be cut, except as provided below.

**1. Unreasonably Contribute to Fire Hazard**

Trees and snags larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be felled, treated, or removed in urban interface areas if TRPA determines that they would unreasonably contribute to fuel conditions that would pose a fire threat or hinder defense from fire in an urbanized area. Within the urban interface areas, fire management strategies favoring the retention of healthy trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types trees shall be fully considered. Urban interface areas are defined as all undeveloped lands within a 1,250 foot zone immediately adjacent to TRPA residential, commercial, or public service plan area boundaries.

**2. Unacceptable Risk to Structures or Areas of High Use**

A tree larger than 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types may be felled, treated, or removed

if TRPA and the land manager determine the tree poses an unacceptable risk to occupied or substantial structures, overhead utility lines and conductors, critical public or private infrastructure, or areas of high human use. Examples of areas of high human use are campgrounds, parking lots, ski trails, and developed beaches. Where a land manager determines that a tree constitutes a physical emergency (e.g., imminent threat of falling on occupied or substantial structures, or people), the land manager may remove the tree but must provide photographic documentation and any applicable paperwork and fees to TRPA within ten working days of removal of the hazardous tree.

**3. Diseased or Infested Trees**

Where immediate treatment and removal is warranted to help control an outbreak of pests or disease, severely insect-infested or diseased trees larger than 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types may be removed. Trees to be felled, treated, or removed require TRPA review on a project-level basis, within 30 working days of written notification by the land manager.

**4. Ecosystem Management Goals**

In limited cases, trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be felled, treated, or removed if a management prescription clearly demonstrates that the identified trees need to be cut for ecosystem management goals consistent with TRPA goals and policies and to increase forest health and resilience. The project and prescription must be developed and reviewed by a qualified forester, and only the trees necessary to achieve ecosystem objectives at a specific site shall be removed. Each tree larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types shall be approved by TRPA. The marking of these trees shall be done by a qualified forester.

**5. Ski Areas Master Plans**

In ski areas with existing TRPA-approved master plans, trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be removed for facilities that are consistent with that master plan. For activities that are consistent with a TRPA – approved master plan, trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be removed when it is demonstrated that the removal is necessary for the activity.

**6. EIP Projects**

Trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be removed when it is demonstrated that the removal is necessary for the activity.

**7. Extreme Fuel Loading**

In case of extreme fuel loading some snags larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types may be cut if the removal is consistent with subsection 62.3.4: Snags and Coarse Woody Debris.

**8. Large Public Utilities Projects**

Trees larger than 30 inches dbh in westside forest types and larger than 24 inches dbh in eastside forest types may be removed for large public utilities projects if TRPA finds there is no other reasonable alternative.

9. **Emergency Fire Suppression**  
Trees may be removed when an emergency fire suppression need exists as determined by the local, state, or federal fire suppression agency involved in a fire suppression activity.
  10. **Private Landowners**  
Private landowners may fell, treat, or remove trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types provided the landowner follows one of the planning processes set forth in subparagraph C.
- B. Standards for Non-SEZ Urban Lands**  
Within non-SEZ urban areas, individual trees larger than 30 inches dbh that are healthy and structurally sound shall be retained as desirable specimen trees having aesthetic and wildlife value, unless no reasonable alternative exists to retain the tree, including reduction of parking areas or modification of the original design.
- C. Alternative Private Landowner Process**  
As an alternative to complying with the standards in subparagraph A, a private landowner may follow one of the following planning processes to achieve or maintain the late seral/old growth threshold, goals, and polices.
1. **Alternative Forest Management Plan**  
A private landowner, in the development of a forest management plan, shall follow the planning process described in Chapter 14: *Specific and Master Plans*, except as provided below.
    - a. In relation to subparagraph 14.8.1.A only the private landowner may initiate the private forest management planning process.
    - b. In relation to subparagraph 14.8.1.B the project team shall consist of a designee of the Executive Director, appropriate regulatory and land management agencies, the proponent's qualified forester, and the team shall consult with the appropriate public land management agencies if the private land is adjacent to public land.
    - c. In relation to Section 14.9, the content of a forest master plan shall be described in the TRPA Forest Master Plan Guidelines. The content shall include enough information to make the required findings of Section 14.10; shall provide guidelines for salvage harvest, insect control, and fire salvage. The document shall be organized by described and mapped planning units. As an example, a non-industrial timber management plan that contains enough information to make the required findings of Section 14.10 can be submitted provided it is developed with approval of the steering committee.
    - d. The harvest practices shall comply with local and state regulations.
    - e. A proposed schedule (and seasonality) of harvest projects and improvement projects shall be included within the plan.
    - f. Individual harvest projects proposed under the master plan within the planned schedule and proposed method shall receive a streamlined review.
  2. **Limited Forest Plan**  
Private landowners may prepare a limited forest plan when there would be limited proposed impact to large trees.

- a. A limited forest plan may be prepared if ten percent or less of the trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside forest types within the project site are proposed to be cut within the life of the plan.
- b. The limited forest plan shall include:
  - (i) The relative state permit application, if available;
  - (ii) Description of harvest activities;
  - (iii) Description of management activities;
  - (iv) Explanation of how thresholds, goals and policies shall be attained under the forest plan; and
  - (v) The expiration date of the plan. A minimum lifespan of ten years and a maximum lifespan of 50 years shall be accepted.
- 3. TRPA shall review proposed cutting of trees larger than 30 inches dbh in the westside forest types and larger than 24 inches dbh in eastside or larger forest types on a tree-by-tree basis consistent with the forest plan.

**61.3.8. Historic and Cultural Resource Protection**

- A. Operations and any ground disturbing activities shall be in accordance with Chapter 67: *Historic Resource Protection*. All historic resources located within the project area shall be flagged and avoided except in accordance with a TRPA-approved resource recovery plan. Flagging shall be removed at the time of completion of operations.

**61.3.9. Wildlife, Habitat, and Sensitive Plants**

- A. Operations shall incorporate appropriate measures to avoid impacts to wildlife during critical wildlife nesting and denning periods in accordance with Chapter 62: *Wildlife Resources*.
- B. Snags shall be retained in accordance with subsection 62.3.4.
- C. Discovery of a TRPA-designated sensitive species or species of interest, or the location of a nest or den of one of those species, shall be immediately reported to TRPA. Any nests, dens, or plant locations shall be protected in accordance with TRPA regulations. All work within the project area shall cease until TRPA identifies under what conditions the project may continue.

**61.4. REVEGETATION**

**61.4.1. Purpose**

This section provides standards for revegetation for such purposes as soil stabilization and improvement of the vegetative cover mix.

**61.4.2. Applicability**

This section shall apply wherever revegetation is required as a condition of project approval or where revegetation is necessary to comply with other provisions of the Code. Landscaping provisions are set forth in Chapter 36: *Design Standards*.

**61.4.3. Approved Species**

Revegetation programs shall use TRPA-approved plant species listed on the TRPA Recommended Native and Adapted Plant List. This list shall be a part of the *Handbook of Best Management Practices* and shall be updated from time to time based on the

criteria that listed plants should be adapted to the climate of the Tahoe region, should require little water and fertilizer after establishment, and should be non-invasive. Specifications of plant materials shall be in accordance with the following requirements:

**A. Site Conditions**

Plant species selected shall be appropriate for site conditions.

**B. Small Scale Programs**

Small scale revegetation programs shall emphasize the use of TRPA-approved grass species in conjunction with mulching or other temporary soil stabilization treatments, as described in the *Handbook of Best Management Practices*.

**C. Large Disturbed Areas**

Revegetation of disturbed areas larger than 10,000 square feet shall include reseeded with TRPA-approved grass species as well as reestablishment of appropriate shrub and tree species.

**D. Fertilizer**

Fertilizer may be permitted to help establish vegetation following planting, but plant species shall be selected that do not require long term fertilization.

**61.4.4. Soil Stabilization**

Site preparation for revegetation shall include measures necessary to stabilize the soil until the vegetation is reestablished. Revegetation and stabilization programs for disturbed sites shall minimize the use of extensive grading whenever practical. Situations where extensive grading and recontouring may be necessary include the following:

- A. Oversteepened cut slopes;
- B. Quarry sites;
- C. Abandoned landfills;
- D. Reclamation of already developed sites; or
- E. Abandoned roads.

**61.4.5. Revegetation Plans**

Where revegetation is required to stabilize soils, replace removed vegetation, or for rehabilitation of areas where runoff or soil erosion needs to be controlled, the applicant shall provide a revegetation plan.

**A. Contents of Plan**

Revegetation plans shall include at a minimum:

1. A description of the site, including the soil type, if applicable, the stream environment zone or backshore type, and existing vegetation;
2. A list of appropriate plant species to be used at the site and a plan showing where they will be planted;
3. The number and size of shrubs and trees to be used, if any;
4. A description of the extent and methods of irrigation, if any;
5. Specifications for site preparation and installation of plant materials;

6. Specifications and schedule for onsite care, including amount and method of application of fertilizers pursuant to the *Handbook of Best Management Practices*, if necessary;
7. Specifications for long term plant care and protection, including the amount and method of application of fertilizers, if necessary; and
8. A description of mulches or tackifiers to be used.

**B. Plant Materials**

Plant materials to be used in a stream environment zone or the backshore shall be from the list shall be derived from stock possessing genetic characteristics of native plants or, if used outside of these areas, plant materials shall originate from a similar elevation and climate as the revegetation site if stock is available. If such stock is not available, stock with demonstrated success in the region may be approved.

**C. Soil Materials**

Revegetation plans may include provisions that allow for the importation of soil in limited situations involving reclamation of extensively disturbed sites, such as those in subsection 61.4.4. Soil material may be permitted to be imported from outside the region if an acceptable source in the region cannot be located. Acceptable sources of soil material in the region include by-products of approved dredging or grading activities and compost.

**D. Security Release**

The portion of a security related to revegetation shall be released when TRPA determines that the required vegetation is established. Establishment of vegetation generally takes one or two growing seasons.

Attachment B

Required Findings/Rationale

**ATTACHMENT B**

**REQUIRED FINDINGS / RATIONALE**

TRPA Code of Ordinances Section 3.3 – Determination of Need to Prepare an Environmental Impact Statement

Finding: TRPA finds that the proposed Code amendments will not have a significant effect on the environment.

Rationale: An Initial Environmental Checklist (IEC) has been prepared to evaluate the effects of the proposed amendments to the Code of Ordinances (see Attachment C). The IEC found that the proposed Code amendments would not have a significant effect on the environment.

The proposed amendments are consistent with and will implement Chapter 61 Vegetation and Forest Health. The amendments are not anticipated to result in significant environmental impacts. As demonstrated in the accompanying findings, amendments to Chapter 61 Vegetation and Forest Health will not result in an unmitigated significant impact on the environment or cause the environmental threshold carrying capacities to be exceeded.

TRPA Code of Ordinances Section 4.4 – Threshold-Related Findings

1. Finding: The amendments to the Code of Ordinances are consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, plan area statements and maps, the Code, and other TRPA plans and programs;

Rationale: The proposed code amendments will not have significant environmental impacts and will increase forest resilience while decreasing fire risk in the Tahoe Basin. The Code amendments are consistent with the Regional Plan policies and goals and all implementing elements of the Regional Plan.

2. Finding: The proposed amendments will not cause the environmental threshold carrying capacities to be exceeded; and

Rationale: The proposed amendments are consistent with the threshold attainment strategies in the Regional Plan. As demonstrated in the findings, these amendments will not cause the environmental threshold carrying capacities to be exceeded.

3. Finding: Wherever federal, state, or local air and water quality standards apply for the region, the strictest standards shall be attained, maintained, or exceeded pursuant to Article V(d) of the Tahoe Regional Planning Compact.



Rationale: The proposed amendments would not adversely affect any state, federal, or local standards. The amendments are intended to allow implementors opportunity to increase pace and scale of treatment, decrease fire risk, and increase forest resilience in the face of climate change, insects and disease, and drought.

TRPA Code of Ordinances Section 4. 6 – Findings Necessary to Amend or Adopt TRPA Ordinances, Rules, or Other TRPA Plans and Programs.

Finding: The Regional Plan and all of its elements, as implemented through the Code, Rules, and other TRPA plans and programs, as amended, achieves and maintains thresholds.

Rationale: As discussed within Sections 4.4. and 4.5 above, the Regional Plan and all of its elements, as amended, achieves and maintains thresholds. The proposed amendments will improve the implementation of threshold attainment by improving forest resilience and health and decreasing high severity fire risk.

Attachment C

Initial Environmental Checklist (IEC)

# ***INITIAL DETERMINATION OF ENVIRONMENTAL IMPACT CHECKLIST***

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## **Project Name: Proposed Code Amendments: Allowing Ground-based Mechanical Equipment on Slopes between 30 and 50 percent.**

### **Project Description:**

The Angora Fire began in the North Upper Truckee area in South Lake Tahoe, California. The fire burned out of control, threatening hundreds of residences and commercial structures, and resulted in thousands of evacuations. A total of 3,100 acres were burned and 254 homes were destroyed. The Angora Fire underscored the need for a comprehensive review of fire prevention and fuels management practices in the Basin and spurred the creation of the Joint Fire Commission to conduct this review and generate recommendations on future policy and practice.

The Emergency California-Nevada Tahoe Basin Fire Commission Report, produced in 2008, created a set of findings and recommendations presented in six categories that address both short and long-term needs, policy changes, education, funding, governmental structures, and environmental practices related to Lake Tahoe's vulnerability to wildfire.

The Commission found that when the TRPA was created the risk of catastrophic wildfire to ecosystems and communities was not considered. This risk is compounded by climate change that ushers in a new era of "mega-fires". Subsequently, the Commission recommended the TRPA, LRWQCB, USDA Forest Service, and other affected agencies amend their plans and ordinances to allow for mechanical equipment use on slopes greater than 30% based on current and future technology and forest practices that ensure environmental protection.

Article 4 of the California Forest Practice Act allows for mechanical treatment on slopes up to 50%. The Act states: "Except for tethered operations, heavy equipment shall be prohibited where any of the following conditions are present: (A) Slopes steeper than 65%. (B) Slopes steeper than 50% where the Erosion Hazard Rating is high or extreme."

In Nevada, NRS Chapter 528 Forest Practice and Reforestation also allows mechanical treatments on steep slopes through a variance procedure with the Nevada Firewarden. When issuing a variance, the Firewarden will consider whether ground-based equipment may destroy advanced regeneration and litter cover; the extent to which ground-based equipment may cause soils to be displaced or erode; and, the extent to which ground-based equipment may cause siltation and eroded soils to infiltrate the 50-foot stream buffer.

Likewise, The LTBMU 2016 Land Management Plan outlines a series of standard and guidelines related to forest vegetation, fuels, and fire management. Standard and Guideline 30 outlines the following for forest treatments, "In general, operate ground-based mechanized equipment for vegetation treatment on slopes less than or equal to 30%. Exceptions should be consistent with safety and design specifications and with the ability to effectively alleviate significant resource impacts."

The project proposes ground-based mechanical equipment for thinning treatments on slopes up to 50 percent, which increases the proportion of land in the Basin that could be treated using mechanical equipment (see Table 1 and Figure 1). Chapter 61 of the TRPA Code prohibits mechanized equipment on slopes greater than 30 percent. The proposed project includes an amendment to the TRPA Code to allow ground-based mechanical equipment and skidding on slopes up to 50 percent depending on specific site conditions and TRPA approval.

Approximately 60,685.05 acres within the Basin are located on slopes between 30 and 50 percent. Currently, under the TRPA Code of Ordinances, these acres may only be treated by hand with subsequent pile burning or aerial logging. Allowing ground-based mechanical equipment as opposed to hand thinning on slopes up to 50 percent would allow land managers to remove trees to meet restoration objectives, increase forest resilience, and decrease fire risk. Approximately, 25,305.05 acres (41.7%) on slopes between 30 and 50 percent fall within the Wildland Urban Interface

(WUI) Threat or Defense Zones (Figure 2). A WUI Defense Zone is the area directly adjoining structures and evacuation routes that is converted to a less-flammable state to increase defensible space and firefighter safety. The WUI Threat Zone is an additional strip of vegetation modified to reduce flame heights and radiant heat. These areas represent critical acres for treatment in the face of climate change and longer, more extreme fire seasons. Additionally, the code amendment may increase the pace and scale of thinning treatments and generate financial and ecological efficiencies by utilizing staff capacity and equipment more effectively for planning and implementation of restoration treatments such as mechanical thinning and broadcast burning.

As noted above, allowing ground-based mechanical equipment on slopes between 30 and 50 percent would likely decrease the number of hand piles for burning. This would allow managers to reduce smoke emissions associated with pile burning and increase opportunities for biomass utilization that could provide long-term carbon storage and reduce greenhouse gas emissions.

The Code amendment would not allow the use of ground-based mechanical equipment on slopes up to 50 percent slopes that are identified or mapped as unstable or active or dormant landslides.

The proposed code amendments will require TRPA review and approval of ground skidding and ground-based mechanical equipment operations on slopes between 30 and 50 percent to ensure environmental protective measures will be in place to minimize slope erosion. Project-specific requirements to meet minimized slope erosion can include but are not limited to leaving remaining ground cover above 85%, use of slash mats, use of low-pressure technology that limits ground disturbance, or inclusion of vegetative buffers. Prior to approval and implementation, implementors will submit to the TRPA their project description, information, and an initial environmental checklist per project that demonstrates minimized slope erosion.

The Basin-wide Code amendment would apply to approximately 60,685.05 acres within the Basin (see Figure 1). Potential for access constraints among other site-specific factors (e.g., unstable slopes) would inform where mechanical treatments would be appropriate and feasible on 30-50 percent slopes. Of the 60,685.05 acres within the Basin that are on slopes between 30 to 50 percent, approximately 47,162.44 acres (77.7%) are on federal lands, 5,270.12 acres (8.6%) are on state lands, 3,885.40 acres are on private lands, and 882.28 acres are on local lands (Table 2 and Figure 3). Partner agencies that would be able to utilize this code amendment include the USDA Forest Service, the California Tahoe Conservancy, the Nevada Division of Forestry, The Nevada Division of State Lands, California State Parks, and others.

Approximately, 6,293.77 acres within the Basin are on slopes between 30 to 50 percent and are also classified as Wilderness. This is a National Forest System classification that allows for limited management and does not allow mechanized equipment unless under emergency authorizations. Wilderness areas within the Basin are at higher elevations with less trees and more exposed granite, so will most likely not warrant mechanical treatment.

Approximately, 362.83 acres within the Basin are on slopes between 30 to 50 percent and are classified as Stream Environment Zones (SEZs). These areas are not included in the potential code amendment.

**Table 1: Acreage by Slopes in the Lake Tahoe Basin**

Area	0-30% Slopes (acres)	30-50% Slopes (acres)	Slopes >50% (acres)	Total (acres)
Lake Tahoe Basin	121,536.1	60,685.05	44,142.56	226,363.61

Table 2: 30 to 50 Percent Slopes Acreage by Ownership

Ownership	30-50% Slopes (acres)
Federal	47,162.44
Local	882.28
Private	3,885.40
State	5,270.12
Other	3,592.04

Figure 1: Lake Tahoe Basin Slopes

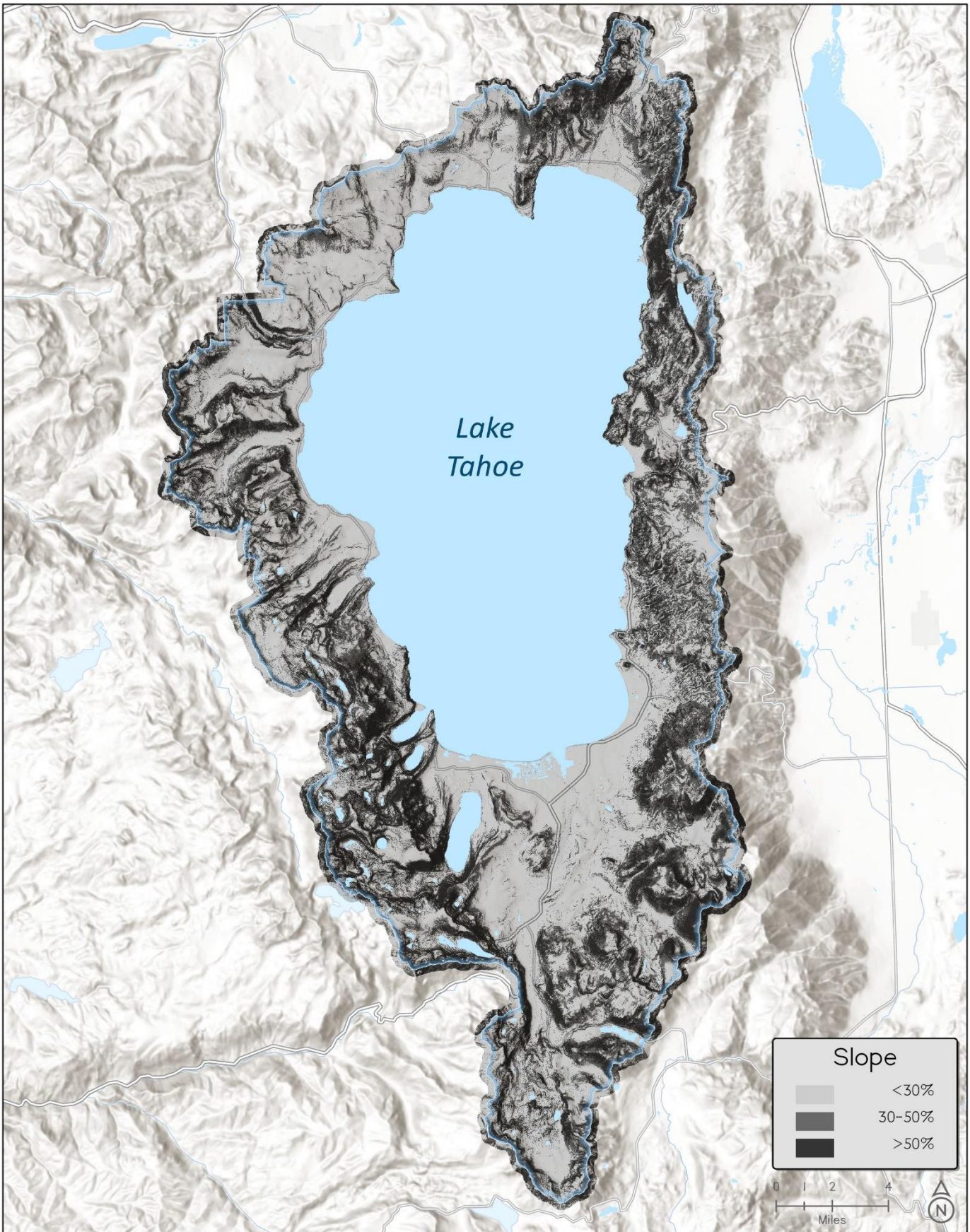


Figure 2: 30 to 50 Percent Slopes in the Lake Tahoe Basin by WUI Defense or Threat Zone

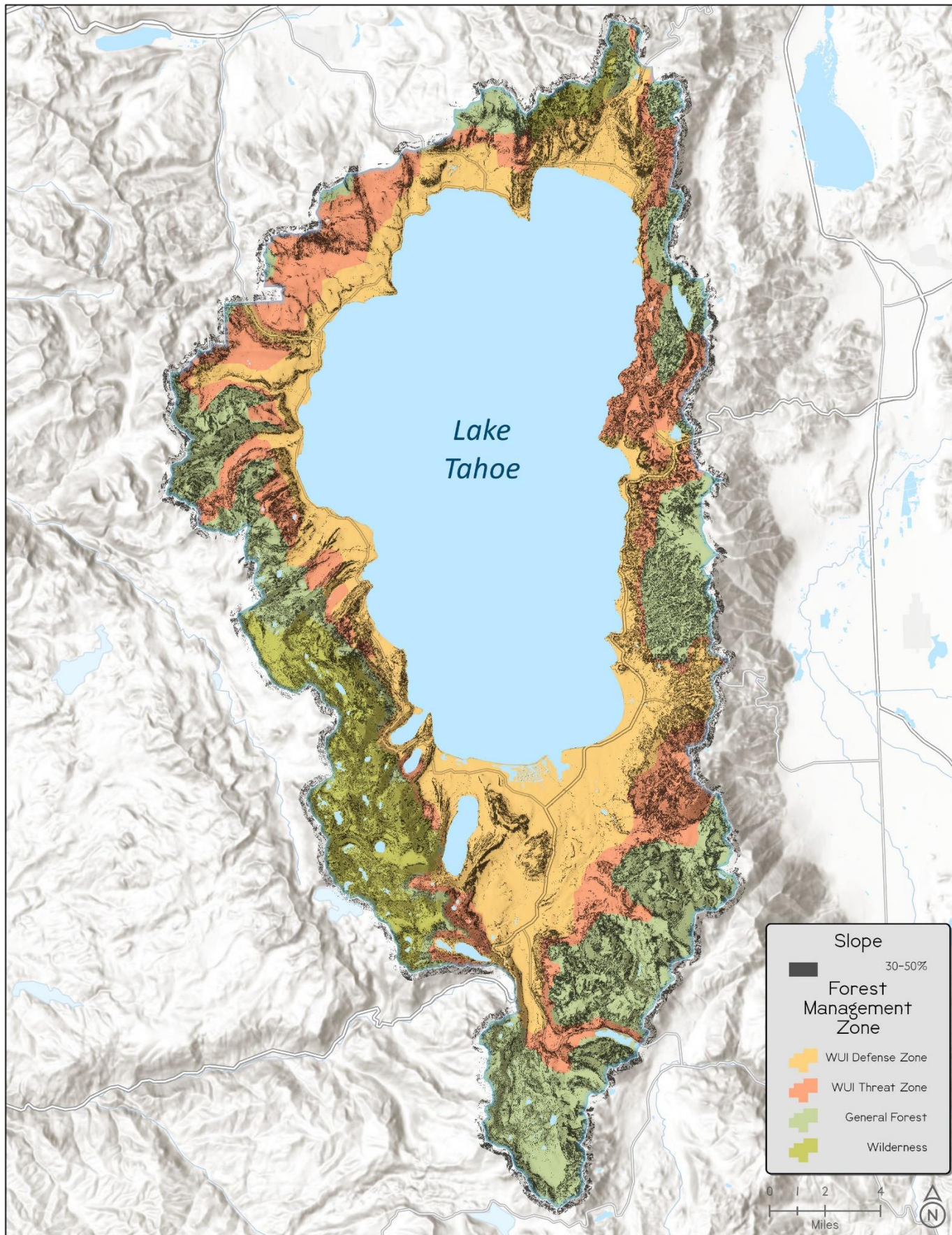
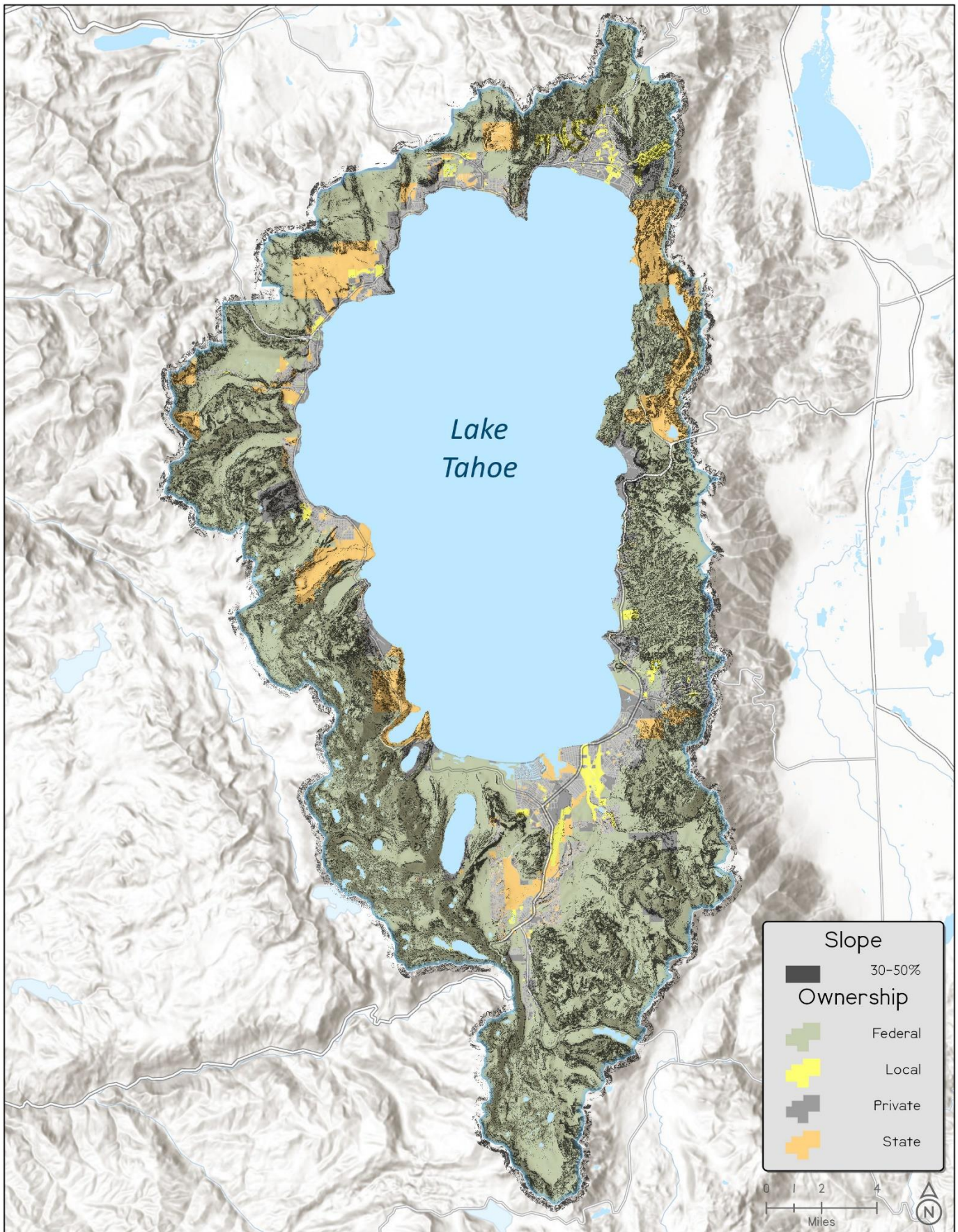


Figure 3: Land Ownership within the Tahoe Basin with 30 to 50 percent slopes



# I. Environmental Impacts

## 1. Land

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Unstable soil conditions during or after completion of the proposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The continuation of or increase in wind or water erosion of soils, either on or off the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The proposed code change would only allow for tree removal and forest thinning on slopes between 30 to 50 percent when proven environmentally suitable with limited erosion impacts and post-treatment remediation in place. Implementors will submit a project description, location, and initial environmental checklist for TRPA review and approval that shows all environmental protection measures to minimize slope erosion.

Additionally, implementors currently meet a variety of standards, guidelines, and requirements related to erosion and soil protection within the Tahoe Basin. For example, the Lake Tahoe Basin Management Unit 2016 Land Management Plan outlines a variety of standards and guidelines that dictate forest management practices as they related to soil compaction, erosion, and protection. These standards and guidelines include, but are not limited to:

- SG10. Avoid soil displacement to the extent practical when grading slopes, piling brush or slash, or engaging in other heavy equipment operations where earth moving is not the objective. [Guideline]
- SG11. During vegetation management activities, limit operation of wheeled or tracked vehicles and timber harvesting equipment to designated routes, and restrict operations to periods of suitable soil moisture conditions as defined in project planning documents and contracts. Suitable conditions also



include frozen ground, and/or a firm, protective base of compacted snow. When suitable conditions are not present, restrict equipment use to roads and designated stream crossings unless suitable mitigation measures can be employed. [Guideline]

- SG12. Avoid unstable areas and SEZs when reconstructing existing roads and landings or constructing new roads and landings. Minimize and mitigate impacts where avoidance is not practical. [Guideline]

Chapter 528 of Nevada Revised Statutes regarding Forest Practice and Reforestation outlines activities to minimize erosion from forestry operations. For example, NRS 528.055 states, “Skid trails, landings, logging roads and firebreaks shall be so located, constructed, used and left after timber harvesting that erosion caused by water flow therefrom and water flow in natural watercourses shall be limited to a reasonable minimum that will not impair the productivity of the soil or appreciably diminish the quality of the water.” Additionally, Chapter 528 outlines best management practices and requirements as they relate to post-treatment restoration including reseeded and revegetating sites (NRS 528.057).

Article 4 of the 2021 California Forest Practice Rules outlines requirements for harvesting practices and erosion control regarding forest management in the State of California. For example, heavy equipment shall not operate on Unstable Areas. If such areas are unavoidable, the RPF shall develop specific measures to minimize the effect of operations on slope instability. These measures shall be explained and justified in the plan and must meet the requirements of 14 CCR § 914 [934, 954]. Additionally, when waterbreaks cannot sufficiently dissipate surface runoff, other erosion controls shall be installed as needed. Erosion Controls means drainage facilities, soil stabilization treatments, road and Landing Abandonment, removal and treatment of Watercourse crossings, and any other features or actions to reduce surface erosion, gully, channel erosion, and mass erosion. Erosion controls must be repaired and maintained year-round to deal with varying weather conditions.

Due to state, federal, and TRPA requirements regarding soil erosion and minimized slope erosion, the proposed code amendments will not have significant impacts as they relate to land.

## 2. Air Quality

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. Substantial air pollutant emissions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Deterioration of ambient (existing) air quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The creation of objectionable odors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Increased use of diesel fuel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

While the proposed code amendment could increase the pace and scale of restoration, most likely forest thinning and restoration activities will continue at the current pace. Additionally, implementors have a suite of best management practices they currently employ to meet air quality and noise standards associated with activities including limitations on the time trucks are allowed to idle. Likewise, implementors within the Basin currently need to meet all air quality regulations dictated by County Air Quality Control Boards or state agencies such as the Nevada Department of Environmental Protection. Lastly the proposed code amendment would have significantly less impacts to noise and air quality standards when compared to catastrophic wildfire emissions and associated emergency operations.

### 3. Water Quality

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. Changes in currents, or the course or direction of water movements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Alterations to the course or flow of 100-yearflood waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Change in the amount of surface water in any water body?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Alteration of the direction or rate of flow of ground water?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Substantial reduction in the amount of water otherwise available for public water supplies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Discussion

The TRPA Code of Ordinances already outlines protections for water quality as it relates to forest management. For example, 61.1.5.C. requires a tree removal plan be submitted to TRPA for approval of substantial tree removal. The tree removal plan must include prescriptions for water quality protection.

The Lake Tahoe Basin Management Unit 2016 Land Management Plan lists a variety of standards and guidelines related to forest treatments and protection of water quality standards including:

- SG4. Design all Forest management activities to prevent violations of applicable water quality standards. [Guideline]
- SG5. Apply current version of the PSW Region Best Management Practices as described in Forest Service Handbook direction for Soil and Water Conservation, Water Quality Management, and Forest Service National Core BMP Technical Guide to all management activities.[Standard]
- SG7. Store fuel and other toxic materials only at designated sites. Prohibit storage of fuel and other toxic materials within SEZs except at designated administrative sites and sites covered by a Special Use Authorization. Refuel outside of SEZs unless there are no other alternatives. [Guideline]

Chapter 528 of Nevada Revised Statutes regarding Forest Practice and Reforestation (NRS 528.053) prohibits the felling of trees, skidding, rigging or construction of roads or landings, or the operation of vehicles, may take place during a logging operation within 50 feet, measured on the slope, of the high-water mark of any lake, reservoir, stream or other body of water unless a variance is first obtained pursuant to subsection 2 from a committee composed of the State Forester Firewarden, the Director of the Department of Wildlife and the State Engineer.

The California Forest Practice Rules of 2021 outline a variety of requirements associated with the protection of water quality and resources during forest management and timber harvesting including limiting the use of landings, skid trails, and roads during winter operations and ensuring all erosion and ensuring water quality BMPs are in place and functioning for all weather events or conditions. Additionally, all forestry projects within the Basin must comply with any federal and state water quality regulations including the Clean Water Act.

## 4. Vegetation

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Reduction of the numbers of any unique, rare or endangered species of plants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- f. Removal of stream bank and/or backshore vegetation, including woody vegetation such as willows?
- g. Removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications?
- h. A change in the natural functioning of an old growth ecosystem?

## Discussion

The proposed code amendment will allow for increased forest treatment and the use of ground-based mechanized equipment on slopes between 30 and 50 percent within the Basin. Through removal of trees, forest treatments in the Basin are typically designed to accomplish forest restoration by increasing forest resilience and decreasing the potential for high severity/catastrophic fires. Removing trees increases horizontal and vertical heterogeneity, which breaks up fuels, can promote tree growth, and provides for diverse wildlife habitat.

Implementors within the Basin currently follow a variety of best management practices associated with terrestrial invasive species control. For example, the Lake Tahoe Basin Management Unit 2016 Land Management Plan) includes several standards and guidelines related to the terrestrial invasive species including:

- SG73. Incorporate prevention and control measures into project planning, management activities and operations to prevent new introductions or contribute to spreading of invasive species, and reduce impacts from existing infestations on NFS lands, or to adjacent lands and water bodies. [Standard]
- SG74. When feasible, employ the following control measures, such as: [Guideline]
  - Use contract and permit clauses to require that the activities of contractors and permittees (including but not limited to special use permits, utility permits, pack stock operators) are conducted to prevent and control the introduction, establishment, and spread of aquatic and terrestrial invasive species.
  - Include invasive species prevention and control measures in mining plans of operation and reclamation plans.
  - When working in known invasive species infestations during project implementation, equipment and vehicles shall be cleaned before moving to other NFS lands.
  - Support partner agencies and their programs. e) Use on-site materials where feasible, unless contaminated with invasive species.
- SG75. Gravel, fill, topsoil, mulch, and other materials should be free of invasive species. [Guideline]
- SG76. New infestations are inventoried and known infestations are prioritized and contained, controlled, or eradicated using an integrated management approach. [Standard]

## 5. Wildlife

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Reduction of the number of any unique, rare or endangered species of animals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Deterioration of existing fish or wildlife habitat quantity or quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The proposed code amendment will allow for increased forest treatment and the use of ground-based mechanized equipment on slopes between 30 and 50 percent within the Basin. Through removal of trees, forest treatments in the Basin are typically designed to accomplish forest restoration by increasing forest resilience and decreasing the potential for high severity/catastrophic fires. Removing trees increases horizontal and vertical heterogeneity, which breaks up fuels, can promote tree growth, and provides for diverse wildlife habitat. Wildlife habitat will be protected, and in many cases promoted, by decreasing the potential for catastrophic wildfire and subsequently increasing forest resilience.

Implementors within the Basin must meet all state and federal threatened and endangered species laws and requirements including obtaining clearances and permits from the US Fish and Wildlife Service, the California Department of Fish and Wildlife, and the Nevada Department of Wildlife. Additionally, implementors currently manage for sensitive species such as Goshawks and Northern Spotted Owls. These habitat areas are mapped within the Basin and have a strict set of criteria for management. For example, the Lake Tahoe Basin Management Unit 2016 Land Management Plan includes standards and guidelines for the protection of species and associated habitats including, but not limited to:

- SG43. On a project specific basis, prescribe measures needed to provide for the diversity of plant and animal communities and support the persistence of native species. [Guideline]
- SG44. During project development, evaluate the project area, including any designated critical habitat, for the habitat suitability and/or occurrence of TEPCS species. [Standard]
- SG45. Implement Limited Operating Periods (LOPs) for TEPCS species and TRPA identified native species (Plan Appendix C) when determined necessary through biological review. [Standard]
- SG47. Decontaminate field clothing and gear prior to entering and when moving between cave habitats to prevent the spread of pathogens and disease. [Guideline] SG48. Maintain and restore the hydrologic connectivity of streams, meadows, wetlands, and other special aquatic features by implementing corrective actions where BMPs have not been implemented or are not effective on

roads and trails that intercept, divert, or disrupt natural surface and subsurface water flow paths. [Guideline]

- SG63. Outside of WUI defense zones, salvage harvests are prohibited in California spotted owl PACs and known carnivore den sites unless a biological evaluation determines that the areas proposed for harvest are rendered unsuitable for the purpose they were intended by a catastrophic stand-replacing event. [Standard]
- SG65. During project-specific analysis determine appropriate amount of coarse woody debris to provide for long-term habitat quality. Coarse woody debris is generally comprised of at least three downed logs per acre in varying stages of decay. [Guideline]
- SG67. Do not construct roads and trails within ¼ mile of the top or base of known cliff nesting raptor sites. [Standard]

## 6. Noise

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Area Plan, Plan Area Statement, Community Plan or Master Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of people to severe noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Exposure of existing structures to levels of ground vibration that could result in structural damage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The proposed code amendment will not increase noise disturbance or pollution above current allowances within the Tahoe Basin.

## 7. Light and Glare

Will the proposal:	Yes	No	No, with mitigation	Data insufficient
a. Include new or modified sources of exterior lighting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create new illumination which is more substantial than other lighting, if any, within the surrounding area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Cause light from exterior sources to be cast off -site or onto public lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create new sources of glare through the siting of the improvements or through the use of reflective materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The proposed code amendment will not significantly impact light and glare.

## 8. Land Use

Will the proposal:	Yes	No	No, with mitigation	Data insufficient
a. Include uses which are not listed as permissible uses in the applicable Area Plan, Plan Area Statement, adopted Community Plan, or Master Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Expand or intensify an existing non-conforming use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The proposed code amendment will not significantly impact land use.

## 9. Natural Resources

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. A substantial increase in the rate of use of any natural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantial depletion of any non-renewable natural resource?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

While this code amendment would promote the removal of trees through ground-based mechanical equipment and may have implications for an increased pace and scale of treatment within the Basin, the benefits of decreased high severity fire risk and increased forest resilience outweigh the potential removal of trees. Likewise, any impacts from the depletion of trees or use of trees by this action would be offset by the potential savings of more trees from high severity wildfire or a mass mortality event from insects and disease spreading through even-aged and dense tree stands.

10. Risk of Upset

Will the proposal:	Yes	No	No, with mitigation	Data insufficient
a. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Involve possible interference with an emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendment would not have significant impacts regarding risk of upset.

11. Population

Will the proposal:	Yes	No	No, with mitigation	Data insufficient
a. Alter the location, distribution, density, or growth rate of the human population planned for the Region?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Include or result in the temporary or permanent displacement of residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments would not have a significant impact on population.



## 12. Housing

Will the proposal:

	Yes	No	No, with mitigation	Data insufficient
a. Affect existing housing, or create a demand for additional housing? To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions:				
1. Will the proposal decrease the amount of housing in the Tahoe Region?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Will the proposal result in the loss of housing for lower-income and very-low-income households?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments would not have a significant impact on housing.

## 13. Transportation / Circulation

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Generation of 100 or more new Daily Vehicle Trip Ends (DVTE)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Changes to existing parking facilities, or demand for new parking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Alterations to present patterns of circulation or movement of people and/or goods?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Alterations to waterborne, rail or air traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments would not have a significant impact on transportation.

### 14. Public Services

Will the proposal have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?:

	Yes	No	No, with mitigation	Data insufficient
a. Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Parks or other recreational facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Maintenance of public facilities, including roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Other governmental services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments would not have a significant impact on public services.

### 15. Energy

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Use of substantial amounts of fuel or energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Ground-based mechanical equipment for tree removal uses diesel fuel. It is not anticipated that the amount of diesel fuel used will be substantially larger than what is currently used within the Basin for tree removal projects. For this reason, the proposed code amendments will not have a significant impact on energy.

## 16. Utilities

Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:

	Yes	No	No, with mitigation	Data insufficient
a. Power or natural gas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Communication systems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Storm water drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Solid waste and disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments will not have a significant impact on utilities.

## 17. Human Health

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Creation of any health hazard or potential health hazard (excluding mental health)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of people to potential health hazards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments will not have a significant impact on human health.

## 18. Scenic Resources / Community Design

Will the proposal:	Yes	No	No, with mitigation	Data insufficient
a. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Be visible from any public recreation area or TRPA designated bicycle trail?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The proposed code amendment will not have long-term impacts on scenic resources or community design. While there may be short-term localized impacts from treatment units, these impacts will be temporary and significantly less than the potential scenic impacts of a catastrophic wildfire or large insect and disease event. While impacts may be visible from roads or trails, the projects will improve visual quality by returning landscapes to more natural and historical stand densities, reducing fire risk, and increasing forest resilience. Additionally, implementors within the Basin must currently meet all TRPA scenic requirements as outlined in Chapter 66 of the TRPA Code of Ordinances.

Lastly, implementors currently take into consideration scenic impacts related to forest management. For example, the Lake Tahoe Basin Management Unit 2016 Land Management Plan lists the follow standards and guidelines related to scenic resources:

- SG117. Scenic resource and built environment guidelines are incorporated into management activities and into the design and development of agency facilities.
- SG116. All resource management and permitted activities shall meet or exceed the established scenery objectives shown on the Minimum Scenic Integrity Objective (MSIO) map. Utilize techniques such as: [Standard]
  - Size areas cleared for management objectives to meet minimum requirements for operability and safety.
  - With consideration for scenic objectives, maintain clumps of trees within cleared areas if they do not pose a safety or operational risk.
  - Maintain understory vegetation within cleared corridors if they do not pose a safety or operational risk

## 19. Recreation

Will the proposal:	Yes	No	No, with mitigation	Data insufficient
a. Create additional demand for recreation facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create additional recreation capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have the potential to create conflicts between recreation uses, either existing or proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in a decrease or loss of public access to any lake, waterway, or public lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

There may be short-term, localized impacts from temporary closures to public lands and recreation areas in the event a treatment unit overlaps a recreation site; however, these impacts will be temporary and significantly less than potential long-term impacts associated with a catastrophic wildfire that could include permanent closure and complete loss of a recreation site and resources.

## 20. Archaeological / Historical

	Yes	No	No, with mitigation	Data insufficient
a. Will the proposal result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Is the property associated with any historically significant events and/or sites or persons?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Implementors must comply with all State Historic Preservation Office regulations as outlined by the States of Nevada and California. These requirements typically include surveying for known or unknown archaeological and historical resources prior to implementation and flagging and avoiding of resources when possible. Additionally, implementors regularly consult and coordinate with the Washoe Tribe regarding culturally sensitive and important resources within the Basin and any potential restoration or management impacts.

## 21. Findings of Significance

	Yes	No	No, with mitigation	Data insufficient
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Does the project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

The proposed code amendments will not have significant impacts.

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**Determination:**

On the basis of this evaluation:

- a. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure  YES  NO
- b. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules and Procedures.  YES  NO
- c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and TRPA's Rules of Procedures.  YES  NO



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Signature of Evaluator

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Forest Health Program Manager

Title of Evaluator

Date 2/14/2022

Attachment D

Dobre et al. 2021. "Assessing the Effects of Forest Treatments and Wildfires on Sediment Yield in the Lake Tahoe Basin." Draft WEPP Analysis Report.



# **Assessing the Effects of Forest Treatments and Wildfires on sediment yield in the Lake Tahoe Basin**

prepared by

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## **I. SUMMARY**

Past forest fuel management activities in the Lake Tahoe Basin have focused on the wildland/urban interface (WUI) to reduce the risk of wildfire to homes and other structures. However, given the increase in wildfire activity within the recent years, land managers within the basin are considering increasing forest treatments to more remote forested areas and on steeper slopes (30–50%), activities that have the potential to also increase soil erosion. This is a great concern in the basin since Lake Tahoe is renowned for its clear waters and eroded sediment can decrease water quality.

To address some of the managers' concerns related to increase soil erosion from forest treatments, we conducted a modeling study to simulate surface runoff and soil erosion from various management conditions followed by a series of data analyses based on the model hillslope results. We first applied the Water Erosion Prediction Project (WEPP) to all watersheds within the Lake Tahoe Basin for eleven management conditions, including current conditions, thinning, prescribed fire, and wildfire, and then performed a series of data summaries and statistical analyses to better understand the relationship between hillslope sediment yield and various environmental variables. While the main focus of the study was to specifically evaluate forest treatments on steep slopes, the large amount of data generated through this modeling exercise allowed us to expand our analyses to other environmental variables to better understand variability in sediment yield due to factors other than slope steepness.

The WEPP model was calibrated to match daily and annual values of surface runoff, sediment yield, and phosphorus, at the outlets of 17 watersheds within the basin. Overall, only minimal calibration was necessary to achieve satisfactory model performance. The model captured runoff regimes across all watersheds reasonably well, and the simulated annual trends of water yield followed the trends of observed yield. The basin-scale data summaries and statistical analyses, revealed that mechanical thinning on steeper slopes can increase soil erosion through rutting, however, current management are likely to use newer harvesting methods and equipment to minimize soil disturbance and increase ground cover. Additionally, the increases in sediment yield with thinning are not statistically significant and they need to be evaluated in terms of other ecological benefits, such as maintaining healthy ecosystems and avoiding the costs of catastrophic high severity fires.

From our analyses other variables emerged as having an influence on soil erosion, such as slope length, slope area, slope width, and precipitation. Specifically slope length appeared as an important variable in all statistical analyses, therefore managers should consider thinning activities that either include buffers or add natural breaks along the slopes (i.e. thin only portions of a slope). Since the conclusions in this study are based on modeling results and not on soil erosion from field data, these results should

be used in combination with other tools and knowledge to make informed future management decisions in the Lake Tahoe Basin.

## **II. INTRODUCTION**

Wildfire activity has been increasing since the mid-1980s in the western U.S. (Westerling et al., 2006) and multiple recent studies suggest that it will continue to increase in the next decades (Yue et al., 2014, Williams et al., 2019, Higuera and Abatzoglou 2021). Within the state of California there was a fivefold increase in annual burned area between 1972–2018 (Williams et al., 2019), with year 2020 experiencing five of the six largest wildfires in state history (Higuera and Abatzoglou 2021). The increase in wildfire activity is mainly attributed to anthropogenic climate changes, specifically to shifts in land use and land use practices, among others (Abatzoglou et al., 2020, Bowman et al., 2020, Coop et al., 2020). In the largely forested areas of the Sierra Nevada mountains, the burned areas are projected to increase by 50% by midcentury. Similarly, Williams et al. (2019) projected an eightfold increase in annual summer forest-fire extent in forested North Coast and Sierra Nevada regions. These statistics are concerning for land and water managers responsible for protecting natural resources.

Forest treatments, especially mechanical thinning and prescribed fires have been proposed as effective measures to reduce wildfire risks (Schwilk et al., 2009, Agee and Skinner, 2005) but also to improve forest resistance to drought and to restore forest structure to historic conditions (Low, 2021). Despite these recommendations, some forest treatments, such as prescribed fires, are still not widely implemented, which is attributed to various factors including favorable weather for burning, air quality constrains, and negative social perception (Kolden 2019).

Fuel reduction treatments using mechanical equipment have commonly been limited to slopes less than 40% on national forest lands in the Sierra Nevada (North et al., 2015). In the Lake Tahoe Basin, regulatory agencies had limited treatments on slopes greater than 30% based on the Bailey Land Capability System developed in the 1970s (Long, 2009), limitations that are mainly driven by water quality and clarity standards (Safford et al., 2009). However, agencies in the Lake Tahoe Basin and other parts of the Sierra Nevada are now interested in the potential benefits and risks of conducting fuel reduction and forest restoration treatments, specifically ground-based thinning using heavy equipment, on slopes greater than 30% to reduce the potential risk of wildfires.

More recently, land managers and scientists have been warned that treatments on steep slopes are important to reduce the potential impacts of severe wildfires (Long, 2009). For example, following the Angora Fire (2007), Safford et al., 2009 examined the effects of previous fuel treatments on fire

severity and reported that an area of steeper slopes had been treated only with hand-thinning and consequently experienced more severe fire; the study also noted that forest thinning on steep slopes needs to be more extensive to achieve a similar fire hazard reduction as on gentle slopes.

Some research has cautioned that slope steepness is a risk factor for soil erosion, but many studies have not found it to be a significant driver of erosion rates. For example, one study (Fox and Bryan, 2000) noted a general slope-erosion relationship, finding that “for a constant runoff rate, soil loss increased roughly with the square root of slope gradient.” However, another study found that steep slopes develop geomorphic features that moderate erosional energy (Giménez and Govers, 2001). A study in New Mexico (Cram et al., 2007) found that steep slopes (26% to 43%) in a mixed-conifer forest in central New Mexico were potentially susceptible to rutting from tires on equipment, and they noted that exposed bare soil was a key indicator. When litter was disturbed but not displaced (characterized as only light to moderate disturbance), runoff and sedimentation on steep slopes did not exceed non-disturbed sites. The authors concluded that advanced equipment such as forwarding beds can avoid erosion from surface disturbance.

The general concern that steep slopes are vulnerable to erosion is often linked to practices sometimes associated with mechanical harvest including clearing and road or trail construction that reduce root strength and increase water runoff (Sidle et al., 2006). Such pronounced effects are unlikely to result from fuel reduction thinning that adheres to best management practices (BMPs), such as limiting the extent and connectivity of disturbed areas (e.g. designated location for landing and spacing of skid trails and burn piles).

### Forest treatments, slope steepness, and soil erosion in the basin

Land managers in the Lake Tahoe Basin are focused on harvest using ground-based machines, although cable-yarding and loaders have been considered as alternative harvest technologies for steep slopes (Han and Han, 2020); such treatments pose different risks in terms of erosion, with little risk where logs can be fully suspended.

A field study of erosion risk from thinning and prescribed burning was conducted in the Lake Tahoe Basin (Harrison et al., 2016); that study included four sites with slopes exceeding 30% (Table 1):

**Table 1:** Sites with slope over 30% in a field study of erosion in the Lake Tahoe Basin.

Site	Avg. slope (%)	Soil type	Parent material	Hydraulic conductivity (cm s <sup>-1</sup> )	Bulk density (field) (g cm <sup>-3</sup> )
Incline 1	38	JO-TA	Volcanic	0.001	0.89
Incline 2	38	JO-TA	Volcanic	0.001	1.16
Slaughterhouse 1	35	CS-CG	Granitic	0.001	1.11
Slaughterhouse 2	34	CS-CG	Granitic	0.006	1.23

*JO-TA = Jorge-Tahoma; CS-CG = Cassenai-Cagwin*

In their results for mastication and prescribed burning, slope was not a significant predictor of erosion. No sediment yield was observed for plots with up to 60% of the surface area burned, despite steep slopes. The authors observed that several practices commonly used in the basin likely limited erosion effects, including dry season operations, limited passes with equipment, application of slash in trails, and use of low ground-pressure vehicles, as has been reported from other areas (Zamora-Cristales et al., 2014). They also noted that steeper slopes were unlikely to be treated with mastication and less likely to be treated with prescribed fire due to implementation challenges. However, they noted that their results “should not be extrapolated to steeper sites”.

A recent follow-up to a pile burning study in the basin noted that pile burning generally did not pose erosion hazards. However, the researchers found that one site, which had not reestablished vegetative cover after several years, was located on a steep slope (Busse et al., 2018). Despite that issue, the authors noted that the eroded sediments did not move far down slope.

A review of fuel treatment effects on soils (Verburg et al., 2009) mentioned some earlier field studies in the basin and cited a rainfall simulation experiment on granitic soils (Cagwin series). The study found that interrill erosion increased significantly as slope class increased from 15–30% to greater than 30%, but slope had no significant effect on infiltration and runoff (Guerrant et al., 1991). They also noted that soil type appeared to have relative low erosion risk. A follow-up study (Naslas et al., 1994) conducted on three slope classes (<15%, 15–30%, >30%), found that erodibility was more dependent on soil type, plot condition and duration of a rainfall event rather than steepness. Those studies suggested that more simplistic classification systems, like the Bailey system, were insufficient to evaluate erosion potential.

### **Studies from Wildfire Settings**

Several studies in wildfire contexts have not found slope to be a main contributor to erosion, especially where the slope exceeds 10–20%. In a study in Colorado, Benavides-Solorio and MacDonald (2005) measured the rates of sediment yield at 48 hillslope-scale plots from three prescribed fires and three wildfires. The authors then quantified the effects of various environmental variables (including slope) on sediment yield and developed empirical models to predict post-fire sediment. Approximately 77% of the model variability in sediment production rates was explained by percent bare soil, rainfall erosivity, fire severity, soil water repellency, and soil texture. Surprisingly, slope was not selected by any of the predicted models, which the authors attributed to the lower variability in slopes (25–45%).

Similar results were found in a separate study, also in Colorado, where slope had limiting effects on sediment yield (Pietraszek, 2006). The authors also attributed these results to the lower variability in slope steepness (20–40%).

Slope steepness was also not important in a study in Montana where the authors found that 75% of the variance in first-year post-fire hillslope erosion rates was explained by the 10-minute rainfall intensity ( $I_{10}$ ). Other site characteristics, such as ground cover, water repellent soil conditions, and slope steepness were obscured when  $I_{10}$  was greater than 70 mm/h (Spigel and Robichaud, 2007).

## **Effects of ground cover on soil erosion**

The most critical influence of management on soil erosion is through its effect vegetative residue (live plants, wood, or litter) covering the soil. Rock fragments can also provide soil protection from raindrop splash, aggregate disintegration, and detachment by overland flow. The role of ground cover on limiting soil erosion applies throughout forested landscapes. Consequently, when using any model to project erosion in forested landscapes, the effects of natural disturbances like wildfire as well as management activities such as thinning, prescribed fire, trails and roads on ground cover are critical.

Forest fuel reduction efforts attempt to reduce surface fuels while maintaining sufficient ground cover to inhibit erosion. In practices observed in the Lake Tahoe Basin, residual ground covers are likely to be effective. Research by Harrison et al. (2016) confirmed that even relatively low (25%) levels of ground cover, in the form of masticated fuels or duff, could effectively inhibit erosion, and that maintaining patchy ground cover could be more beneficial than maintaining continuous ground cover.

## **Concerns with parameters other than ground cover**

Studies of soil quality and forest treatment effects have often examined soil compaction, and that indicator has been a focus of soil monitoring in the basin (Norman et al., 2008). Compaction by heavy equipment can have negative impacts on vegetation, particularly seedlings (Mariotti et al., 2020). However, such concerns may be less significant for fuel reduction contexts in the Lake Tahoe Basin, where treatments commonly occur on coarsely-textured granitic soils and are expected to reduce small trees. While compaction is important for hydrology (change in infiltration leads to increased overland flow and potential for erosion), the amount of cover is a more direct control on erosion rates (Prats et al., 2019). One concern is that wheeled or tracked vehicles might be more subject to slippage on steep slopes, which could lead to gouging of soils, but experienced operators and oversight may limit or mitigate such potential.

## **III. METHODS**

### **The WEPP model**

The Water Erosion Prediction Project (WEPP) model is a physically-based, continuous-simulation, distributed-parameter model (Flanagan and Nearing, 1995). The WEPP technology is based on the fundamentals of hydrologic and erosion science (Nearing et al., 1990) and has been initially developed and successfully applied to predict soil erosion from small agricultural catchments (Flanagan and Nearing, 1995, Flanagan et al., 2007). However, in the recent years the model has been improved to predict sediment delivery from larger forested watersheds. Major recent improvements include the incorporation of the Muskingum-Cunge channel routing algorithms (Wang et al, 2014) and of a simple linear reservoir algorithm (Srivastava et al., 2013, Srivastava et al., 2017, and Srivastava et al., 2018, Brooks et al., 2016), which now allows users to apply the model to larger watersheds characterized by baseflow.

## **The WEPPCloud online GIS interface**

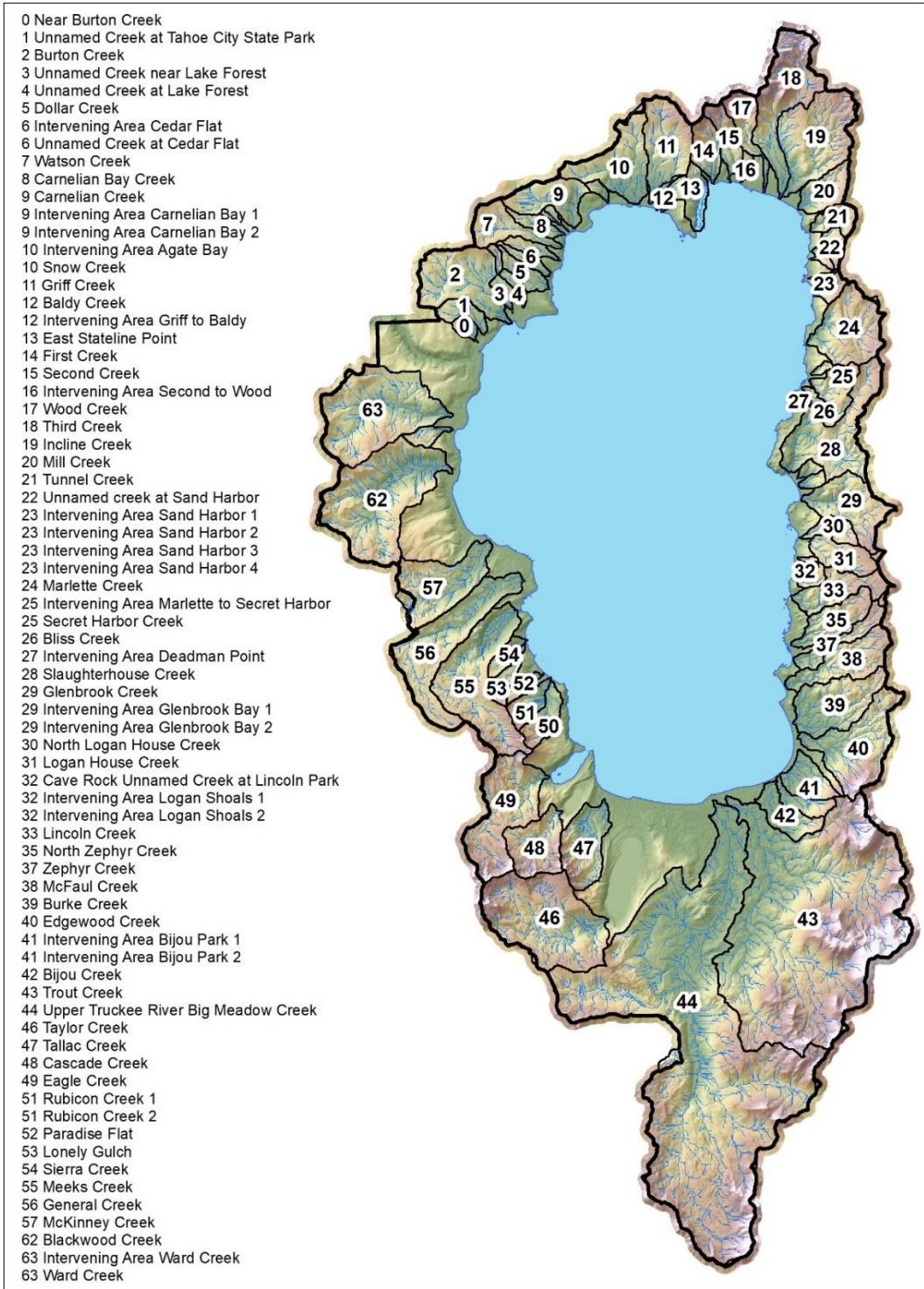
WEPPcloud (<https://wepp.cloud>) is an online interface for the WEPP model that allows users to run hydrologic simulations and view model results without downloading any data or software on their computers. To run predictions of runoff and erosion, users only need a computer connected to the internet. All input, output, and model runs are stored online and can be accessed by the user at a later time or shared with other collaborators. The Lake Tahoe interface (<https://wepp.cloud/weppcloud/lt/>) is site-specific and all input data, especially the management files, were specifically created for this project based on data from literature and from previous field measurements.

## **Study sites and watershed delineation**

For this study, we selected all watersheds around the Lake Tahoe Basin (Fig. 1), with a few exceptions. We excluded ski runs because treatments at such sites are likely to differ from the general forest and would require more customization. Similarly, urban areas and small “frontal” watersheds that are concentrated in the Wildland-Urban Interface (WUI) were not specifically modeled because WEPP was designed as a wildland model. Urban areas with impervious surfaces require more complex calibration and customization of input parameters. The Lower Truckee watershed in the NW side of the lake flows out of the basin. Therefore, this area was excluded from the analyses.

The watersheds were delineated based on a USGS National Elevation Dataset (NED) at 30-m resolution using the TOPAZ (Garbrecht and Martz, 1999) model. Two parameters are needed to delineate watersheds: a Critical Source Area (CSA—the threshold area at which the channel begins) and a Minimum Source Channel Length (MSCL—the minimum length of a channel). Higher MSCL and CSA values will delineate watersheds with less number of hillslopes but longer lengths, while smaller values will delineate more number of hillslopes but shorter lengths. In the current simulations we used MSCL = 60 and CSA = 5.





**Fig. 1.** Watershed boundaries and names of the simulated watersheds.

## **Model setup and input data**

### ***Soils and Landcover/Managements***

The soil and management files are created based on default values in WEPP or are extracted from national databases. The WEPP soil input files require: *rill* and *interrill erodibility*, *critical shear*, *effective hydraulic conductivity*, *soil depth*, *%sand*, *%silt*, *%clay*, *%rock*, *%organic matter*, *CEC*, *bulk density*, *hydraulic conductivity*, *wilting point*, and *field capacity* for each soil layer. We automatically extracted all these parameters from the NRCS SSURGO database and created a soil file for each hillslope in each watershed. Similarly, we identified a landcover type based on the 2016 NCDL Landcover map (e.g. deciduous forest, evergreen forest, shrubland, etc.) and then created a Tahoe-specific WEPP management file similar to Brooks et al., 2016, and assigned it to each hillslope. Although WEPP requires several vegetative parameters, the most sensitive ones are %canopy cover, %rill and %interrill ground covers, and Leaf Area Index (LAI). These input files were the basis for the “Current Conditions” scenario.

### ***Weather data***

In the Lake Tahoe model runs we used the historic gridded Daymet at 1 km spatial resolution (Thornton et al. 2016) database to acquire daily precipitation, maximum and minimum temperature at each hillslope within the modeled watersheds between 1990–2019. The rest of the weather parameters (storm duration, time to peak intensity, peak intensity, solar radiation, average wind speed and duration, and dew point temperature) were stochastically generated based on the nearby Tahoe, CA station, using the CLIGEN weather generator (Nicks and Lane 1989, Srivastava et al. 2019).

For the future climate scenario, we used the A2 climate scenario (Coats et al., 2013) for the daily precipitation, maximum and minimum temperature and CLIGEN for the remaining parameters. An important observation is that the CLIGEN model uses current weather stations to generate local storm durations and intensities and, therefore, might not be comparable to future storm characteristics. Future model simulations are between 2018–2048. The weather files were built to match the streamflow and water quality data available at the outlet of the modeled watersheds (Table 2).

## **Model calibration and performance assessment**

Model accuracy assessment was performed on 17 watersheds in the basin with long-term observed USGS data (Fig. 2; Table 2). To calibrate the model, we ran the WEPPcloud interface with default parameters and downloaded all the model runs (including all the input and output data) with the wepppy-win-bootstrap, a freely available Python package developed to allow advanced users to download, modify, and run WEPPcloud projects locally on Windows computers (Lew, 2021). We first calibrated daily streamflow and total water yield as described below and then calibrated key parameters related to sediment and phosphorus yield. Model performance was assessed for each watershed simulation by utilizing a variety of publicly available USGS data sources: daily streamflow data measured at USGS gauging stations, flow-weighted annual loads of sediment and phosphorus processed in previous studies, and flow-weighted monthly concentrations of phosphorus. Model performance efficiency was assessed using several goodness-of-fit statistics: the Nash-Sutcliffe

Efficiency (*NSE*; Nash and Sutcliffe, 1970), the Kling-Gupta efficiency (*KGE*; Gupta et al., 2009), and percent bias (*PBias* (%); Yapo et al., 1996). These indices were calculated with the ‘*hydroGOF*’ R package (Zambrano-Bigiarini, 2020).

**Table 2.** List of gauged study watersheds, simulation dates, areas, elevations, and precipitation. Full USGS station codes and names, the corresponding WEPPcloud interface model run names, and web addresses for the model runs are provided in the supplementary material (Table A1 in Appendix).

No.	Name	USGS station	Simulation date range YYYY/MM/DD		Watershed area (ha)	Min. elevation (m)	Max. elevation (m)	Mean Annual Precipitation (mm)
			Start	End				
<i>California</i>								
1	WC8 <sup>§</sup>	10336676	1990/01/01	2014/09/30	2310	1920	2700	1406
2	WC7A <sup>§</sup>	10336675	1991/10/01	2001/09/30	2170	1967	2700	1414
3	WC3A <sup>§</sup>	10336674	1991/10/01	2011/11/01	1160	2021	2700	1496
4	BC1	10336660	1990/01/01	2014/09/30	2670	1904	2676	1476
5	GC1	10336645	1990/01/01	2014/09/30	1820	1913	2640	1271
6	UTR1 <sup>§</sup>	10336610	1990/01/01	2014/09/30	13320	1899	3052	1025
7	UTR3 <sup>§</sup>	103366092	1990/06/01	2012/09/30	9380	1926	3050	1117
8	UTR5 <sup>§</sup>	10336580	1990/05/12	2011/10/11	3410	1981	3050	1218
9	TC4 <sup>§</sup>	10336780	1990/01/01	2014/09/30	9870	1899	3306	905
10	TC2 <sup>§</sup>	10336775	1990/06/01	2012/09/30	5560	1914	3259	880
11	TC3 <sup>§</sup>	10336770	1990/05/22	2011/03/31	1780	2124	3259	900
<i>Nevada</i>								
12	LH1	10336740	1990/01/01	2011/10/12	500	2030	2688	657
13	GL1	10336730	1990/01/01	2012/09/30	990	1903	2689	616
14	IN1 <sup>§</sup>	10336700	1990/01/01	2014/09/30	1580	1904	2807	928
15	IN2 <sup>§</sup>	103366995	1990/01/01	2004/09/30	1070	1942	2807	999
16	IN3 <sup>§</sup>	103366993	1990/05/01	2011/03/31	690	2114	2807	1061
17	TH1	10336698	1990/01/01	2014/09/30	1470	1900	3135	1081

<sup>§</sup> Denotes nested watersheds.

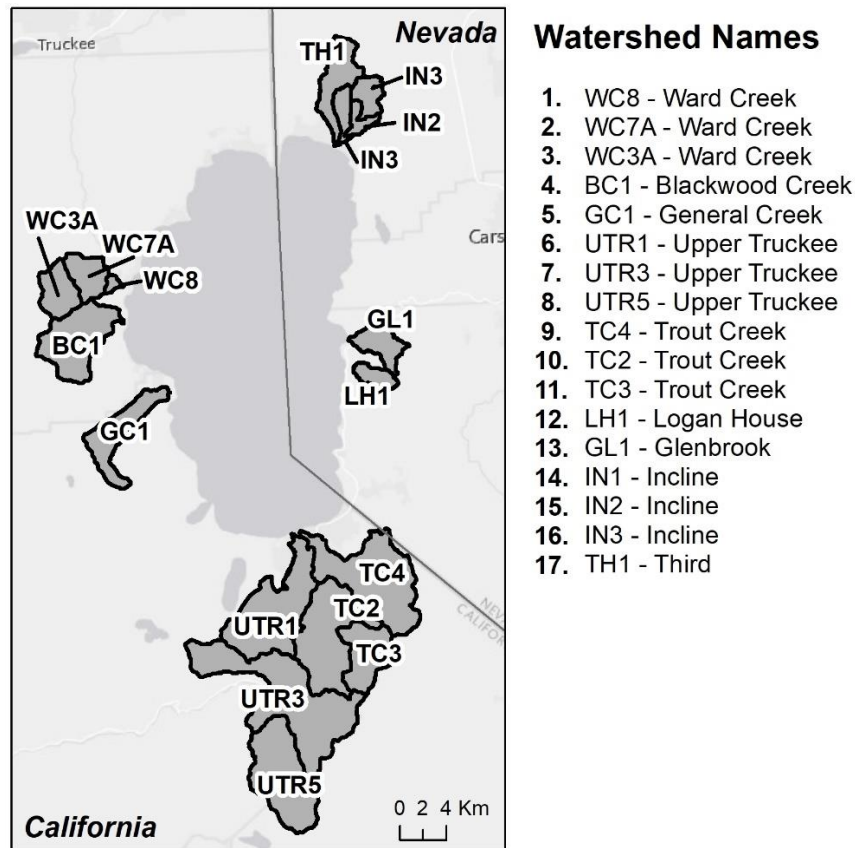


Fig. 2. Watersheds with observed data used for calibration.

**Streamflow and water yield**

Streamflow calibration was performed using only the linear baseflow recession coefficient ( $k_b$ ). The  $k_b$  coefficient represents the fixed proportion of the total water stored in a dynamic groundwater reservoir that provides baseflow to the stream on any given day and typically varies between  $0.01 \text{ d}^{-1}$  and  $0.1 \text{ d}^{-1}$  (Beck et al., 2013; Sánchez-Murillo et al., 2014). Brooks et al. (2016) determined that the observed streamflow recessions on the western side of Lake Tahoe could be represented by a linear reservoir coefficient  $k_b$  of  $0.04 \text{ d}^{-1}$ . However, due to a complex hydrogeology of the east side of the Lake Tahoe Basin, attributed to large geologic faults and high permeability rates (Nolan and Hill, 1991), the authors proposed that additional deep seepage losses of groundwater were occurring and suggested that the rate of groundwater loss from the reservoir could be quantified by calibrating a second deep seepage reservoir coefficient ( $k_s$ ) for groundwater lost from the system. For our simulations, we assigned a default  $k_b$  value of  $0.04 \text{ d}^{-1}$  to all modeled watersheds from the west-side of the basin and calibrated the  $k_b$  and  $k_s$  coefficients for the east-side watersheds similar to the Brooks et al. (2016) approach. For the streamflow model performance assessment, we used a maximum of 25 years (1990–2014) of observed daily streamflow data at the 17 watersheds identified in Table 2.

### ***Sediment yield***

The WEPP model can simulate soil erosion from hillslopes and channels, soil deposition within the hillslope and channel profile, and sediment yield at the watershed outlet. The most important calibrating parameters for simulating soil erosion are effective hydraulic conductivity, rill and interrill erodibilities, hillslope critical shear, percent ground cover, and channel bed critical shear stress ( $\tau_c$ ) (Nearing et al., 1990). For hillslopes, these parameters were set by default in the WEPPcloud interface based on previous field observations in forest soils of various textures (Lew et al., 2021). Similarly, for channel erosion, Srivastava et al. (2020) demonstrated good agreement between observed and model simulations in the seven watersheds in the Mica Creek Experimental Watershed in North Idaho (MCEW) by varying only the channel  $\tau_c$ . The authors found a direct relationship between WEPP-calibrated  $\tau_c$  and the median particle size ( $D_{50}$ ) and suggested that pebble count data can be used to parametrize the channel  $\tau_c$  in forested watersheds. In the Lake Tahoe watersheds, pebble count data were available at few locations, which were provided by the land managers. We calculated the  $D_{50}$  from the observed pebble count data and identified the channel bed critical shear stress-equivalent following Berenbrock and Tranmer (2008).

Observations of event-based suspended sediment concentrations (SSC) were available at the USGS gauging stations for all modeled watersheds in the Lake Tahoe Basin. Additionally, we also had available flow-weighted annual loads of SSC estimated in a previous study in the basin by Coats et al. (2016). The authors estimated and compared annual loads from several regression equations after correcting the sources of bias in the USGS water quality database.

### ***Phosphorus yield***

Simulated phosphorus yield in WEPPcloud is based on simple static phosphorus concentrations in each of the three components of the streamflow hydrograph (surface runoff, subsurface lateral flow, and baseflow), and particulate phosphorus concentration on the delivered sediment. These static concentrations were calculated based on long term observed streamflow (*USGS code: 00060—Discharge,  $ft^3 s^{-1}$* ) and event-based TP concentrations (*USGS code: 00665—Phosphorus, water, unfiltered,  $mg l^{-1} P$* ), SRP (*USGS code: 00671—Orthophosphate, water, filtered,  $mg l^{-1} P$* ), SSC (*USGS code: 80154—Suspended sediment concentration,  $mg l^{-1}$* ), and streamflow (*USGS code: 00061—Discharge, instantaneous,  $ft^3 s^{-1}$* ) measured at the USGS stream gauging stations and bias-corrected by Coats et al., 2016. Particulate phosphorus (PP;  $mg L^{-1}$ ) is not typically measured at the USGS stream gauging stations and was calculated by subtracting SRP from TP. Since these observations were event-based, we calculated the flow-adjusted daily concentrations with the LOAD ESTimator (LOADEST; Runkel et al., 2004) model, which is a USGS model used to derive relationships between event-based streamflow and suspended sediment concentrations based on eleven pre-defined regression equations. For each watershed, we ran the LOADEST model with an automated regression model selection.

On 1 January 1997 and 31 December 2005, a few watersheds on the western side of the Lake Tahoe experienced significant rain-on-snow events that caused record peak streamflow events. For example, Blackwood Creek, USGS code 10336660, recorded  $83 m^3 s^{-1}$  (247 mm) in 1997 and  $64 m^3 s^{-1}$  (191

mm) in 2005 peak streamflow. Therefore, when using the entire data record generated bias model results, we ran seasonally piecewise LOADEST models for all years except for WY 1997 and WY 2006, and then separately for years WY 1997 and WY 2006. Gao et al. (2018) found that the seasonally piecewise method performed better than the year-round method in estimating monthly nitrogen loads.

Static phosphorus concentrations needed as input to the WEPPcloud interface were further calculated from the flow-weighted concentrations for each watershed. We assumed the phosphorus concentrations in the surface runoff are typical of the streamflow SRP concentrations ( $\text{mg L}^{-1}$ ) during spring snowmelt (months April and May) and that the phosphorus concentrations in the baseflow are typical of the streamflow SRP concentrations ( $\text{mg L}^{-1}$ ) in the fall (September and October). For the phosphorus concentrations in lateral flow, we averaged the SRP streamflow concentrations ( $\text{mg L}^{-1}$ ) of the remaining months. We calculated the particulate phosphorus concentrations adsorbed to sediments with equation 1.

$$pSediment = \left( \frac{TP - SRP}{SSC} \right) 10^6 \quad (1)$$

where  $pSediment$  is the particulate phosphorus concentration ( $\text{mg kg}^{-1}$ ), calculated for May, which is the month with the highest runoff and SSC. We used the phosphorus concentrations determined from the observed data as initial input to the model and further calibrated these values to match simulated values with observed annual average flow-adjusted loads of TP, SRP, and PP.

### **Model parameterization for management scenario testing**

For this analysis, we modeled 72 watersheds identified in Fig. 1 for 11 management scenarios, or conditions. The management parameters used to simulate these conditions are provided in Table 3.

#### ***Management conditions:***

1. *Undisturbed Current Conditions.*
2. *Uniform Thinning (96% Cover)*
3. *Uniform Thinning (Cable 93% Cover)*
4. *Uniform Thinning (Skidder 85% Cover)*
5. *Uniform Prescribed Fire*
6. *Uniform Low Severity Fire*
7. *Uniform Moderate Severity Fire*
8. *Uniform High Severity Fire*
9. *Simulated Wildfire – FCCS fuels – current conditions*
10. *Simulated Wildfire – future fuels from LANDIS and current climate*
11. *Simulated Wildfire – future fuels from LANDIS and future climate scenario A2*

The purpose for simulating undisturbed conditions was to establish a baseline for sediment and phosphorus that managers could use for comparing impacts of alternative management strategies to current conditions. For those watersheds that were gauged, the undisturbed conditions also provided an opportunity to more finely calibrate the model. The vegetation types for the current conditions assumed 100% ground cover in forested areas and 90% in the shrub-dominated areas.

Thinning and burning scenarios were simulated assuming the entire watershed was exposed to the same condition at once, although it is improbable that a fire would uniformly burn an entire watershed or that thinning would occur on all hillslopes at once. Thinning assumed 96, 93, and 85% ground cover in forested areas, with no treatment in other vegetation types. While the method of thinning does not necessarily affect the number of trees removed, it does affect the post-disturbance ground cover. We assumed the three thinning scenarios to be representative of hand thinning (96% post-disturbance ground cover), cable thinning (93%), and skidder thinning (85%), respectively. Of all thinning methods, hand thinning has the lowest ground cover disturbance. In Lake Tahoe, this method has been applied mainly on steep slopes, where there are concerns with soil disturbance by heavy equipment (Lake Tahoe Basin Report, 2014). Mechanical thinning is more cost-effective than hand thinning, however it is prohibited in the basin on slopes greater than 30 percent and on sensitive areas (e.g. stream environment zone). We also assumed the 96% mechanical treatment to be similar to cable-based thinning methods while 85% to be similar to skidder thinning. Most thinning treatments in the basin are already designed to minimize soil disturbance and, across the basin, average post-thinning ground cover varies between 87 and 100% (Norman et al., 2008, Pell and Gross, 2016, Christensen and Norman, 2007). Therefore, we considered the 85% post-disturbance ground cover as an extreme thinning scenario, which we used in several statistical analyses.

Prescribed fire, low, moderate, and high severity fire management conditions assumed ground covers of 85, 80, 60, and 30%, respectively, in forested areas, 75, 70, 50, and 30%, respectively, in shrub-dominated areas, and no treatment in other vegetation types. Similar to the thinning scenarios, the uniform application of a scenario tends to increase the overall sediment yield at the outlet of a watershed, but it allowed us to directly compare simulated runoff, sediment, and phosphorus for each hillslope and watershed from all management conditions.

The runs with a simulated wildfire were based on predicted Soil Burn Severity (SBS) map. These maps assign either a low, moderate or high soil burn severity to each hillslope in the basin and were created based on a machine learning technique in which we used historic SBS maps from the King, Angora, and Emerald fires with several environmental variable related to soils, topography, climate, landcover, and fuels, to predict SBS classes of low moderate, and high severity for the entire Lake Tahoe Basin. The fuel loads were based on both FCCS and LANDIS. FCCS is the “Fuel Characteristic Classification System” (Ottmar et al., 2007) and LANDIS is a vegetation growth model that can be driven by historic or future climates (Scheller et al. 2007).

Soil properties vary with soil type (e.g. granitic, volcanic) and land use (e.g. forest, shrubs, grass) and they change with changes in land management or with wildfire. To reflect a change in management, such as thinning, prescribed fire, or a wildfire, we altered key soils and management parameters based on filed validated measures (Elliot, 2004) (Table 3).

For this study we delineated 72 watersheds that drain directly into the lake, but only 17 watersheds have water quality observations for calibration. The  $k_b$  and  $k_s$ , channel  $\tau_c$ , and phosphorus concentrations in surface runoff, subsurface lateral flow, baseflow, and sediment for the calibrated watershed runs were distributed to uncalibrated watersheds across the basin based on the watershed’s similarities, parent material, and proximity.

All simulations were performed using Python batch processing scripts that generate WEPPcloud compatible projects and results were further compiled in tabular data files and GIS data files. In the current version of the WEPPcloud interface, users can perform similar scenario testing for only individual watersheds, however, future interface developments will allow select users to perform similar batch hydrologic modeling for multiple watersheds and scenarios at the same time.

**Table 3.** Key hillslope soils and management parameters used to parameterize the WEPPcloud interface by management and three soil types, for the study watersheds.

Soil Type	Management Name	Soils			Managements		
		Critical Shear (Pa)	Interrill Erodibility (Kg s/m4)	Rill Erodibility (s/m)	Canopy Cover (fraction)	Interrill Cover (fraction)	Rill Cover (fraction)
Granitic	Old Forest	4	250000	0.00015	0.9	1	1
Granitic	Young Forest	4	400000	0.0002	0.8	1	1
Granitic	Forest Thinning 96% cover	4	400000	0.00004	0.4	0.96	0.96
Granitic	Forest Thinning 93% cover	4	400000	0.00004	0.4	0.93	0.93
Granitic	Forest Thinning 85% cover	4	400000	0.00004	0.4	0.85	0.85
Granitic	Forest Prescribed Fire	4	1000000	0.0003	0.85	0.85	0.85
Granitic	Forest Low Severity Fire	4	1000000	0.0003	0.75	0.8	0.8
Granitic	Forest Moderate Severity Fire	4	1000000	0.0003	0.4	0.5	0.5
Granitic	Forest High Severity Fire	4	1800000	0.0005	0.2	0.3	0.3
Granitic	Shrubs	4	141100	0.0000873	0.7	0.9	0.9
Granitic	Shrub Prescribed Fire	4	170100	0.000149	0.7	0.75	0.75
Granitic	Shrub Low Severity Fire	4	170100	0.000149	0.5	0.7	0.7
Granitic	Shrub Moderate Severity Fire	4	170100	0.000149	0.3	0.5	0.5
Granitic	Shrub High Severity Fire	4	948600	0.0004343	0.05	0.3	0.3
Granitic	Bare Slope	4	300000	0.005	0.05	0.2	0.2
Granitic	Sod Grass	4	196700	0.0004446	0.4	0.6	0.6
Granitic	Bunch Grass	4	196700	0.0004446	0.6	0.8	0.8
Alluvial	Old Forest	1	300000	0.0001	0.9	1	1
Alluvial	Young Forest	1	500000	0.00015	0.8	1	1
Alluvial	Forest Thinning 96% cover	1	500000	0.00003	0.4	0.96	0.96
Alluvial	Forest Thinning 93% cover	1	500000	0.00003	0.4	0.93	0.93
Alluvial	Forest Thinning 85% cover	1	500000	0.00003	0.4	0.85	0.85
Alluvial	Forest Prescribed Fire	1	1500000	0.0002	0.85	0.85	0.85
Alluvial	Forest Low Severity Fire	1	1500000	0.0002	0.75	0.8	0.8
Alluvial	Forest Moderate Severity Fire	1	1500000	0.0002	0.4	0.5	0.5
Alluvial	Forest High Severity Fire	1	2000000	0.0004	0.2	0.3	0.3
Alluvial	Shrubs	1	141100	0.0000873	0.7	0.9	0.9
Alluvial	Shrub Prescribed Fire	1	170100	0.000149	0.7	0.75	0.75
Alluvial	Shrub Low Severity Fire	1	170100	0.000149	0.5	0.7	0.7
Alluvial	Shrub Moderate Severity Fire	1	170100	0.000149	0.3	0.5	0.5
Alluvial	Shrub High Severity Fire	1	948600	0.0004343	0.05	0.25	0.25
Alluvial	Bare Slope	1	750000	0.004	0.05	0.2	0.2
Alluvial	Sod Grass	1	196700	0.0004446	0.4	0.6	0.6



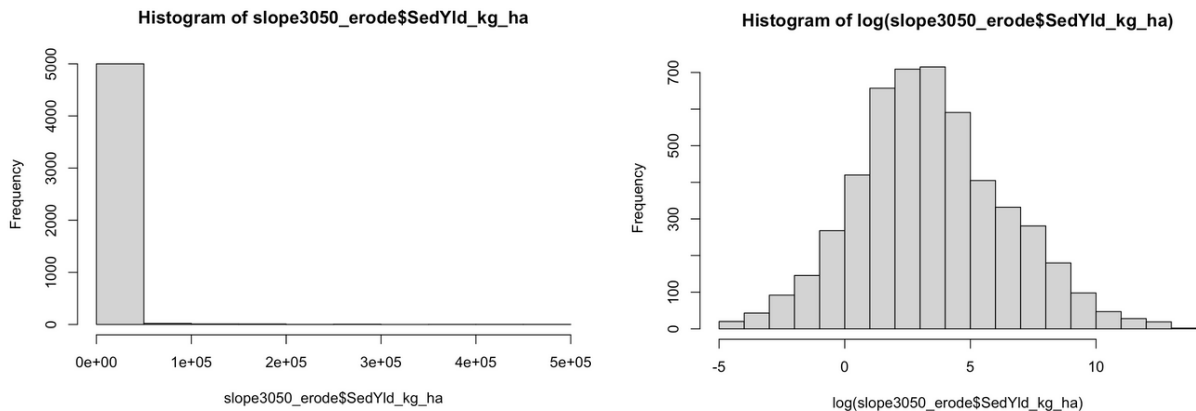
Alluvial	Bunch Grass	1	196700	0.0004446	0.6	0.8	0.8
Volcanic	Old Forest	1.5	300000	0.00005	0.9	1	1
Volcanic	Young Forest	1.5	600000	0.0001	0.8	1	1
Volcanic	Forest Thinning 96% cover	1.5	600000	0.00002	0.4	0.96	0.96
Volcanic	Forest Thinning 93% cover	1.5	600000	0.00002	0.4	0.93	0.93
Volcanic	Forest Thinning 85% cover	1.5	600000	0.00002	0.4	0.85	0.85
Volcanic	Forest Prescribed Fire	1.5	1000000	0.0002	0.85	0.85	0.85
Volcanic	Forest Low Severity Fire	1.5	1000000	0.0002	0.75	0.8	0.8
Volcanic	Forest Moderate Severity Fire	1.5	1000000	0.0002	0.4	0.5	0.5
Volcanic	Forest High Severity Fire	1.5	1500000	0.0003	0.2	0.3	0.3
Volcanic	Shrubs	1.5	134500	0.0000846	0.7	0.9	0.9
Volcanic	Shrub Prescribed Fire	1.5	162200	0.0001444	0.7	0.75	0.75
Volcanic	Shrub Low Severity Fire	1.5	162200	0.0001444	0.5	0.7	0.7
Volcanic	Shrub Moderate Severity Fire	1.5	162200	0.0001444	0.3	0.5	0.5
Volcanic	Shrub High Severity Fire	1.5	904400	0.0004209	0.05	0.3	0.3
Volcanic	Bare Slope	1.5	600000	0.003	0.05	0.2	0.2
Volcanic	Sod Grass	1.5	187600	0.0004309	0.4	0.6	0.6
Volcanic	Bunch Grass	1.5	187600	0.0004309	0.6	0.8	0.8

## Basin-scale statistical analyses

### Management scenario comparison

After running the WEPPcloud interface for all watersheds in the basin, and for all 11 conditions, we saved the model outputs, including information regarding elevation, slope, aspect, soil properties, landuse, etc. for each modeled hillslope as shapefiles and tables. We further plotted the data and performed calculations and statistical analyses to compare soil erosion between the different management conditions as well as to better understand the drivers for sediment and phosphorus yield.

To compare the potential soil erosion changes from the management scenarios we calculated annual average sediment yield by each treatment. A histogram of the data indicates that non-zero sediment yield are highly skewed and appear to fit a log normal distribution (Fig. 3). Therefore, this analysis used the data filtered to non-zero sediment yield, as zero values within a dataset make linear modelling difficult. Additionally, only observations with non-zero sediment yield are informative. Since we are only using a subset of the data, this is a conditional analysis.



**Fig. 3.** Histogram of sediment yield for hillslopes between 30-50% that erode. Untransformed data (left) and log-transformed data (right).

### ***Estimating Treatment Benefits***

One approach to evaluating the impacts of thinning is to compare the erosion associated with thinning as an absolute difference in sediment yield from thinning as compared to current conditions by hillslope (Eq. 1). These calculations were performed on the hillslope output data and then mapped for the Blackwood Watershed, which we used as an example. For all these calculations we used the thinning scenario with the 85% post-treatment ground cover. Since post-thinning ground cover in Lake Tahoe Basin often exceeds 85% (Norman et al., 2008, Pell and Gross, 2016, Christensen and Norman, 2007), we consider the thin 85% a worst-case thinning scenario.

#### **Eq. 1**

$$\text{AbsoluteDifference} = \text{Thinning85cover} - \text{CurrentErosion}$$

Thinning forested hillslopes can reduce fire severity. However, thinning can also increase erosion compared to undisturbed or current conditions. We estimated a treatment benefit based on four of the modeled conditions (unburned, thin 85%, low severity and moderate severity). The estimated erosion rates would generally occur in the year of the disturbance. Most forested watersheds recover quickly from disturbances associated with low severity fire or thinning. We selected the thinning scenario with the most post-disturbance ground cover (85% cover) and assumed that by thinning, the burn severity would be reduced from a moderate severity to the low severity. We also assumed that thinning would be carried out three times as often as a wildfire would occur, for example every 20 years for thinning instead of every 60 years for wildfire. We selected a thinning regime of 20 years because it is common practice in the basin; however, we also tested treatment benefits by thinning 1, 10, 20, 30, 40, 50, and 60 times within the 60 years fire return interval.

We then defined and calculated the Treatment Benefit as:

#### **Eq. 2**

$$\text{TreatmentBenefit} = (\text{ModerateSeverity} - \text{LowSeverity}) - ((\text{Thinning85} - \text{CurrentConditions}) \times 3)$$

### ***Treatment effects on sediment yield for slopes 30–50%***

Specifically, we were interested in sediment and phosphorus yield following thinning on steeper slopes (30–50%) since these hillslopes are now considered for mechanical thinning by managers looking to reduce ground fuels to minimize wildfire risks.

We further tested the change in probability of eroding versus not eroding for different treatments. We accomplished this by calculating odds ratios and risk ratios, for all hillslopes with sediment yield > 0 kg/ha and between 30–50% slopes. In this analysis, we only considered three thinning scenarios, the prescribed fire scenario, and the high severity wildfire scenario as a worst-case scenario. The *odds*

*ratio* indicates the change of odds of erosion versus no erosion under current conditions compared to the other treatments. The *risk ratio*, slightly different from the odds ratio, calculates the risk of erosion for the entire population of each scenario. Like the odds ratio, it is comparing the ratio between the reference level, current conditions, fire, and thinning scenarios. The results are otherwise interpreted the same as an odds ratio.

Lastly, we ran a *Generalized Linear Model* (GLM) of scenario versus sediment yield using a log-normal distribution. The results of the Analysis of Variance (ANOVA) are presented along with pairwise comparison between each treatment and the current conditions (which is treated as a reference level in the analysis).

### ***Variable importance***

In addition to the data analysis presented so far, we also performed several exploratory data analyses such as Correlations, Principal Component Analysis (PCA), and Random Forest (RF). These analyses were performed on various environmental variables extracted by hillslope from the WEPP model input data.

*Correlations*, specifically spearman correlations, were performed by first considering all the forested hillslopes in the basin, and then by some of the most eroding forested watersheds (i.e. Blackwood Creek, Ward Creek, Trout, and Upper Truckee). All correlations were performed with the statistical software R with the package *psych* at  $\alpha \leq 0.001$ .

*PCA* is a multivariate statistical data analysis that is used to reduce a large number of correlated variables into uncorrelated variables, named principal components, and to infer underlying relationships between the set of variables. In general, PCA provides an understanding of:

1. The relationship between the variables;
2. The direction in which data are dispersed; and
3. The relative importance of each direction.

Variables that point in the same direction are positively correlated while those that point in opposite directions are negatively correlated. Variables that are perpendicular are not correlated.

We used a PCA analysis to explore the distribution of sediment yield relative to several soil and topographical variables. For displaying purposes, a categorical variable *SedYld\_Class* was created by binning sediment yield into 3 categories: no erosion, low erosion, and high erosion. The cutoff between low erosion and high erosion categories was set to split the data in relatively equal parts. We created PCA plots based on the forested hillslopes for each management condition.

*RF* or random decision forest is a type of machine learning algorithm used for classification or regression of multiple variables within a dataset. We used the RF algorithms to predict if a hillslope will erode or not and also to predict the hillslope sediment yield for current conditions, 85% thinning, prescribed fire, and high severity fire based on multiple physical attributes. The “observed” sediment yield in this case was the WEPP modeled sediment yield at each hillslopes. While this approach is

redundant (i.e. predicting soil erosion already predicted by WEPP), we were mainly interested in identifying physical hillslope attributes that explain the variability in soil erosion.

To predict if a hillslope will erode or not, we created a new variable *SedVar* by converting sediment yield to a binary variable where any data point greater than zero was classified as "eroded" and all data points equal to zero were classified as "non-eroded". To predict the actual values of sediment yield, we used the WEPP-predicted sediment yield resulted from the four management scenarios: current conditions, thinning 85%, prescribed fire, and high severity fire.

## **IV. RESULTS AND DISCUSSION**

### **Model performance assessment**

#### *Streamflow and water yield assessment*

The WEPP model was applied to 17 watersheds of varying sizes in the Lake Tahoe Basin. The overall goodness-of-fit statistics for the WEPP-simulated and observed daily streamflow comparisons for the watersheds indicate reasonable results (Table 4). Across the watersheds, *NSEs* based on daily streamflow values were in the range of 0.44 to 0.64 indicating satisfactory agreement between modeled and observed values. The only exception was the Logan House Creek watershed (LH1), located on the eastern side of the Lake Tahoe Basin, with an *NSE* of  $-0.09$  signifying poor model performance. Brooks et al. (2016) reported similar results for the LH1 watershed, which the authors attributed to water loss through fractures in the bedrock. The WEPP model was not able to simulate this complex hydrogeology without additional calibration. Positive *KGE* values in the range of 0.56 to 0.78 (excluding watershed LH1) suggest reasonable model performance when considering mean flow as a *KGE* estimation criterion. *Pbias* within  $\pm 3.81\%$  across all watersheds indicated slight over- and under-prediction of streamflow (Table 4).

The WEPP model captured runoff regimes across all watersheds reasonably well, and the simulated annual trends of water yield followed the trends of observed yield (Fig. 4 and 5). Compared to daily streamflow, monthly and annual goodness-of-fit statistics showed improved model performance for all watersheds (Table 4).

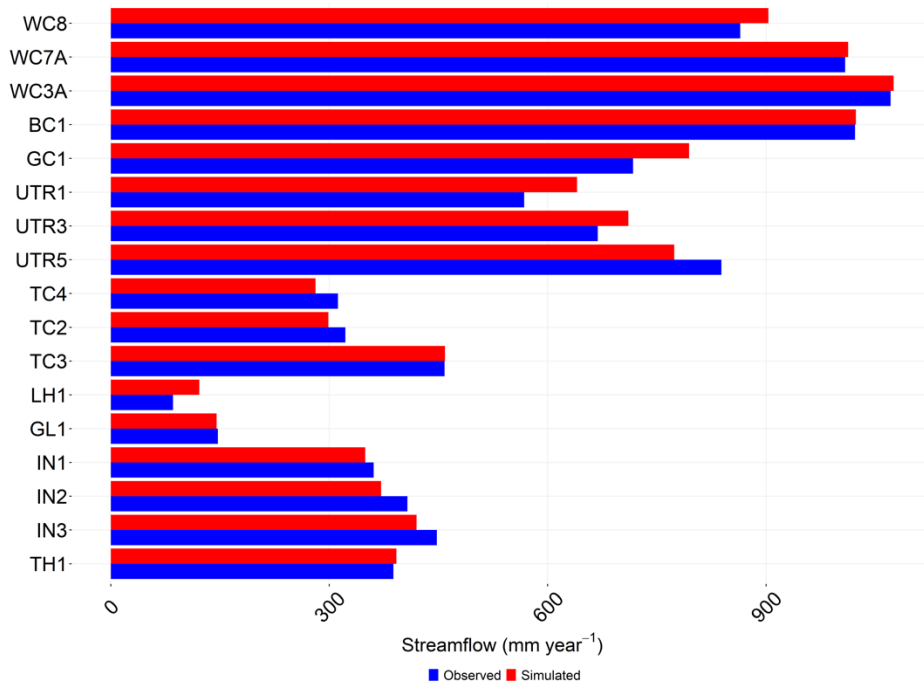
**Table 4.** Goodness-of-fit statistics for observed and simulated streamflow simulations. D = daily, M = monthly, A = annually (Water Year) statistics.

No.	Name	Begin	End	NSE			KGE			PBias (%)		
				D	M	A	D	M	A	D	M	A
<i>California</i>												
1	WC8	1/1/1990	9/30/2014	0.59	0.69	0.94	0.60	0.72	0.84	4.5	4.8	4.5
2	WC7A	10/1/1991	9/30/2001	0.59	0.71	0.98	0.62	0.77	0.92	0.3	0.4	0.3
3	WC3A	10/1/1991	11/1/2011	0.61	0.71	0.96	0.65	0.73	0.94	0.3	0.5	0.3
4	BC1	1/1/1990	9/30/2014	0.59	0.66	0.94	0.61	0.69	0.85	0.1	0.3	0.1
5	GC1	1/1/1990	9/30/2014	0.54	0.61	0.90	0.66	0.71	0.89	10.7	11	10.7
6	UTR1	1/1/1990	9/30/2014	0.53	0.63	0.91	0.73	0.78	0.86	12.8	13.1	12.8
7	UTR3	6/1/1990	9/30/2012	0.56	0.66	0.96	0.77	0.82	0.9	6.3	6.4	6.3
8	UTR5	5/12/1990	10/11/2011	0.59	0.73	0.93	0.78	0.83	0.84	-7.7	-7.8	-7.7
9	TC4	1/1/1990	9/30/2014	0.64	0.69	0.86	0.75	0.77	0.74	-9.9	-9.8	-9.9
10	TC2	6/1/1990	9/30/2012	0.54	0.60	0.92	0.77	0.79	0.84	-6.8	-6.8	-6.8
11	TC3	5/22/1990	3/31/2011	0.48	0.53	0.87	0.67	0.69	0.76	0.3	0.3	0.3
<i>Nevada</i>												
12	LH1	1/1/1990	10/12/2011	-0.09	0.49	0.77	0.39	0.48	0.62	-3.2	-3.1	-3.2
13	GL1	1/1/1990	9/30/2012	0.53	0.66	0.87	0.56	0.60	0.77	2.8	2.8	2.8
14	IN1	1/1/1990	9/30/2014	0.44	0.57	0.72	0.56	0.56	0.60	-3.2	-3.2	-3.2
15	IN2	1/1/1990	9/30/2004	0.48	0.65	0.81	0.62	0.61	0.70	-2.2	-2.2	-2.2
16	IN3	5/1/1990	3/31/2011	0.48	0.71	0.80	0.69	0.66	0.68	-1.5	-1.4	-1.5
17	TH1	1/1/1990	9/30/2014	0.60	0.82	0.86	0.76	0.89	0.87	0	-0.1	0
<b>Mean<sup>§</sup></b>				<b>0.55</b>	<b>0.66</b>	<b>0.89</b>	<b>0.68</b>	<b>0.73</b>	<b>0.81</b>	<b>3.81</b>	<b>1.40</b>	<b>3.81</b>

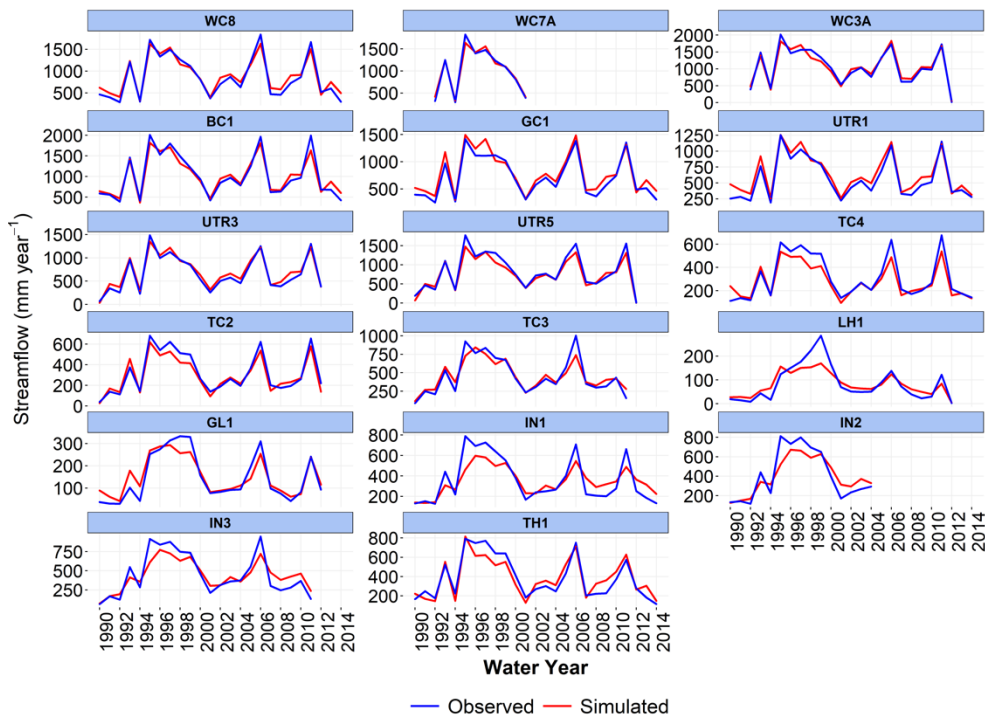
<sup>§</sup> Mean values calculated without LH1 watershed.

See Fig. 1 for watershed location and Table A1 in Appendix for full watershed names.

Nevertheless, uncalibrated model results in this study suggest that the WEPPcloud interface can satisfactorily represent the hydrology of distinct geographic regions and that water resources managers could apply the interface to ungauged watersheds for forest management decisions. Future efforts to improve hydrologic simulations with the WEPPcloud interface are underway to improve the snow hydrology routines in WEPP.



**Fig. 4.** Comparison of observed and simulated average annual water yield for the study watersheds.



**Fig. 5.** Comparison of simulated and observed annual streamflow.

A linear groundwater reservoir with a default  $k_b$  of  $0.04 \text{ d}^{-1}$  was appropriate to model low summer streamflow in most watersheds of this study, except in the drier watersheds on the east-side of the basin. For these watersheds, the initial model results showed overestimations in water yield. Similar results were reported by Brooks et al. (2016) in Logan House (LH1) and Glenbrook Creek (GC1) watersheds. In their study, the authors used a secondary reservoir to simulate water yield by allowing groundwater loss through hydrogeological fractures and, therefore, bypassing the USGS stream gauge. In this study, the addition of a second aquifer reservoir in nine watersheds located in the NE, E, and SE of the Lake improved water yield simulations, supporting an old hypothesis that these watersheds could be characterized by complex hydrogeology (Hyne et al., 1972). Calibrated  $k_b$  and  $k_s$  for all watersheds are shown in Table 5.

**Table 5.** Calibrated parameter values for baseflow and deep seepage coefficients, channel critical shear stress, and phosphorus concentrations in surface runoff, subsurface lateral flow, baseflow, and sediment.

No.	Name	Baseflow coefficient ( $\text{d}^{-1}$ )	Deep seepage coefficient ( $\text{d}^{-1}$ )	$\tau_c$ ( $\text{Nm}^{-2}$ )	$P_{\text{runoff}}$ ( $\text{mg L}^{-1}$ )	$P_{\text{lateral}}$ ( $\text{mg L}^{-1}$ )	$P_{\text{baseflow}}$ ( $\text{mg L}^{-1}$ )	$P_{\text{sediment}}$ ( $\text{mg L}^{-1}$ )
<i>California</i>								
1	WC8	0.04	0	30	0.004	0.005	0.006	1300
2	WC7A	0.04	0	30	0.005	0.006	0.007	1100
3	WC3A	0.04	0	30	0.003	0.004	0.005	900
4	BC1	0.04	0	10	0.003	0.004	0.005	1100
5	GC1	0.04	0	45	0.002	0.003	0.004	1300
6	UTR1	0.04	0	15	0.004	0.005	0.006	1200
7	UTR3	0.04	0	70	0.003	0.004	0.005	1300
8	UTR5	0.04	0	180	0.007	0.008	0.009	1300
9	TC4	0.01	0.0062	45	0.008	0.009	0.010	1800
10	TC2	0.0168	0.0105	45	0.008	0.009	0.010	1700
11	TC3	0.01	0.0010	75	0.007	0.008	0.009	1500
<i>Nevada</i>								
12	LH1	0.0005	0.0009	40	0.001	0.002	0.003	2500
13	GL1	0.0018	0.0016	35	0.015	0.016	0.017	3500
14	IN1	0.0019	0.0010	35	0.011	0.012	0.013	1500
15	IN2	0.0017	0.0006	40	0.011	0.012	0.013	1300
16	IN3	0.0022	0.0009	45	0.010	0.011	0.012	1300

<b>17</b>	TH1	0.0130	0.0134	25	0.008	0.009	0.010	700
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See Fig. 1 for watershed location and Table A1 in Appendix for full watershed names.

### *Sediment load*

Observed annual average sediment loads generally varied between the west- and the east-side, and from watershed to watershed. Eastern watersheds generated considerably less sediment compared to watersheds from the western side of the basin. Observed annual average sediment loads ranged from 5 Mg yr<sup>-1</sup> at Logan House Creek (LH1) to 2852 Mg yr<sup>-1</sup> from Blackwood Creek (BC1). This difference is mainly due to differences in area and precipitation since the LH1 watershed received less than half of the precipitation recorded in the BC1 (657 mm yr<sup>-1</sup> precipitation in LH1 compared to 1476 mm yr<sup>-1</sup> recorded in BC1; Table 2). Other watershed characteristics such as watershed soils, geology, and vegetation, may also contribute to the difference in sediment loads between the two watersheds, albeit to a lesser extent.

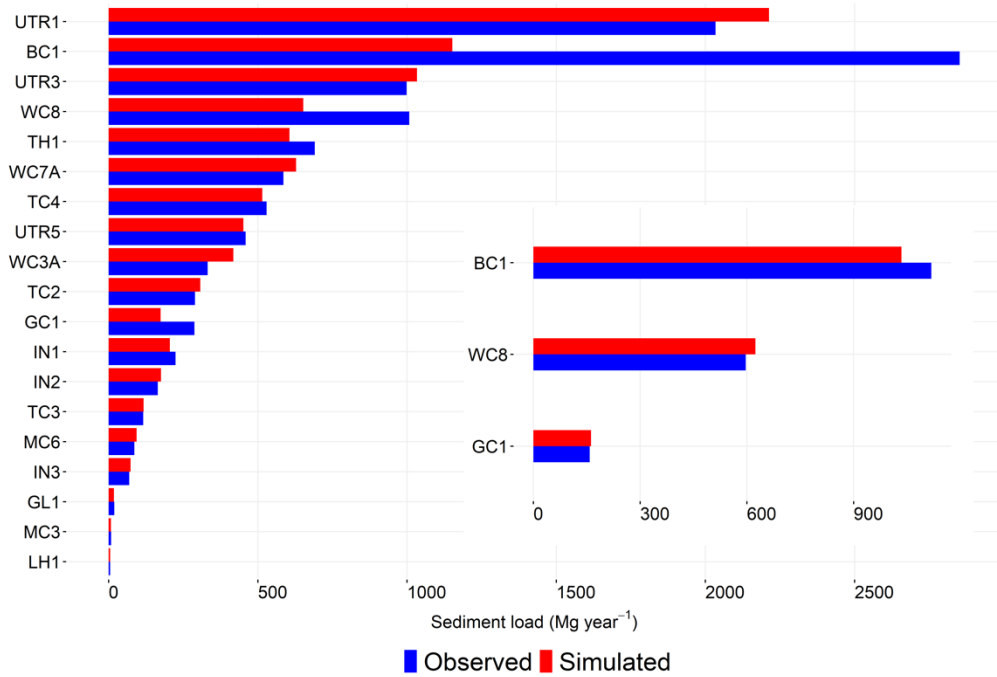
Model results showed an underestimation of annual sediment loads at three watersheds in the western side of the basin, namely at Blackwood Creek (BC1), Ward Creek (WC8), and General Creek (GC1) (Figs. 6 and 7). The main reason for this underestimation was due to sediment delivery associated with a few high peak flow events from 1 and 2 January 1997 (WY 1997) and on 31 December 2005 (WY 2006), which were not captured by the model. These high peak flow rates were caused by rain-on-snow events that are often observed in the mid-winter in Pacific Northwest (Marks et al., 2001) and in watersheds in the Sierra Nevada mountains (Kattelmann, 1997; McCabe et al., 2007). In the Lake Tahoe Basin, the 1997 event was considered a 100-year flood event (Tetra Tech, 2007), which caused peak suspended sediment loads with return periods ranging from 40 to 60 years only in streams from the western side of Lake Tahoe (Simon et al., 2004). Brooks et al. (2016) demonstrated that the WEPP model can accurately simulate the 1997 high peak flow in the Upper Truckee River (UTR5) when scaling the weather data across the watershed based on data from a lower elevation SNOTEL station, which recorded a slightly different rain distribution for the day. Since most of the sediment is delivered during these high peak flow events, an accurate representation of weather data is essential to model such events.

Another potential source of underestimation of sediment load by WEPP may be sediment delivery from landslides, as the WEPP model does not consider mass wasting sources of sediment. There is some evidence of mass wasting, particularly in the steeper upland portions of the Blackwood Creek (BC1) watershed (Gavigan, 2007). Additional sediment during peak flows may also be from channel erosion processes not addressed by the WEPP model, like side sloughing during channel drawdown following flood flows that would have saturated the stream banks (Simon et al. 2009).

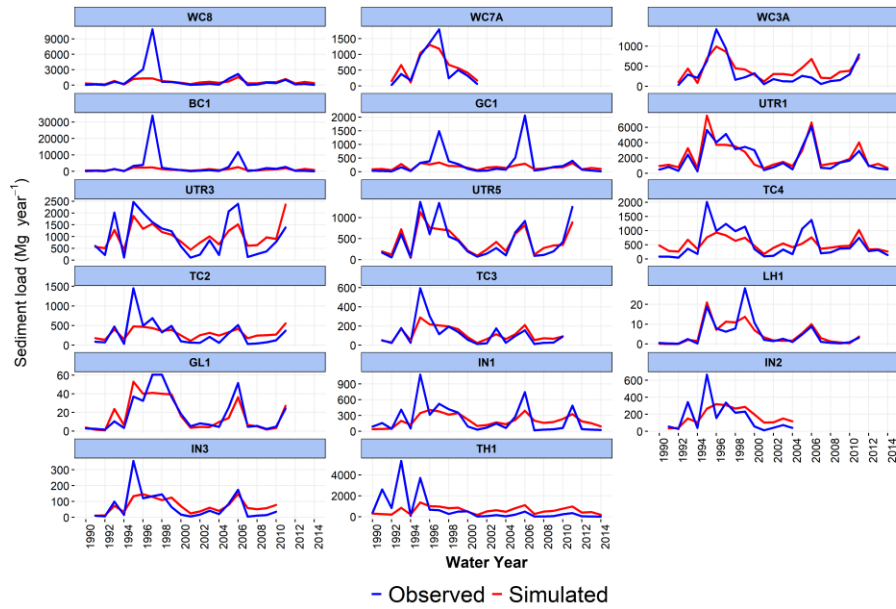
The goodness-of-fit statistics based on annual sediment loads for all simulated years show that WEPP predictions were in reasonable agreement with observed data except for WC8, BC1, and GC1 watersheds (Table 6). Results for the three watersheds improved substantially when the water years with high peak flow events (1997 and 2006) were omitted from the analysis. For example, *NSE*, *KGE*,



and *Pbias* for watershed BC1 improved from 0.05 to 0.63, -0.15 to 0.48, and -60% to -7%, respectively.



**Fig. 6.** Comparison of WEPP-simulated and observed average annual sediment load. WEPP underestimated sediment loads in the three watersheds (WC8, BC1, and GC1) that were affected by the rain-on-snow events in WY 1997 and 2006. The inset figure shows WEPP-simulated and observed sediment load after excluding these two years.



**Fig. 7.** Comparison of WEPP-simulated and observed annual sediment load.

**Table 6.** Goodness-of-fit statistics for the WEPP-simulated and observed annual sediment load. Italicized rows denote watersheds where statistics were recalculated after eliminating sediment load in 1997 and/or 2006 water years that experienced high peak flow events and extreme soil erosion.

<i>No.</i>	<i>Name</i>	<i>nPairs</i>	<i>NSE</i>	<i>KGE</i>	<i>PBias (%)</i>
<i>California</i>					
<b>1</b>	WC8	25	0.16	0.03	-35.3
<i>1</i>	<i>WC8<sup>†</sup></i>	25	<i>0.62</i>	<i>0.48</i>	<i>4.6</i>
<b>2</b>	WC7A	10	0.78	0.70	7.2
<b>3</b>	WC3A	20	0.67	0.60	26
<b>4</b>	BC1	25	0.05	-0.15	-59.6
<i>4</i>	<i>BC1<sup>††</sup></i>	25	<i>0.63</i>	<i>0.48</i>	<i>-7.2</i>
<b>5</b>	GC1	25	0.15	0.03	-39.4
<i>5</i>	<i>GC1<sup>††</sup></i>	25	<i>0.58</i>	<i>0.49</i>	<i>1.9</i>
<b>6</b>	UTR1	25	0.82	0.88	8.8
<b>7</b>	UTR3	21	0.60	0.56	3.5
<b>8</b>	UTR5	21	0.80	0.70	-1.7
<b>9</b>	TC4	25	0.47	0.38	-2.8
<b>10</b>	TC2	21	0.41	0.32	6.1
<b>11</b>	TC3	20	0.65	0.53	0.9
<i>Nevada</i>					
<b>12</b>	LH1	22	0.73	0.74	-2.2
<b>13</b>	GL1	22	0.79	0.81	-6.6
<b>14</b>	IN1	25	0.43	0.36	-8.3
<b>15</b>	IN2	14	0.36	0.39	6.4
<b>16</b>	IN3	20	0.51	0.45	7.2
<b>17</b>	TH1	25	0.12	0.02	-12.4
<b>Mean<sup>§</sup></b>			<b>0.59</b>	<b>0.52</b>	<b>5.95</b>

<sup>†</sup> Calculations without WY 1997.

<sup>††</sup> Calculations without WY 1997 and 2006.

<sup>§</sup> Mean values calculated without WY 1997 and WY 2006 for WC8, BC1, and GC1.

See Fig. 1 for watershed location and Table A1 in Appendix for full watershed names.

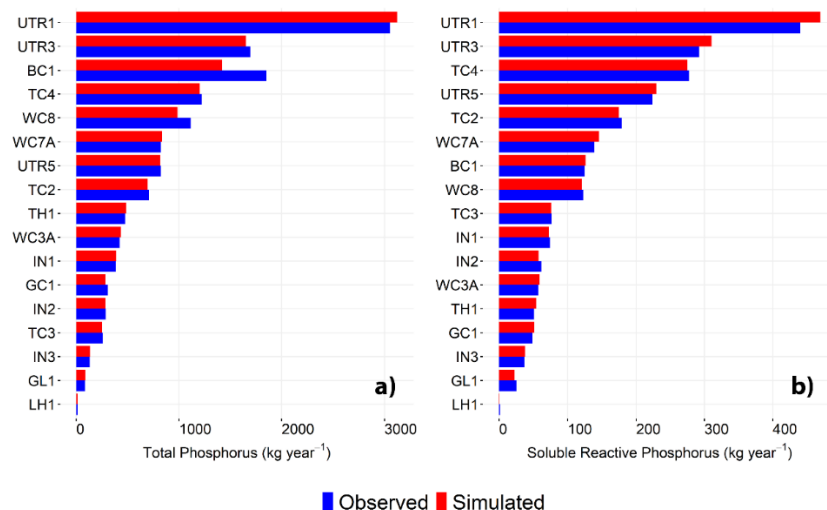
We manually calibrated the  $\tau_c$  in the Lake Tahoe watersheds to match the simulated to observed annual sediment loads at the watershed outlets, assuming minimal upland erosion. These values ranged from  $10 \text{ Nm}^{-2}$  in the Blackwood Creek watershed to  $180 \text{ Nm}^{-2}$  in the headwaters of the Upper Truckee River (UTR5) watershed (Table 5). Lower values of the  $\tau_c$  are associated with smaller  $D_{50}$  particle size (Srivastava et al., 2020), and therefore higher soil erodibility for channel beds. Conversely, higher values of  $\tau_c$  are associated with larger  $D_{50}$  particle sizes and result in lower erodibility values. Indeed, the Blackwood Creek watershed is known in the Lake Tahoe Basin as the top contributor of sediment yield to the lake and has been the subject of several channel restoration efforts (Norman et al., 2014; Oehrli, 2013). The headwater portion of the Upper Truckee River watershed is characterized by rock outcrops of low infiltration rates and erodibilities (Brooks et al., 2016), which can be an explanation for the higher  $\tau_c$  calibrated by the model. Median pebble count data ( $D_{50}$ ) was available for two of the modeled watersheds in the Lake Tahoe Basin and  $\tau_c$  equivalents for these two watersheds approximately matched the calibrated values  $\tau_{c\text{-calibrated}}$ : Blackwood Creek, mainstream,  $D_{50} = 42$ ,  $\tau_c = 26$ ,  $\tau_{c\text{-calibrated}} = 10$ ; Ward Creek,  $D_{50} = 68$ ,  $\tau_c = 54$ ,  $\tau_{c\text{-calibrated}} = 30$ .

### *Phosphorus yield*

The magnitudes of all three phosphorus constituents simulated by the WEPP model were in close agreement with the observed across all watersheds (Figs. 8a and 8b). The goodness-of-fit statistics based on annual values were very good for all three phosphorus constituents (Table 7): TP ( $NSE = 0.75$ ,  $KGE = 0.71$ ,  $PBias = -0.5\%$ ), PP ( $NSE = 0.71$ ,  $KGE = 0.70$ ,  $PBias = -1.3\%$ ), and SRP ( $NSE = 0.66$ ,  $KGE = 0.66$ ,  $PBias = -4.6\%$ ). The simulated annual loads of TP, PP, and SRP followed the trends of observed load (data not shown), which is expected since PP, which is transported mainly with sediments, is the major form of phosphorus transport in streams from Lake Tahoe (Hatch et al., 2001). Therefore, similar to the sediment load, the TP and PP load for the three watersheds (WC8, BC1, and GC1) that experienced the rain-on-snow events in WY 1997 and 2006 were also underestimated (Figure 8a). Simulated annual SRP load was better captured by the model, except in Logan House (LH1) where the model underestimated the observed loads ( $PBias = -95\%$ ; Table 7). However, it is worth noting that the difference between the observed and simulated phosphorus load for this watershed is insignificant ( $1.5 \text{ kg yr}^{-1}$ ).

The simplistic coefficient-based phosphorus algorithms implemented in the WEPPcloud interface were sufficient to capture the general trends of annual phosphorus loads associated with surface runoff, subsurface lateral flow, baseflow, and sediment in our study watersheds (Figs. 8 and 9). Most process-based phosphorus models use complex processes involving mineralization, decomposition, and immobilization pools and their interaction among them for phosphorus transport computations. Hydrologic simulations with such algorithms may improve the spatial and temporal estimates of phosphorus for watershed simulation studies. A version of the WEPP model with a water quality

module is under development (personal communication, D.C. Flanagan) and would likely be available for the evaluation of nutrient transport in forest settings in the future version of WEPPcloud.



**Fig. 8.** Comparison of WEPP-simulated and observed average annual TP (a) and SRP (b) loads. PP exhibited similar trends as TP.

**Table 7.** Goodness-of-fit statistics for the average annual phosphorus load for the three constituents (TP = Total Phosphorus, PP = Particulate Phosphorus, and SRP = Soluble Reactive Phosphorus). Italicized rows denote watersheds where statistics were recalculated after eliminating phosphorus load in 1997 and/or 2006 water years that experienced high peak flow events and extreme soil erosion.

No.	Name	TP			PP			SRP			
		<i>nPairs</i>	<i>NSE</i>	<i>KGE</i>	<i>Pbias</i> (%)	<i>NSE</i>	<i>KGE</i>	<i>Pbias</i> (%)	<i>NSE</i>	<i>KGE</i>	<i>Pbias</i> (%)
<i>California</i>											
1	WC8	25	0.56	0.43	-11.5	0.53	0.41	-12.7	0.83	0.70	-2.2
<i>1</i>	<i>WC8†</i>	25	<i>0.79</i>	<i>0.65</i>	2.5	<i>0.77</i>	<i>0.71</i>	2.6	<i>0.83</i>	<i>0.71</i>	<i>0.6</i>
2	WC7A	20	0.94	0.96	1.6	0.93	0.96	0.8	0.94	0.91	5
3	WC3A	10	0.75	0.82	2.8	0.75	0.83	2.3	0.64	0.66	3.9
4	BC1	25	0.39	0.28	-23.3	0.37	0.25	-25.2	0.69	0.67	1.2
<i>4</i>	<i>BC1††</i>	25	<i>0.70</i>	<i>0.63</i>	<i>0.4</i>	<i>0.69</i>	<i>0.62</i>	<i>0.3</i>	<i>0.69</i>	<i>0.62</i>	<i>0.5</i>
5	GC1	25	0.64	0.53	-8	0.57	0.46	-11	0.75	0.84	6.2
<i>5</i>	<i>GC1††</i>	25	<i>0.79</i>	<i>0.74</i>	<i>4.1</i>	<i>0.75</i>	<i>0.82</i>	<i>3.3</i>	<i>0.74</i>	<i>0.82</i>	<i>6.1</i>
6	UTR1	25	0.81	0.85	2.3	0.75	0.78	1.5	0.8	0.68	6.6
7	UTR3	21	0.83	0.71	-2.4	0.79	0.70	-4.3	0.77	0.69	6.3
8	UTR5	21	0.86	0.83	-0.7	0.76	0.77	-2	0.94	0.89	2.5
9	TC4	25	0.80	0.65	-1.6	0.75	0.61	-1.8	0.87	0.76	-0.9
10	TC2	21	0.70	0.55	-1.6	0.59	0.47	-1.5	0.9	0.79	-2.4
11	TC3	20	0.84	0.83	-3.3	0.81	0.81	-4.6	0.89	0.83	-0.8
<i>Nevada</i>											
12	LH1	22	0.63	0.68	-21.9	0.53	0.64	-28.6	-1.17	-0.39	-94.6
13	GL1	22	0.83	0.91	3	0.75	0.81	2.3	0.77	0.79	-10.9
14	IN1	25	0.65	0.58	1.2	0.64	0.58	2.1	0.64	0.49	-2.3
15	IN2	14	0.59	0.59	-0.8	0.56	0.59	0.9	0.66	0.54	-6.2

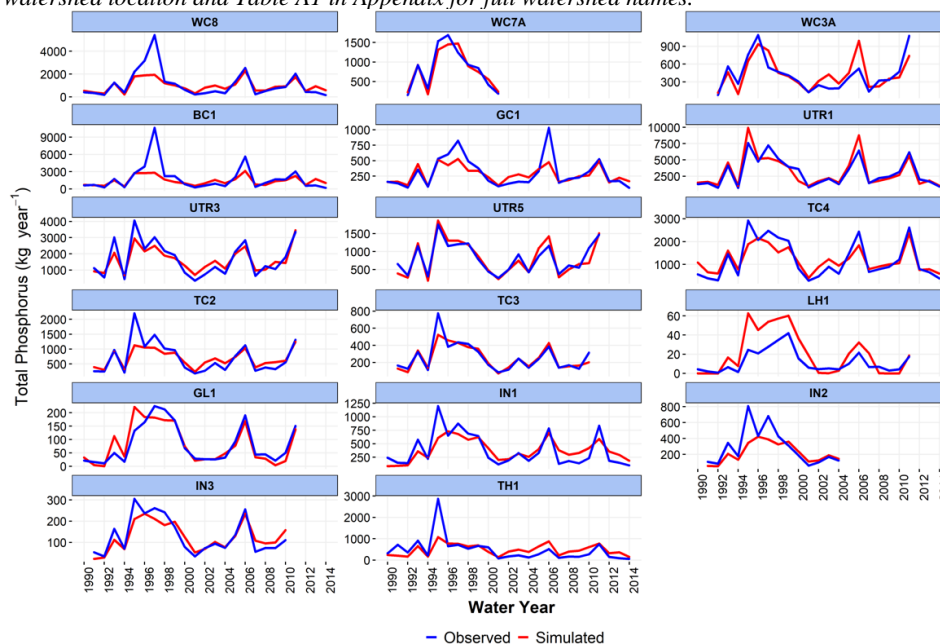
<b>16</b>	IN3	20	0.82	0.79	3	0.80	0.82	2.4	0.56	0.65	2.5
<b>17</b>	TH1	25	0.41	0.36	2.7	0.37	0.33	1.9	0.75	0.83	5.7
<b>Mean<sup>§</sup></b>			<b>0.75</b>	<b>0.71</b>	<b>-0.51</b>	<b>0.71</b>	<b>0.70</b>	<b>-1.32</b>	<b>0.66</b>	<b>0.66</b>	<b>-4.61</b>

<sup>†</sup> Calculations without WY 1997.

<sup>††</sup> Calculations without WY 1997 and 2006.

<sup>§</sup> Mean values calculated without WY 1997 and WY 2006 for WC8, BC1, and GC1.

See Fig. 1 for watershed location and Table A1 in Appendix for full watershed names.



**Fig. 9.** Comparison of WEPP-simulated and observed annual TP loads for the Lake Tahoe Basin watersheds. SRP and PP exhibited similar trends as TP.

Phosphorus concentration values in runoff inferred from the observed data varied between 0.0028 mg L<sup>-1</sup> in General Creek (GC1) to 0.013 mg L<sup>-1</sup> in Glenbrook Creek (GL1). The lateral flow and baseflow P concentrations were higher than those in the runoff and ranged between 0.026 mg L<sup>-1</sup> in Logan House (LH1) to 0.0153 mg L<sup>-1</sup> in Glenbrook Creek (GL1) for lateral flow, and from 0.0024 mg L<sup>-1</sup> in Logan House (LH1) to 0.0228 mg L<sup>-1</sup> in Glenbrook Creek (GL1) for baseflow, respectively. In general, these values were lower in watersheds located on the western side and higher in those from the eastern side of the basin. The observed P concentrations in the sediments varied between 840 mg kg<sup>-1</sup> in Third Creek (TH1) to 4397 mg kg<sup>-1</sup> in Glenbrook Creek (GL1). Similarly, as with the streamflow P concentrations, sediment P concentrations varied among watersheds, with lower values in watersheds on the northern, western, and southern sides of the basin and higher values in watersheds from the eastern side of the basin (Table 8).

The significant difference in P concentration in runoff and sediment between watersheds on the west- and east sides of Lake Tahoe, respectively, is likely due to differences in the parent material. Specifically, watersheds located on the NW and W of Lake Tahoe are mainly underlying volcanic soils with poorly crystalline iron and aluminum oxides that retain P and limit the P movement in water

(Heron et al., 2020). Watersheds on the eastern side of the Lake Tahoe Basin, however, are developed mainly on granitic parent material with greater potential for P mobilization to streamflow (Heron et al., 2020).

**Table 8.** Observed (Obs.) and calibrated (Calib.) phosphorus concentrations. Observed values are inferred from the flow-weighted phosphorus and sediment concentrations calculated with the LOADEST model.

No.	Name	Single/ Double aquifer reservoir	Obs. in runoff (mg L <sup>-1</sup> )	Calib. in runoff (mg L <sup>-1</sup> )	Obs. in lateral flow (mg L <sup>-1</sup> )	Calib. in lateral flow (mg L <sup>-1</sup> )	Obs. in baseflow (mg L <sup>-1</sup> )	Calib. in baseflow (mg L <sup>-1</sup> )	Obs. in sediment (mg kg <sup>-1</sup> )	Calib. in sediment (mg kg <sup>-1</sup> )
<i>California</i>										
1	WC8	Single	0.0059	0.004	0.009	0.005	0.0125	0.006	2059	1300
2	WC7A	Single	0.0053	0.005	0.009	0.006	0.0147	0.007	1188	1100
3	WC3A	Single	0.0034	0.003	0.004	0.004	0.0045	0.005	1600	900
4	BC1	Single	0.0040	0.003	0.007	0.004	0.0116	0.005	1166	1100
5	GC1	Single	0.0028	0.002	0.009	0.003	0.0187	0.004	1303	1300
6	UTR1	Single	0.0049	0.004	0.006	0.005	0.0070	0.006	1362	1200
7	UTR3	Single	0.0034	0.003	0.004	0.004	0.0050	0.005	1896	1300
8	UTR5	Single	0.0052	0.007	0.010	0.008	0.0209	0.009	2466	1300
9	TC4	Double	0.0073	0.008	0.008	0.009	0.0094	0.01	2966	1800
10	TC2	Double	0.0080	0.008	0.009	0.009	0.0099	0.01	1789	1700
11	TC3	Double	0.0077	0.007	0.009	0.008	0.0104	0.009	2545	1500
<i>Nevada</i>										
12	LH1	Double	0.0037	0.002	0.003	0.003	0.0024	0.004	3875	2300
13	GL1	Double	0.0130	0.015	0.015	0.016	0.0228	0.017	4397	3500
14	IN1	Double	0.0109	0.011	0.012	0.012	0.0141	0.013	1727	1500
15	IN2	Double	0.0123	0.011	0.012	0.012	0.0120	0.013	1248	1300
16	IN3	Double	0.0104	0.01	0.011	0.011	0.0127	0.012	2280	1300
17	TH1	Double	0.0080	0.008	0.011	0.009	0.0138	0.01	840	700
	<b>Mean</b>	<b>Single</b>	<b>0.004</b>	<b>0.004</b>	<b>0.007</b>	<b>0.005</b>	<b>0.012</b>	<b>0.006</b>	<b>1630</b>	<b>1188</b>
	<b>Mean</b>	<b>Double</b>	<b>0.009</b>	<b>0.009</b>	<b>0.010</b>	<b>0.010</b>	<b>0.012</b>	<b>0.011</b>	<b>2407</b>	<b>1733</b>

*Observed in runoff: Average SRP concentrations for April and May.*

*Observed in lateral flow: Average SRP concentrations of all months, except April, May, September, and October.*

*Observed in baseflow: Average SRP concentrations for September and October.*

*Observed in sediment: Average (TP-SRP) x 10<sup>6</sup> /SSC for May.*

*See Fig. 1 for watershed location and Table A1 in Appendix for full watershed names.*

### ***Basin-scale model runs***

The model calibration for the 17 watersheds in the basin allowed us to identify the minimum number of critical calibrating parameters in the model to confidently simulate streamflow, and sediment and phosphorus yield. Model results suggested that most of the calibrated parameters are fairly consistent across each ecosystem where a calibrated value in one watershed is also reasonable for a neighboring watershed in the same ecosystem. For example, eight watersheds in the western side of the basin were

calibrated with a single linear reservoir aquifer and a baseflow recession coefficient of  $0.04 \text{ day}^{-1}$ . Conversely, all watersheds located NE, E, and SE were calibrated with a second linear reservoir and various deep seepage coefficients. These similarities among watersheds allowed us to apply the calibrated values to model the rest of the ungauged watersheds within the basin. Regional differences were also observed for the channel critical shear and phosphorus concentrations, which were similarly distributed across the basin (Figs A1, A2, A3).

WEPPcloud simulated output can be downloaded as summarized tables and GIS shapefiles (Fig. 10) and managers can use this information to compare runoff, sediment yield, and phosphorus yields from individual hillslopes and watersheds (<https://wepp.cloud/weppcloud/lt/>). For example, maps of sediment yield output suggest that under undisturbed conditions there are erosion hot spots within several watersheds in the basin (e.g. Blackwood Creek, Ward Creek, upland portion of the Upper Truckee River, and Third Creek) and that sediment yield from these areas tends to increase with disturbance severity (Fig. 11). Another observation with great implications for management is that for the eastern watersheds, the model simulated minimal to no erosion even after a wildfire ( $< 1 \text{ kg ha}^{-1}$ ). Two of the eastern watersheds have been identified in previous research studies as sinks, rather than sources of sediments mainly due to their small size and low precipitation and runoff rates (Simon et al., 2004). This finding could be useful to prioritize areas for treatment in the basin.

**Summarized All Conditions**

**Tabled Results by Condition**

[Aggregated Outlet Summary Results \(.csv\)](#)

[Aggregated Hillslopes Summary Results \(.csv\)](#)

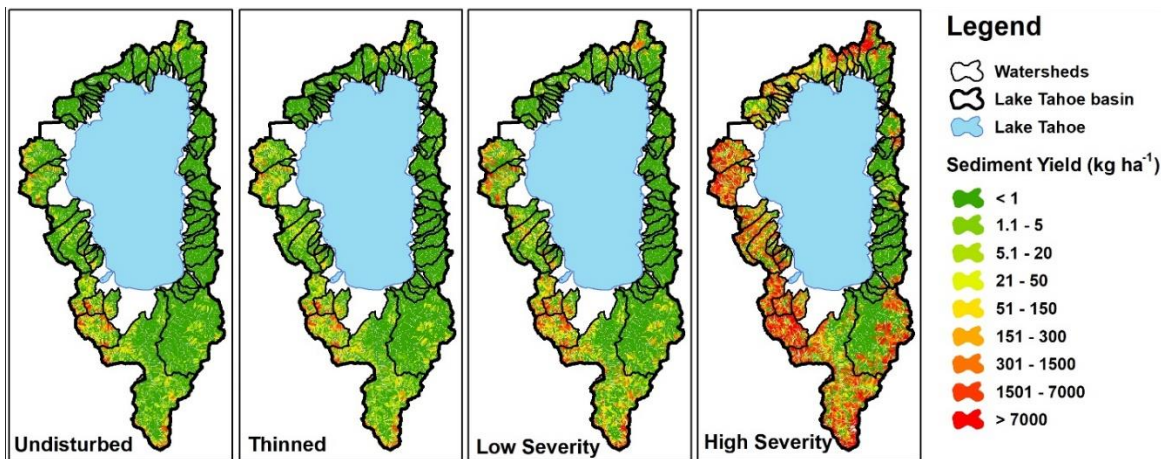
[Aggregated Channels Summary Results \(.csv\)](#)

[Aggregated Sediment Delivery Summary Results \(.csv\)](#)

**ESRI Shapefiles by Condition**

[Aggregated Shapefiles of Results \(.zip\)](#)

**Fig. 10.** Summarized results for all watersheds in the Lake Tahoe available on the WEPPcloud interface.



**Fig. 11.** Annual average sediment delivery rate for four scenarios: undisturbed, thinned, uniform low severity fire, and uniform high severity fire. Similar maps can be created from the model results for other hydrologic components (e.g. runoff, lateral flow, baseflow) or scenarios (e.g. uniform prescribed fire, uniform moderate severity fire, based on future climate scenarios, etc.).

Previous research in the basin suggested that high peak flows associated with rain-on-snow events (e.g., year 1997) can flush stored sediment from the stream channels and reduce the sediment load in the following years (Simon et al., 2004). Since forest disturbances have the potential to increase peak flows (Grant et al., 2008), we could expect rill and interrill erodibilities and the channel critical shear to change immediately post-disturbance. However, without clear guidelines from the available literature, we were unable to parameterize the WEPPcloud interface to reflect these complex changes within the channel streambed post-disturbance.

Similarly, forest treatments and wildfire have the potential to increase P concentrations in forested ecosystems mainly through increases in soil erosion and increased availability of ash (Santín et al., 2018). However, studies have found little effects from thinning (Deval et al., 2021) or from a combination of thinning and prescribed fires on P delivery (Kaye et al., 2005; Martin and Harr, 1989). Since forest wildfires, especially those that result in high soil burn severity, affect soil properties, there is more evidence that P concentrations post-wildfire increase (Lane et al., 2008; Murphy et al., 2006; Santín et al., 2018; Smith et al., 2011). However, because this information is limited in the research literature, we did not attempt to include in the model any temporal changes in phosphorus concentrations with treatment. Moreover, even if such changes were implemented, we lacked post-disturbance phosphorus observations at the modeled watersheds to validate model results.

## **Basin-scale statistical analyses**

### ***Management scenario comparison***

Analyzing the soil erosion as an average for all the hillslopes and modeled conditions in the basin, we find that, overall, all thinning scenarios narrowly increased sediment and phosphorus yields but not as much as a moderate or high severity fire (Table 9). The annual average hillslope soil erosion from the current conditions was 107 Mg/yr while erosion from thinning varied between 110 Mg/yr for thinning (96%) and 113 Mg/yr for thinning (85%). Conversely the soil erosion for the wildfire scenarios was 298 Mg/yr, 930 Mg/yr, and 6131 Mg/yr for low, moderate, and high severity, respectively (Table 9).

The WEPP model can differentiate between soil detachment and deposition from both hillslopes and channel and can produce outputs by either hillslopes or channels or at the watershed outlets. In this study, we have mainly focused on the results from the hillslopes since they are the main target for forest management activities. However, in addition to the hillslope results, Table 9 also shows the sediment yield, total phosphorus, and sediment yield for particles <16 µm from the watershed outlets. Under current conditions, channels generate more soil erosion than hillslopes, which is expected since undisturbed forests generate minimal sediment yield (Elliot, 2004). With an increase in disturbance, though, despite an increase in sediment yield from hillslopes, total sediment transported to channels will decrease (107 Mg/yr from hillslopes vs 141 Mg/yr from channels for current conditions, compared



to 6121 Mg/yr from hillslopes vs 1443 Mg/yr from channels for high severity fire) (Table 9). This shift in erosion between hillslopes and channels with an increase in disturbance is likely due to sediment deposition within the channel network.

The relatively small increase in sediment yield with thinning when compared to current conditions is likely due to the differences in land cover. Our results show that under undisturbed conditions the areas covered by grass and shrub generate substantially more erosion than the areas covered by forests (Fig. 15 in section *Treatment effects on sediment yield for slopes 30–50%*) therefore, the effects of thinning are masked by the grass and shrub areas.

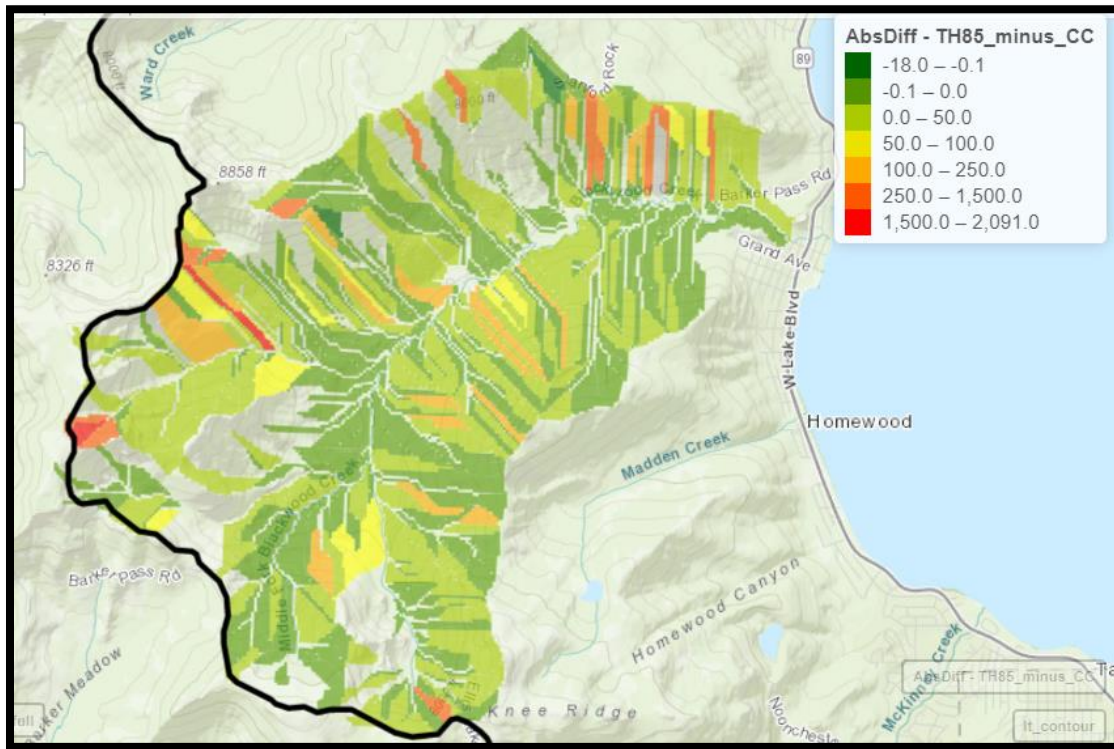
**Table 9.** Summary of annual average sediment and phosphorus yields from hillslopes and at the watershed outlets.

Condition	Hillslopes Sediment (Mg/yr)	Outlet Sediment (Mg/yr)	Outlet Total P (kg/yr)	Outlet Sediment <16µm (Mg/yr)
Current Conditions	107	141	210	38
Thinning 85%	113	153	227	41
Thinning 93%	111	152	227	41
Thinning 96%	110	152	226	41
Prescribed Fire	183	177	255	46
Low Severity Fire	298	221	310	56
Moderate Severity Fire	930	428	559	103
High Severity Fire	6131	1443	1751	387
SimFire.fccsFuels_obs_cli	285	237	329	59
SimFire.landisFuels fut cli A2	670	474	635	110
SimFire.landisFuels obs cli	278	238	329	59

### *Estimating Treatment Benefits*

Besides directly comparing WEPP model outputs for soil erosion from current conditions to the potential erosion from forest treatments and wildfires, we also calculated the projected change in sediment yield with thinning as an absolute difference between current conditions and thinning at 85%. The treatment benefit estimates were calculated for the Blackwood watershed as an example.

Fig. 12 shows a map of the absolute difference in soil erosion. More yellow or red areas are hillslopes where thinning will generate more erosion than current conditions. A negative value means the hillslope erosion following thinning may be less than erosion for the current condition, likely due to an earlier slower snowmelt following thinning.



**Fig. 12.** Absolute sediment yield difference (kg/ha/yr)

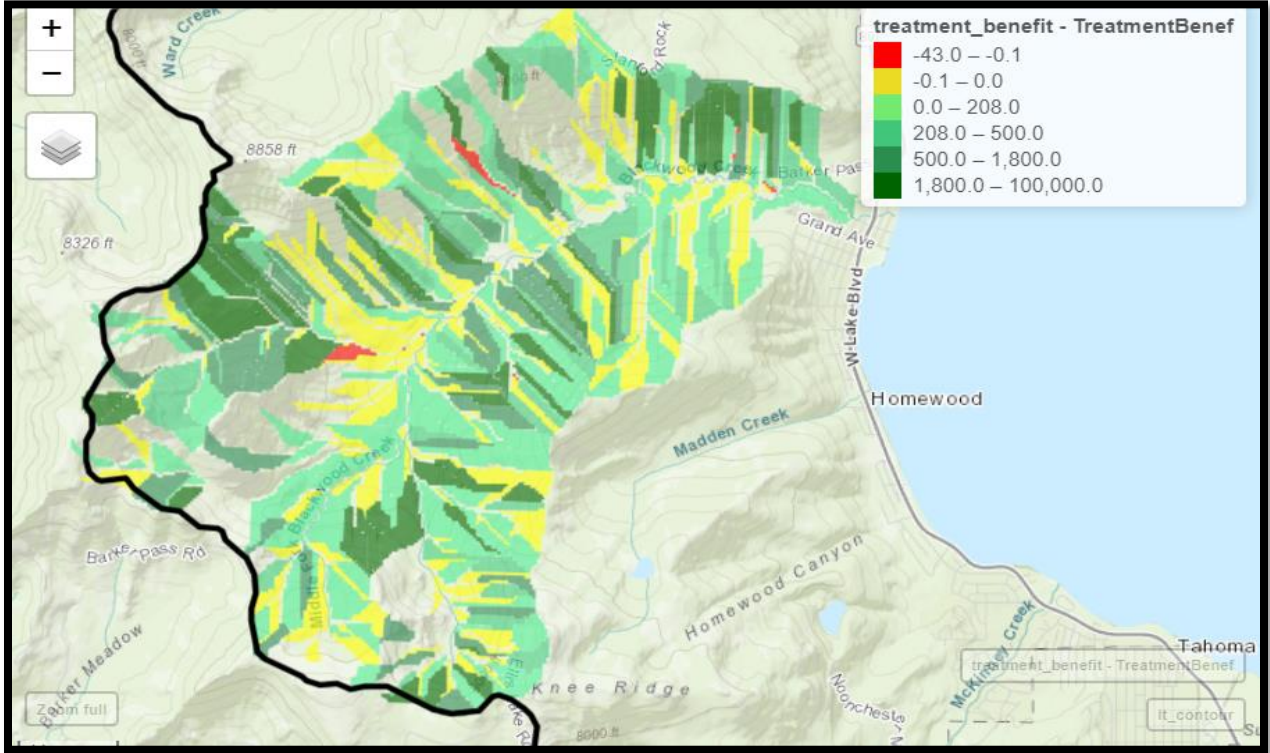
Fig. 13 shows the treatment benefit where dark green areas represent greater benefit from thinning. For example, for the most extreme value (treatment benefit: 98,575 kg/ha) soil erosion is predicted as: Current Conditions (1,274 kg/ha), Thinning 85% (3,255 kg/ha), Low Fire (25,074 kg/ha), and Moderate Fire (129,593 kg/ha). Yellow areas are areas where the treatment benefits are non-detectable. The red areas represent hillslopes where current conditions and thinning generate zero erosion while low severity fire generates more erosion than moderate severity. The reason for the moderate severity scenario generating less sediment than low severity is likely due to faster late season snow melt rates predicted for some years beneath the denser low severity canopy compared to the moderate severity canopy. Comparing these results with the results from Fig. 12, it appears that the hillslopes that would erode more after thinning (the redder hillslopes in Fig. 12) are also the hillslopes that would benefit more from thinning (greener hillslopes in Fig. 13).

We also calculated treatment benefit from thinning 1, 10, 20, 30, 40, 50, 60 times within the 60 year fire return interval as opposed to only three times. Results show that managers would need to apply thinning treatments more than 50 times within the 60 years, in order to generate erosion that would eliminate the benefits of reducing wildfire severity from moderate to low (Table 10).

**Table 10.** Average treatment benefit (sediment yield in kg/ha) from increasing thinning within 60 year fire return interval. Results are for the forested hillslopes of Blackwood Creek. Calculation were performed with Eq. 1.

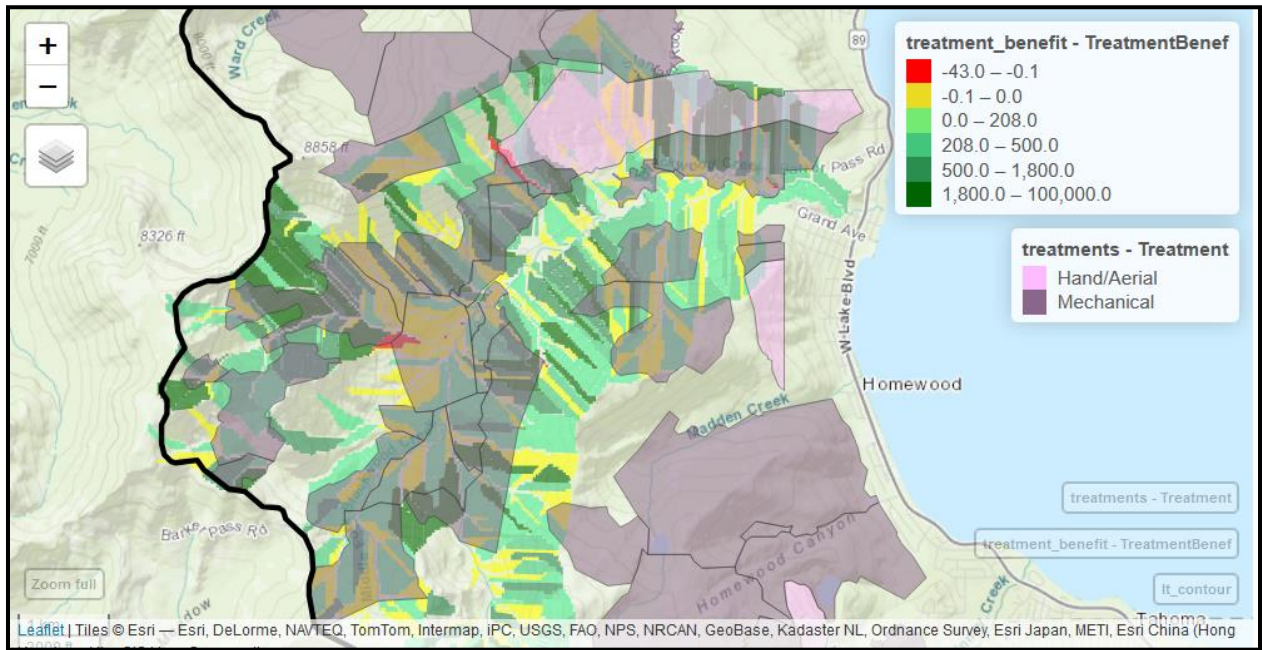
Number of thinning operations	1	3	10	20	30	40	50	60
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Average treatment benefit (kg/ha)	1663	1595	1356	1015	674	333	-8	-349
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**Fig. 13.** Example of Treatment Benefit in Blackwood Watershed (kg/ha/yr).

As part of the overall restoration project, treatment polygons have been identified by the stakeholder group for either mechanical thinning on generally flatter slopes and hand or aerial thinning on steeper slopes. Fig. 14 shows the proposed treatment map overlaid on the treatment benefits layer.

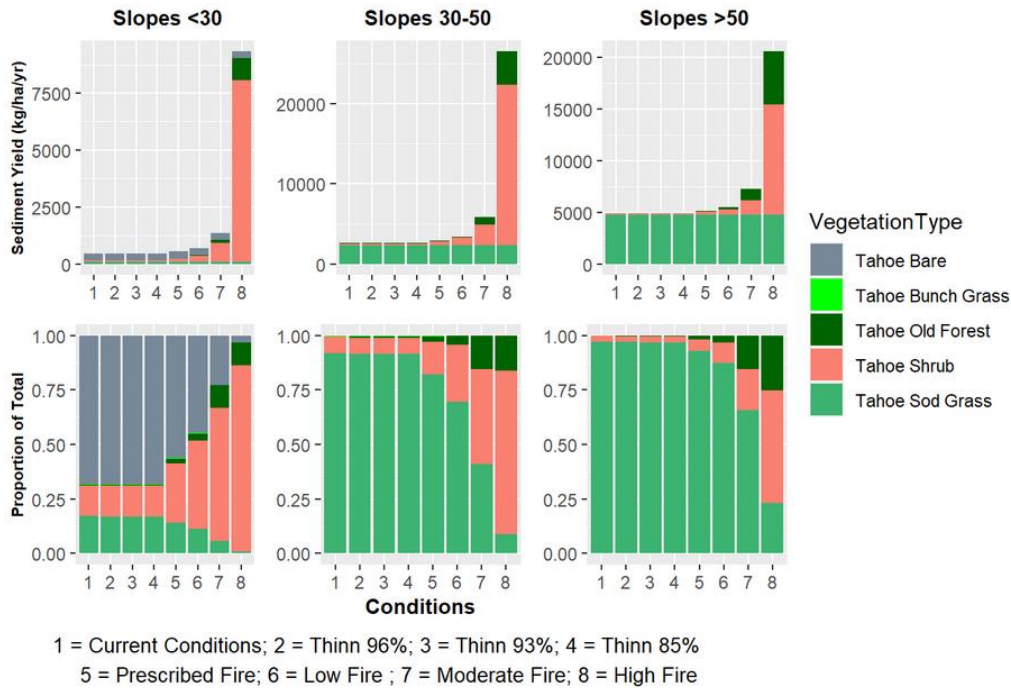


**Fig. 14.** Treatment benefit overlapped proposed treatment areas (kg/ha/yr).

***Treatment effects on sediment yield for slopes 30–50%***

We performed several data manipulations and statistical analyses to better understand the effects of slope (specifically those between 30–50%) on sediment yield.

Fig. 15 shows that on gentler slopes (<30%), the bare hillslopes will generate most of the erosion, followed by sod grasses and shrubs. On steeper slopes (>30%), most of the erosion occurred from sod grasses and shrubs. Burn conditions will increase erosion from areas covered by grass and shrubs more than from forests since these areas are generating more erosion than forested areas even under current conditions. We removed from these graphs the three runs based on the SBS predicted maps as those model runs were performed while assuming all hillslopes are forested, and, therefore cannot be compared to the runs where the management scenarios were applied by vegetation type.



**Fig. 15.** Average sediment yield by vegetation type and slope categories.

Field observations following the Emerald Fire (2016) documented that two treatment units that had been hand thinned in 2013 experienced low severity wildfire (Kyle Jacobson, Emerald Fire Report). Within those units, which were covered by slopes averaging 30–45%, there were a few areas that experienced high severity fire, which were mainly covered with shrubs. Given that the shrubs areas are generating more erosion than forests, both undisturbed and disturbed conditions, land managers should consider applying treatments on all land covers and not just on forested lands.

Managers are interested expanding thinning treatments to steeper slopes and since thinning will only occur in forested hillslopes, we also analyzed the data by slope steepness only for forested slopes. Results suggest that soil erosion will increase with slope steepness and with increase disturbance (Table 11). Slopes > 30% will generate more erosion than slopes < 30% even in undisturbed conditions (7 kg/ha/yr for slopes 30–50% as compared to 1 kg/ha/yr for slopes <30%). Thinning can increase annual average soil erosion, however less than wildfire. If we only consider the 30–50% hillslopes, thinning (85%) will increase soil erosion by 15 kg/ha/yr (22–7 kg/ha/yr) compared to current conditions. However, since the model results show that wildfire will, on average, increase soil erosion to 4226 kg/ha/yr, it would take 281 years ( $=4226/15$ ) of annual thinning to reach the sediment yield from one catastrophic wildfire. If we consider the thinning scenario with the least ground disturbance (thinning 96%), it would take 469 ( $=4226/(16-7)$ ) years of thinning to reach the sediment yield of a high severity wildfire (Table 11). These calculations are purely speculative since it is highly unlikely that a wildfire will burn a watershed uniformly at high severity or that the thinning treatments will be applied on all hillslopes annually, however, they provide a perspective on the difference in erosion between the thinning and the high severity scenarios.

**Table 11.** Average annual sediment yield (kg/ha) by slope (%) and treatment.

<b>Scenario</b>	<b>&lt;30</b>	<b>30-50</b>	<b>&gt;50</b>
Current Conditions	1	7	10
Thinn 96%	2	16	22
Thinn 93%	2	18	24
Thinn 85%	3	22	30
Prescr_FireF	12	73	98
Low_Severity	22	138	184
Moderate_Severity	142	894	1111
High_Severity	956	4226	5172
SimFire_LANDIS_obsClim	37	207	197
SimFire_FCCS_obsClim	40	207	232
SimFire_LANDIS_futureClim	171	801	887

If we only analyze the data for the undisturbed and 85% thinning conditions, by slope steepness, we find overall low erosion rates from thinning (Table 12). Specifically for the hillslopes between 30–50%, average sediment yield from thinning is 0.14 Mg yr<sup>-1</sup>. If we further compare the average sediment yield for the 30–50% hillslopes, we find that slope length, specifically slopes >180 m have the potential to generate more erosion from thinning (2.08 Mg yr<sup>-1</sup>) than slopes < 300 m (0.01 Mg yr<sup>-1</sup>) (Table 13). We selected these cutoffs to reflect the maximum forest buffer (7–100 m) according to State and Federal guidelines for buffers in the U.S. (Mayer et al., 2005) and the average slope length of the hillslopes within the basin (180 m)

**Table 12.** Average annual sediment yield by treatment and slope steepness.

<b>Slope steepness (%)</b>	<b>Current Conditions (kg ha<sup>-1</sup> yr<sup>-1</sup>)</b>	<b>Thinned 85% (kg ha<sup>-1</sup> yr<sup>-1</sup>)</b>
<30	0.7	2.8
30–50	6.8	21.8
>50	10.4	29.9

**Table 13.** Average annual sediment yield by treatment and slope length for slopes between 30–50%.

<b>Slope length (m)</b>	<b>Current Conditions (kg ha<sup>-1</sup> yr<sup>-1</sup>)</b>	<b>Thinned 85% (kg ha<sup>-1</sup> yr<sup>-1</sup>)</b>
<100	0.004	0.029
100–180	0.068	0.420
>180	15.026	47.735

The odds ratio test between treatment and current conditions indicated that the odds of erosion are higher: 1.71, 1.75, 1.85, 2.59, and 4.4 for Thinn96, Thinn93, Thinn85, Prescribed Fire, and High Severity Fire, respectively. When comparing two treatments, an odds ratio of 1 means that both treatments are equal, while 2 indicates one treatment has twice the odds of occurring as the reference

treatment. We found similar results for risk ratio, which calculates the risk of erosion for the entire population of each treatment condition.

The results of the ANOVA analysis were significant ( $p\text{-value} < 0.001$ ) suggesting that soil erosion on steeper slopes does increase with treatment, however, the pairwise comparison between each treatment and the current conditions showed that only prescribed fire and high severity fires were significant and not thinning. This suggests that even the most extreme thinning technique will not greatly affect the overall soil erosion in the basin.

From both the ANOVA and the odds ratio analyses we can conclude that thinning will increase the risk of erosion, but when thinned hillslopes erode, the sediment yield is no different from an untreated hillslope (roughly  $8 \text{ kg ha}^{-1}$ ).

### ***Variable importance***

The next analyses are based on a series of variables created from the model input files. These include sediment yield ( $\text{kg ha}^{-1}\text{yr}^{-1}$ ), and various variables related to hillslope physical attributes, topography, and soils (Table 14).

### ***Correlations***

Results for all variables and watersheds suggest that for current condition model results sediment yield is positively correlated with hillslope length ( $p\text{-value} = 0.39$ ), precipitation ( $p\text{-value} = 0.23$ ), hillslope area ( $p\text{-value} = 0.22$ ), and percent slope ( $p\text{-value} = 0.19$ ) (Table 15). These results suggest that soil erosion increases on longer and larger hillslopes and on those that receive more precipitation. For the disturbed conditions, we found similar correlations, however, they increase with condition in the following order: thinning, prescribed fire, high severity fire (Table 15). Some variables were negatively correlated with sediment yield: plant available water ( $p\text{-value} = -0.20$ ), slope width ( $p\text{-value} = -0.20$ ), and total soil saturation amount ( $p\text{-value} = -0.21$ ). While these correlations are not strong, they suggest that soil erosion increases with a decrease in soil moisture. The negative correlation with slope width implies that soil erosion is greater on narrower slopes. This is perhaps because narrower slopes tend to also be found on steeper slopes at high elevation, and therefore have a greater risk of erosion.

**Table 14.** List of variables used in the variable importance data analyses.

<b>Variable</b>	<b>Description</b>
Sediment_kg_ha	Sediment Yield in (kg/ha)
precip_mm	Precipitation (mm)
length_m	Slope Length (m)
width	Slope Width (m)
area_ha	Area (ha)
aspect	Aspect (degrees)
slope	Slope (%)
TEXT	Texture (Volcanic/Granitic/Alluvial)
LNDUS	Landuse
albedo	Albedo (0-1)
ani	Anisotropy (-)
bd	Bulk Density (kg/m3)
bed_ksat	Hydraulic conductivity of the underlying geology (mm/hr)
kinter	Interrill erodibility (kg s/m-4)
cec	Cation Exchange Capacity (meq/100g)
clay	Clay (%)
fc	Field Capacity (m3/m3)
fc_rc	Field Capacity corrected for rock content (m3/m3)
horizons	No of soil horizons
krill	Rill erodibility (s/m)
ksat	Saturated hydraulic conductivity (mm/hr)
mukey	Soil name/key from SSURGO
om	Organic matter (%)
plant_available_water_mm	Plant available water (mm)
rocks	Rocks (%)
sand	Sand (%)
sat_wat_conc_rc	Saturated water content (m3/m3)
tauc	Critical Shear (Pa)
total_depth	Total soil depth (mm)
total_sat_amt_mm	Total saturation ammount (mm)
wp	Wilting Point (m3/m3)
wp_rc	Wilting point corrected for rock content (m3/m3)
Elev	Elevation (m)



**Table 15.** Spearman correlations (*p-values*) of sediment yield with all variables based on the model results from all watersheds. See Table 14 for variable names.

<b>Variables</b>	<b>Current Conditions</b>	<b>Thinning 85%</b>	<b>Prescribed Fire</b>	<b>High Severity Fire</b>
length_m	0.39	0.48	0.51	0.59
precip_mm	0.23	0.32	0.33	0.41
area_ha	0.22	0.28	0.32	0.40
slope	0.19	0.21	0.22	0.18
anis	0.18	0.22	0.13	0.11
Elev	0.13	0.17	0.14	0.17
ksat	0.12	0.13	0.03	-0.03
bd	0.10	0.09	-0.02	-0.07
rocks	0.08	0.09	0.18	0.23
wp	0.06	0.11	0.16	0.23
om	0.05	0.09	0.09	0.12
clay	0.05	0.07	0.16	0.25
cec	0.03	0.06	0.16	0.26
sand	0.02	0.00	-0.10	-0.20
wp_rc	-0.01	0.00	-0.01	-0.01
aspect	-0.03	-0.04	-0.07	-0.10
albedo	-0.05	-0.07	-0.04	-0.02
fc	-0.08	-0.05	-0.01	0.02
fc_rc	-0.10	-0.10	-0.14	-0.16
sat_wat_conc_rc	-0.13	-0.15	-0.20	-0.23
bed_ksat	-0.14	-0.19	-0.16	-0.23
total_depth	-0.15	-0.19	-0.12	-0.12
horizons	-0.16	-0.18	-0.08	-0.02
plant_available_water_mm	-0.20	-0.23	-0.21	-0.24
width	-0.20	-0.23	-0.20	-0.20
total_sat_amt_mm	-0.21	-0.25	-0.22	-0.26

When considering the data by individual watersheds, the correlations between sediment yield and slope length are much stronger for Blackwood, Ward, and Upper Truckee Watersheds (e.g. for Blackwood the *p-value* = 0.64, 0.79, 0.80, and 0.88 for Current Conditions, Thinning, Prescribed Fire, and High Severity fire, respectively). Interestingly, the correlations with precipitation were much weaker when considering the data by watershed, which suggests that precipitation is more important regionally (west/east) rather than locally (within watershed). Slope area, percent slope, and elevation were also strongly correlated with sediment yield for all watersheds, however, for Trout, bulk density (*p-value* = 0.35), and anisotropy (*p-value* = 0.35), were slightly more correlated with sediment yield than slope length (*p-value* = 0.31) (Tables 16–19).

The positive correlation between sediment yield and hillslope area could be indirectly because of the correlation between slope length and hillslope area (*p-value* = 0.71; data not shown). Similarly, sediment yield increases with elevation, which could also be because slope steepness increases with elevation (*p-value* = 0.38; data not shown) and also because higher elevation areas, especially in watersheds like Blackwood and Ward, are characterized by sparser vegetation and rock outcrops, which generate more erosion.

Soil bulk density is calculated as the dry weight of soil divided by its volume and it increases with compaction and depth. Our results show that soil erosion increases with bulk density for the Trout watershed (Table 18). This is likely due to the fact that soils with high bulk densities also tend to have more sands, less organic matter, and less available water capacity. Soil anisotropy is a term used to denote preferential flow direction in soils and depends on the structure of the soil. Soil anisotropy ratio signifies a prevalence of lateral versus vertical hydraulic conductivity. In soils with higher anisotropy values, water movement through the soil profile is higher laterally than vertically, and is higher in steeper slopes (Zaslavsky and Rogowski, 1969). In WEPP, a value of 10 (unitless) is assigned for the first 400 mm of soil depth and 1 (unitless) for the remaining soil depth. The positive correlation between anisotropy and erosion suggests that soil erosion increases on slopes with greater lateral flow, and therefore on steeper slopes.

**Table 16.** Spearman correlations (*p-values*) of sediment yield with all variables based on the model results for the Blackwood Creek watershed. See Table 14 for variable names.

<b>Variables</b>	<b>Current Conditions</b>	<b>Thinning 85%</b>	<b>Prescribed Fire</b>	<b>High Severity Fire</b>
length_m	0.64	0.79	0.80	0.88
area_ha	0.43	0.54	0.60	0.69
slope	0.29	0.37	0.39	0.39
Elev	0.23	0.25	0.25	0.33
albedo	0.15	0.11	0.10	0.08
anis	0.15	0.13	0.12	0.13
wp	0.13	0.13	0.16	0.09
precip_mm	0.07	0.05	0.07	0.12
bd	0.06	0.08	0.09	0.03
clay	0.05	0.05	0.05	0.02
fc	0.04	0.04	0.10	0.02
rocks	0.03	0.00	-0.05	0.05
cec	0.02	0.00	-0.04	0.06
wp_rc	0.01	0.03	0.07	-0.02
om	0.00	0.00	-0.02	0.04
horizons	-0.02	-0.03	-0.01	-0.01
ksat	-0.02	-0.01	-0.07	0.01
fc_rc	-0.02	-0.01	0.04	-0.05
aspect	-0.05	0.04	0.07	0.06
sand	-0.06	-0.04	0.01	-0.06
plant_available_water_mm	-0.07	-0.05	-0.01	-0.09
total_sat_amt_mm	-0.08	-0.07	-0.02	-0.11
total_depth	-0.08	-0.07	-0.03	-0.12
sat_wat_conc_rc	-0.08	-0.06	-0.01	-0.09
bed_ksat	-0.18	-0.13	-0.13	-0.13
width	-0.31	-0.34	-0.28	-0.27

**Table 17.** Spearman correlations (*p-values*) of sediment yield with all variables based on the model results for the Ward Creek watershed. See Table 14 for variable names.

<b>Variables</b>	<b>Current Conditions</b>	<b>Thinning 85%</b>	<b>Prescribed Fire</b>	<b>High Severity Fire</b>
length_m	0.60	0.73	0.76	0.86
area_ha	0.37	0.50	0.53	0.67
slope	0.25	0.35	0.40	0.44
Elev	0.22	0.24	0.19	0.33
albedo	0.17	0.22	0.27	0.25
clay	0.17	0.09	0.05	-0.04
anis	0.16	0.20	0.24	0.22
precip_mm	0.14	0.11	0.06	0.11
rocks	0.13	0.18	0.18	0.24
ksat	0.11	0.12	0.09	0.11
bd	0.10	0.00	-0.05	-0.16
cec	0.10	0.18	0.17	0.27
wp	0.06	0.00	-0.01	-0.12
aspect	-0.02	-0.02	-0.01	0.02
om	-0.09	0.00	0.02	0.11
wp_rc	-0.09	-0.14	-0.15	-0.22
sand	-0.12	-0.07	0.00	-0.01
fc	-0.12	-0.15	-0.13	-0.20
fc_rc	-0.13	-0.18	-0.17	-0.23
plant_available_water_mm	-0.16	-0.20	-0.20	-0.23
total_depth	-0.20	-0.24	-0.23	-0.26
total_sat_amt_mm	-0.20	-0.24	-0.23	-0.27
horizons	-0.21	-0.10	-0.04	0.04
sat_wat_conc_rc	-0.21	-0.25	-0.24	-0.27
bed_ksat	-0.25	-0.22	-0.19	-0.13
width	-0.34	-0.33	-0.33	-0.27

**Table 18.** Spearman correlations (*p-values*) of sediment yield with all variables based on the model results for the Trout Creek watershed. See Table 14 for variable names.

<b>Variables</b>	<b>Current Conditions</b>	<b>Thinning 85%</b>	<b>Prescribed Fire</b>	<b>High Severity Fire</b>
bd	0.35	0.41	0.41	0.43
anis	0.35	0.38	0.38	0.36
length_m	0.31	0.40	0.41	0.53
sand	0.30	0.30	0.28	0.20
Elev	0.26	0.32	0.31	0.40
slope	0.24	0.29	0.29	0.33
wp	0.21	0.19	0.21	0.17
wp_rc	0.20	0.17	0.17	0.09
area_ha	0.19	0.22	0.24	0.31
precip_mm	0.16	0.21	0.21	0.21
ksat	0.06	0.09	0.08	0.14
rocks	0.00	0.05	0.05	0.14
clay	-0.01	0.01	0.02	0.08
cec	-0.01	0.02	0.02	0.09
fc_rc	-0.03	-0.08	-0.08	-0.17
aspect	-0.04	-0.05	-0.06	-0.03
om	-0.06	-0.09	-0.09	-0.09
width	-0.14	-0.19	-0.19	-0.25
sat_wat_conc_rc	-0.14	-0.20	-0.20	-0.29
fc	-0.17	-0.20	-0.18	-0.20
bed_ksat	-0.17	-0.19	-0.20	-0.22
albedo	-0.28	-0.27	-0.26	-0.19
horizons	-0.32	-0.32	-0.32	-0.28
plant_available_water_mm	-0.32	-0.37	-0.36	-0.39
total_sat_amt_mm	-0.34	-0.40	-0.39	-0.43
total_depth	-0.35	-0.37	-0.37	-0.37

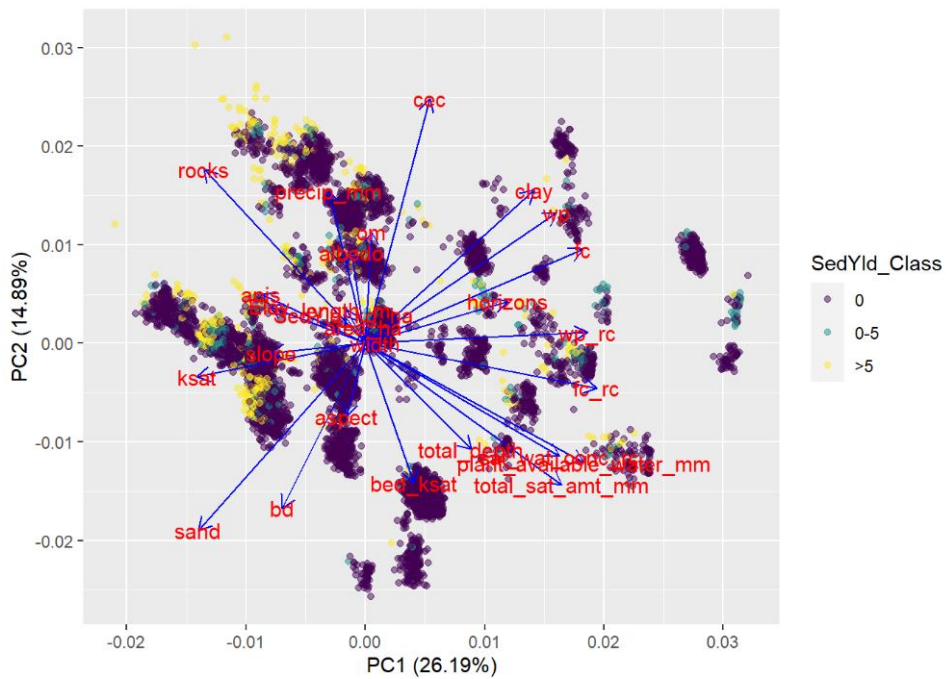
**Table 19.** Spearman correlations (*p-values*) of sediment yield with all variables based on the model results for the Upper Truckee Watershed. See Table 14 for variable names.

<b>Variables</b>	<b>Current Conditions</b>	<b>Thinning 85%</b>	<b>Prescribed Fire</b>	<b>High Severity Fire</b>
length_m	0.54	0.66	0.67	0.73
area_ha	0.36	0.47	0.49	0.55
slope	0.32	0.35	0.37	0.32
Elev	0.21	0.29	0.29	0.33
bd	0.10	0.08	0.06	0.07
anis	0.08	0.15	0.15	0.17
clay	0.08	0.06	0.06	0.07
rocks	0.07	0.05	0.04	0.02
precip_mm	0.07	0.16	0.18	0.22
ksat	0.06	0.04	0.03	0.00
wp	0.04	0.07	0.09	0.14
cec	0.03	0.03	0.03	0.04
wp_rc	-0.02	0.01	0.03	0.07
albedo	-0.02	-0.06	-0.07	-0.11
fc	-0.03	0.00	0.02	0.07
bed_ksat	-0.03	-0.06	-0.07	-0.08
sand	-0.04	-0.02	-0.02	-0.03
aspect	-0.04	-0.05	-0.05	-0.05
om	-0.07	-0.03	-0.02	0.00
total_depth	-0.07	-0.13	-0.13	-0.17
fc_rc	-0.08	-0.05	-0.03	0.01
horizons	-0.09	-0.13	-0.14	-0.15
plant_available_water_mm	-0.09	-0.12	-0.12	-0.12
total_sat_amt_mm	-0.12	-0.16	-0.16	-0.18
sat_wat_conc_rc	-0.12	-0.11	-0.10	-0.08
width	-0.25	-0.25	-0.24	-0.22

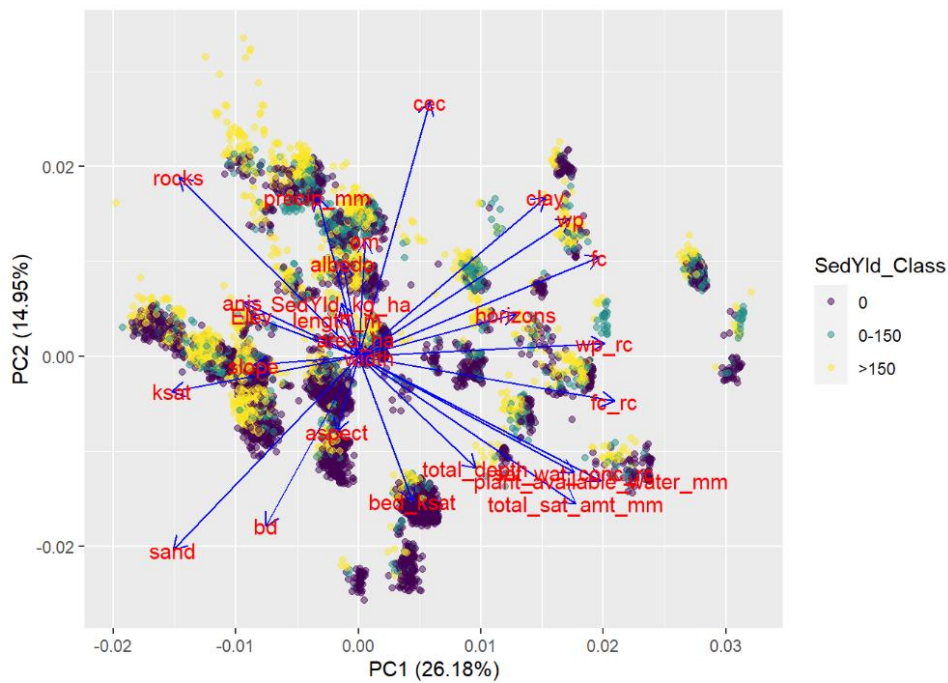
*PCA*

The PCA analysis revealed similar relationships between variables for all management condition. For comparison we are only presenting the results for current conditions and high severity fire (Figs. 16 and 17). The first two components of PCA, cumulatively, explained 41% of variance for all

management conditions. The data seems to be spread uniformly along the two principal components, however, data groups in small clusters, which is likely due to differences among individual watersheds. Additionally, higher sediment yield values are mainly found on the negative values for component 1 and positive values for component 2, while lower sediment yield values are mainly found on the positive values for component 1 and negative values for component 2. This pattern is more apparent for the results based on the high severity management scenario. While the loading of the sediment yield variable does not have a significant weight on the two principal components compared to other variables, it is in the same direction as slope length, slope area, slope width, % rocks, % organic matter, precipitation, and albedo, which signifies positive correlations with these variables. From the PCA analysis we cannot draw clear conclusions regarding sediment yield and slope, however, the analysis helps us better understand the relationships between the data.



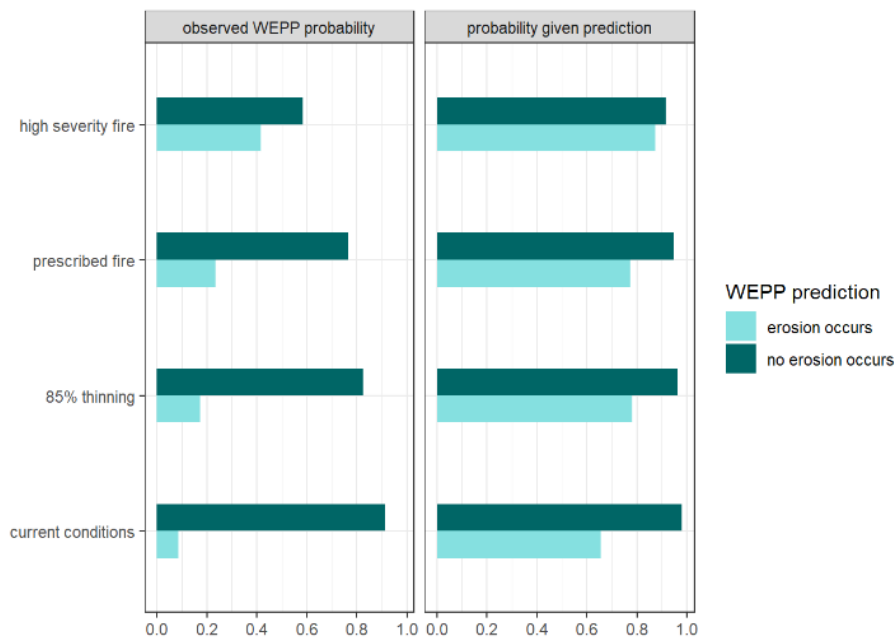
**Fig. 16.** Results of the principle component analysis for the 27 environmental variables based on all forested hillslope for current conditions. The colors represent sediment yield classes. Description of variable abbreviations can be found in Table 14.



**Fig. 17.** Results of the principle component analysis for the 27 environmental variables based on all forested hillslope for high severity fire. The colors represent sediment yield classes. Description of variable abbreviations can be found in Table 14.

*RF*

We first applied the random forest model to predict whether a hillslope will erode or not. Under current conditions, approximately 10% of the hillslopes across the Lake Tahoe Basin erode, while under high severity fire, the percentage increases to slightly over 40% (Fig. 18, left column). These results suggest, at least according to the WEPP model, that approximately 60% of the hillslopes will not erode even under high severity fire, which is the most extreme modeled scenario. The non-eroding hillslopes are mainly found in the eastern-side of Lake Tahoe (Fig. 11), however, all watersheds, including the highly eroding ones such as Blackwood and Upper Truckee also have non-eroding hillslopes.



**Fig. 18.** Accuracy of the random forest prediction of eroding vs. non-eroding hillslopes by management scenario.

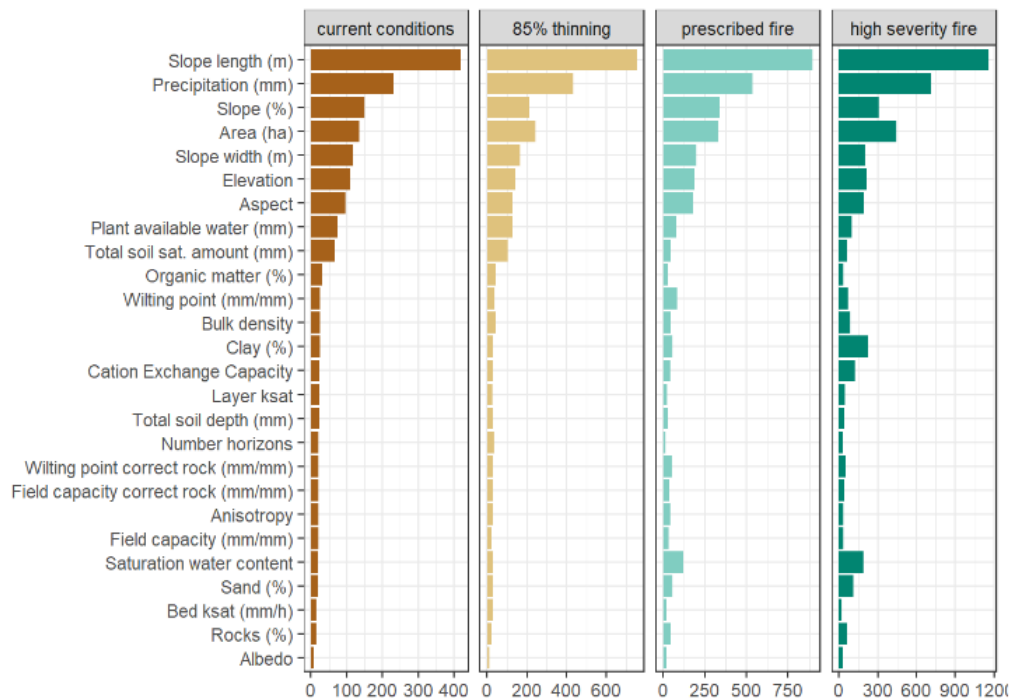
To better understand the differences between the hillslopes that erode and those that do not erode, we calculated the average values for several environmental variables by hillslopes that erode and those that do not erode. Table 20 shows that hillslopes that do not erode, have on average shorter hillslopes lengths, receive less precipitation, have smaller areas and wider widths, and are mainly facing SSW slopes. Both elevation and slope were similar for hillslopes from the two erosion categories.

**Table 20.** Averages of sediment yield and environmental variables by hillslopes that erode vs. those that do not erode.

SedVar	Sediment Yield (kg/ha)	Slope Length (m)	Slope Steepness (%)	Precipitation (mm)	Elevation (m)	Area (ha)	Width (m)	Aspect (degrees)	Soil Depth (mm)
NoErod	0	114	0.24	917	2228	3.63	349	206	1223
Erod	5190	272	0.27	1119	2281	6.06	298	180	1152

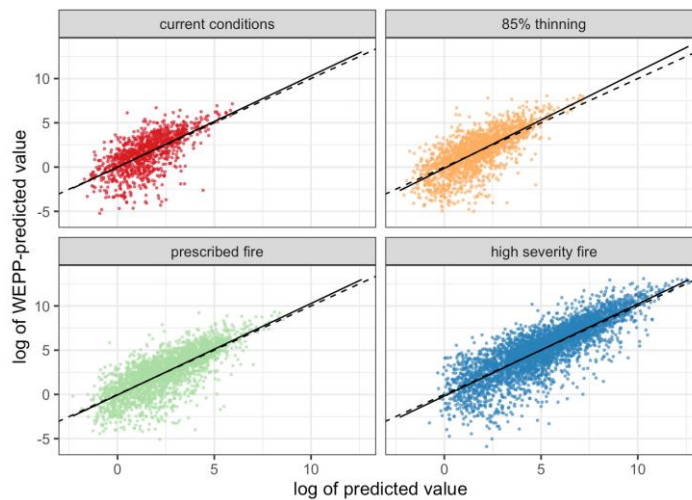
Plotting the variable importance from the random forest model, we find that the most important variables for predicting areas that erode are: slope length, followed by precipitation, %slope, slope area, slope width, and elevation (Fig. 19). While slope length and precipitation are at the top for each of the four management scenarios compared in this analysis, the order of the other variables varies with scenario (Fig. 19).



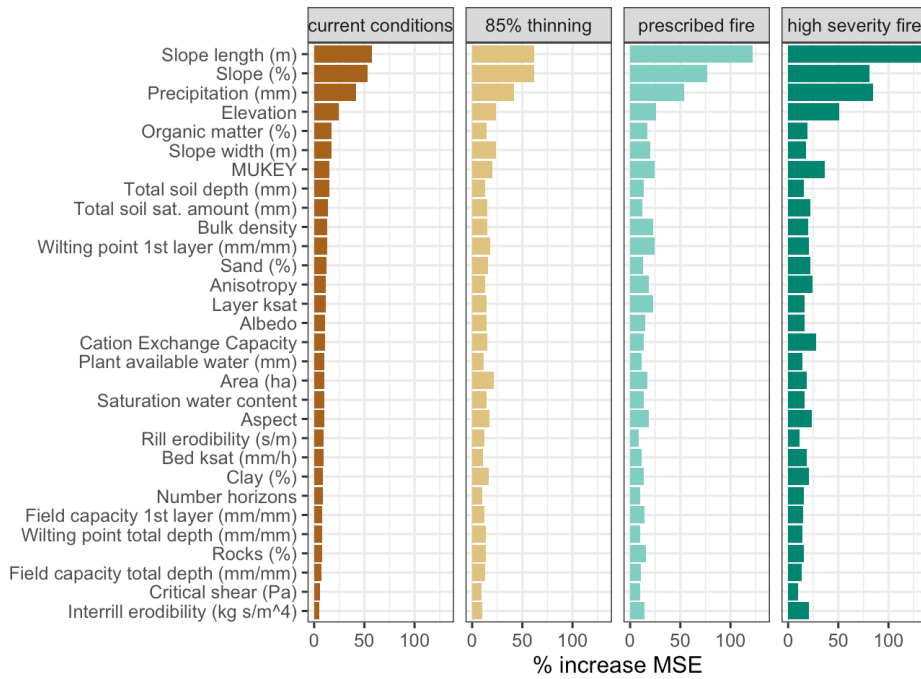


**Fig. 19.** Variable importance for the RF model (testing eroding vs. non-eroding hillslopes) by management scenario.

We then applied the RF model to predict actual values of sediment yield. The RF model accurately predicted soil erosion for all four management conditions (Fig. 20). Plotting the % increase in Mean Squared Error (MSE) we find that, similar to the previous analysis, the most important variables for predicting sediment yield are length, followed by %slope and precipitation (Fig. 21).



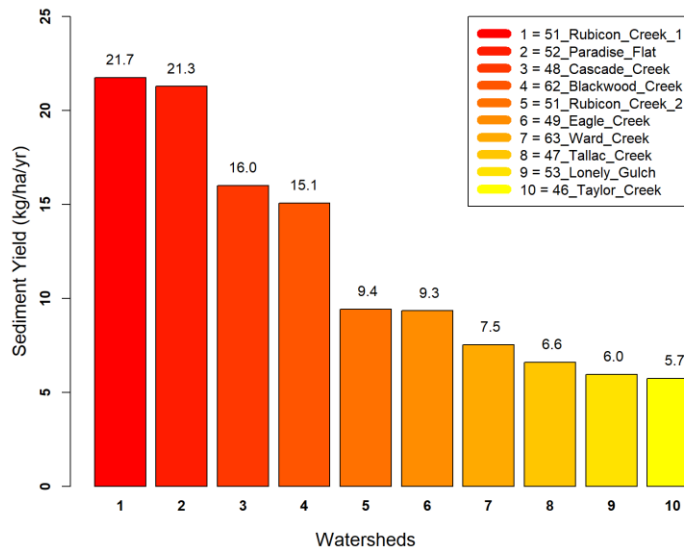
**Fig. 20.** WEPP-predicted vs RF predicted sediment yield based on several environmental variables.



**Fig. 21.** Percent increase in mean squared error (MSE) by modeled variables and scenarios.

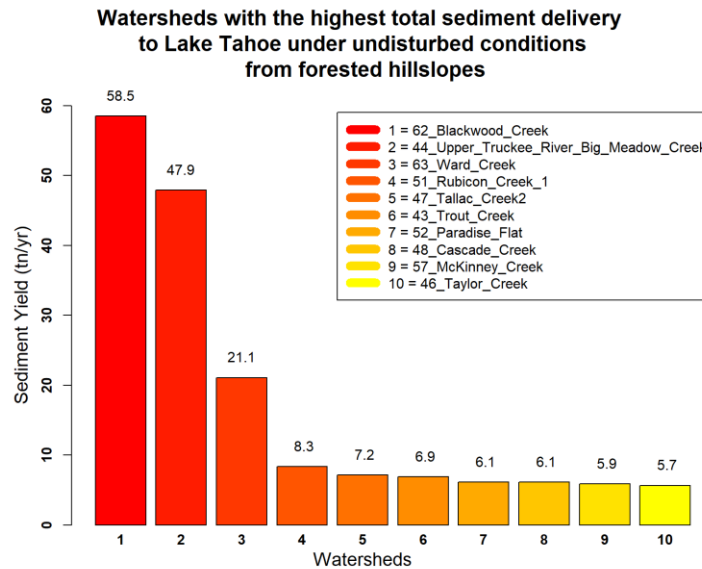
*Additional graphs and data summaries*

Fig. 22 shows the top ten watersheds within the Lake Tahoe Basin with the greatest sediment delivery from hillslopes for the undisturbed conditions. These calculations are performed by selecting only the forested hillslopes.



**Fig. 22.** Ten watersheds with the greatest sediment delivery from hillslopes to channels for the undisturbed forest conditions.

The order of the watersheds changes when accounting for the watershed area (Fig. 23). Blackwood, Upper Truckee, and Ward are the greatest contributors.



**Fig. 23.** Top ten watersheds delivering sediment to Lake Tahoe.

Soil erosion and sediment delivery are influenced by topography, land cover, soil properties and climate. Based on the hillslope output data we created additional tables to quantify the effects of each of these individual factors on soil erosion. All calculations are based on the model results from the current condition scenario. Variable precipitation, was split based on the average precipitation at all the hillslopes within the basin (1000 mm). Tables 20–24 show the average sediment yield by various variables. From these tables we can conclude:

- Volcanic soils erode more than granitic and alluvial soils (Table 21);
- Sediment yield is greatest on hillslope that receive more than 1000 mm of precipitation and have slopes > 50%; The least sediment yield is found on hillslopes with less than 1000 mm precipitation and slope steepness < 30% (Table 22);
- Hillslopes between 2600–2800 m generate more erosion than hillslopes found at both lower and higher elevation (Table 23);
- Soil erosion is greater on soils with more rock outcrops (e.g. Melody and Ellispark) (Table 24);

- Soil erosion is similar on all aspects, except on western slopes, where soil loss is less than half of the soil loss predicted on south-, north-, and east-facing slopes (Table 25).

**Table 21.** Average sediment yield (kg/ha) by texture and condition.

<b>Texture</b>	<b>Current Conditions</b>	<b>Thinning 85%</b>	<b>Prescribed Fire</b>	<b>High Severity Fire</b>
<b>Alluvial</b>	1.64	4.05	22	519
<b>Granitic</b>	2.22	5.48	21	1278
<b>Volcanic</b>	6.03	23.42	77	5431

**Table 22.** Average sediment yield by slope steepness and precipitation.

<b>Precipitation Category</b>	<b>Slope Steepness</b>	<b>Sediment yield (kg/ha)</b>	<b>Sediment yield (tonnes)</b>
<1000mm	<30	0.08	0.0005
>1000mm	<30	1.38	0.0087
<1000mm	>50	3.31	0.0272
>1000mm	>50	16.93	0.1157
<1000mm	30–50	0.63	0.0045
>1000mm	30–50	13.70	0.0911

**Table 23.** Average soil loss by elevation (m).

<b>Elevation Category</b>	<b>Sediment yield (kg/ha)</b>	<b>Sediment yield (tonnes)</b>
<1800	0.0	0.00
1800–2000	0.36	0.00
2000–2200	1.70	0.01
2200–2400	3.26	0.02
2400–2600	5.33	0.03
2600–2800	8.98	0.05
2800–3000	3.89	0.03
>3000	0.05	0.00

**Table 24.** Average soil loss by top ten eroding soils.

<b>Soil Name</b>	<b>Sediment yield (kg/ha)</b>
Melody-Rock outcrop complex	83
Lithnip-Meiss-Hawkinspeak association	59

Ellispeak-Rock outcrop complex	44
Rubble land-Glenalpine complex	33
Meeks extremely stony loamy coarse sand	26
Ellispeak-Waca complex	21
Waterpeak-Rock outcrop complex	19
Temo-Witefels complex	16
Tinker-Rock outcrop	11
Mountrose-Wardcreek-Melody complex	10

**Table 25.** Average soil loss by aspect.

<b>Aspect</b>	<b>Sediment yield (kg/ha)</b>	<b>Sediment yield (tonnes)</b>
<b>E</b>	3.99	0.02
<b>N</b>	3.75	0.02
<b>S</b>	3.93	0.03
<b>W</b>	1.45	0.01

## **V. CONCLUSIONS**

In the current study, we demonstrated that the WEPPcloud interface can successfully simulate general trends in streamflow, sediment, and phosphorus in watersheds with different physiographic settings with minimal calibration. Additionally, we demonstrated the applicability of the interface to various forest fuel treatments and wildfire scenarios, which can provide land and water resources managers with site-specific information of the spot areas in their watersheds to control soil erosion and phosphorus transport with forest management practices. The minimal calibration performed in this study involved manual alterations of calibrating parameters that are not easily found in national databases (i.e., kb, Ksub,  $\tau_c$ , P concentrations). However, previous research, and the current study, demonstrate that at least some of these parameters could be inferred from geology (kb) or could be determined from observed data at nearby watersheds (kb,  $\tau_c$ , P concentrations).

The results from the treatment benefit calculations for Blackwood, revealed the sensitive areas within the watershed that are more prone to erosion. The results suggest that hillslopes that are more prone to erosion post-thinning would also benefit more from thinning by avoiding high erosion rates from a potential wildfire.

Land managers were interested to determine if thinning would increase sediment yield on steeper slopes (30–50%). To address this question we performed several data summaries and statistical analyses, which showed that when we analyze the data considering all vegetation types, most sediment yield on slopes between 30–50% comes from areas covered by shrubs and grasses and not from forested areas, which suggests that land managers should consider applying treatments on all land covers and not just on forested lands.

The results from the ANOVA and the odds ratio analyses on hillslopes between 30 and 50% showed that thinning will increase the risk of erosion, but when thinned hillslopes erode, the sediment yield is no different when compared to an untreated hillslope. When we further plotted the data by slope length we found that longer hillslopes generate significantly more sediment yield than shorter slopes. Additional data analyses revealed other variables that are influencing soil erosion in the basin, however, slope length was consistently identified as a major driver. Therefore managers should consider thinning activities that either include buffers or add natural breaks along the slopes (i.e. thin only portions of a slope).

Mechanical thinning has the potential to generate more erosion through soil disturbances related to rutting, however, current management practices are likely to address this risk by using slash mats (harvest residue on which harvesting machinery can move) or other methods to minimize soil disturbance and increase ground cover. Newer mechanized equipment (with flexible tracks or frames, or with tethering), which were designed to be operated on steep terrains, can further minimize soil disturbance. Similarly, newer harvesting machines are equipped with larger inflatable wheels and they can also carry instead of dragging logs from site-to-site, which reduce compaction and minimize disturbance.

This modeling study showed that thinning minimally increased soil erosion when compared to the results from the wildfire. A large body of research suggests that forest treatments will help decrease risks of wildfire, with important social benefits.

Other mitigation strategies to minimize impacts of treatments on sediment and water quality include:

- Encouraging high patchiness of treatments.
- Staggering treatments in time and space to minimize cumulative impacts at the watershed outlet.
- Designing topographically-based buffers to reduce the connectivity of potential source areas to stream networks. These buffers could be strips of undisturbed soils on long slopes and at the bottom of steep slopes. This approach would be distinct from standard stream zone buffers, as full restoration goals may include thinning and burning within riparian areas.
- Planning upland treatments to follow meadow restoration projects that are designed to help capture eroded sediments and burned debris on floodplains. Such effects have been suggested for meadow restoration projects to mitigate channel incision, such as at Trout Creek.
- Using care when reopening roads to access areas for thinning to minimize erosion risk.

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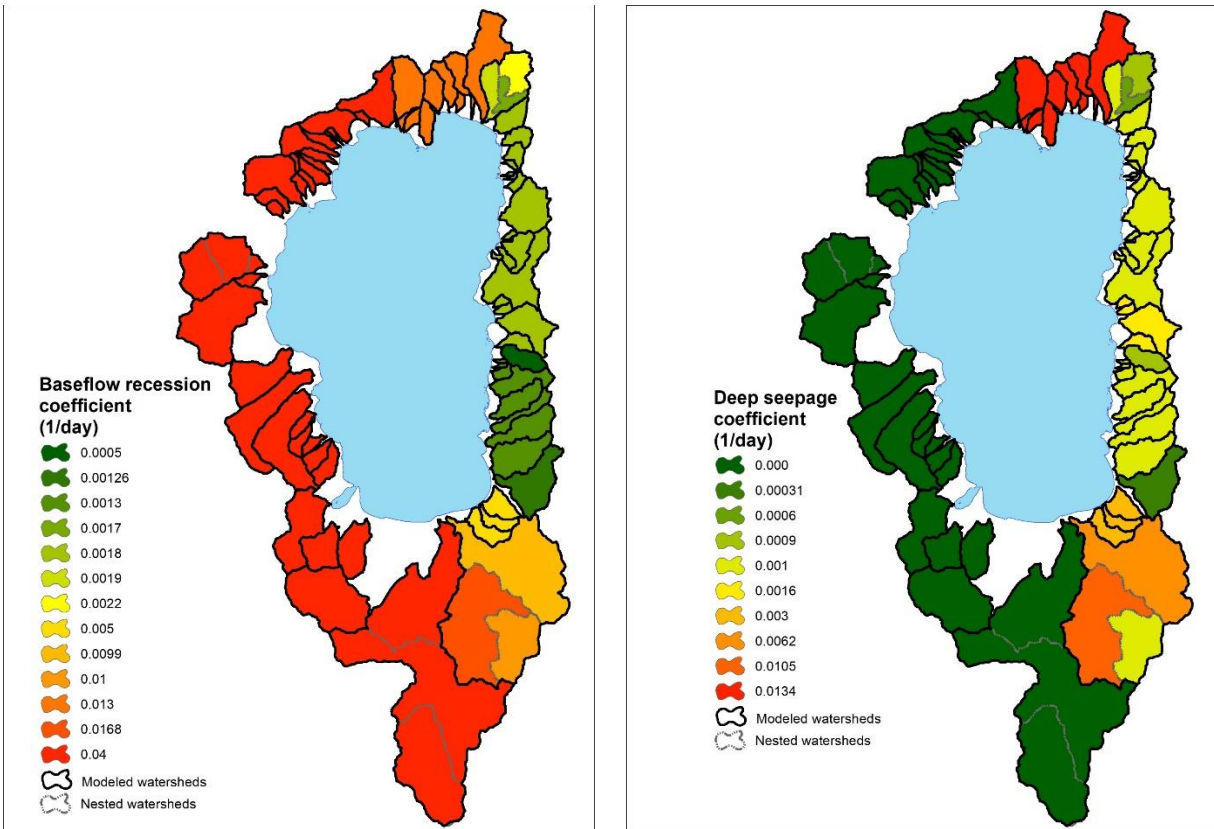
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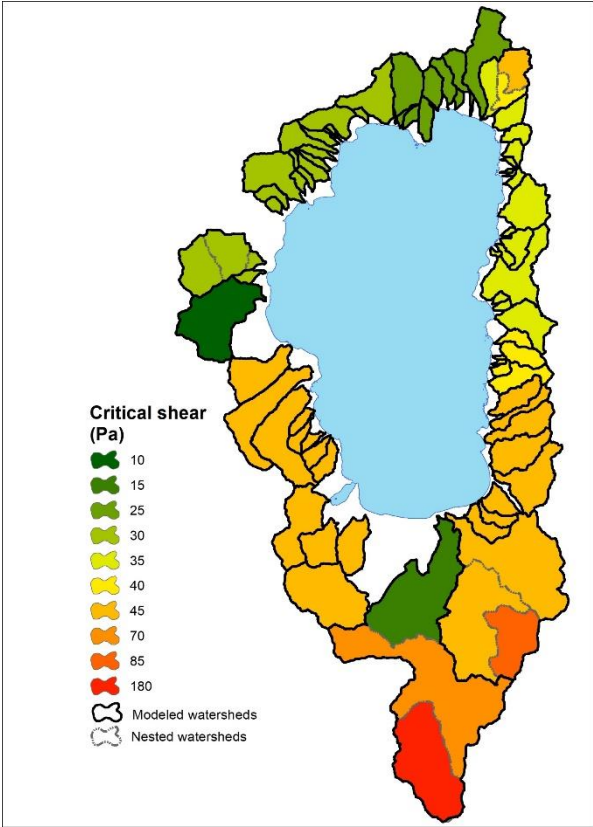
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## APPENDIX

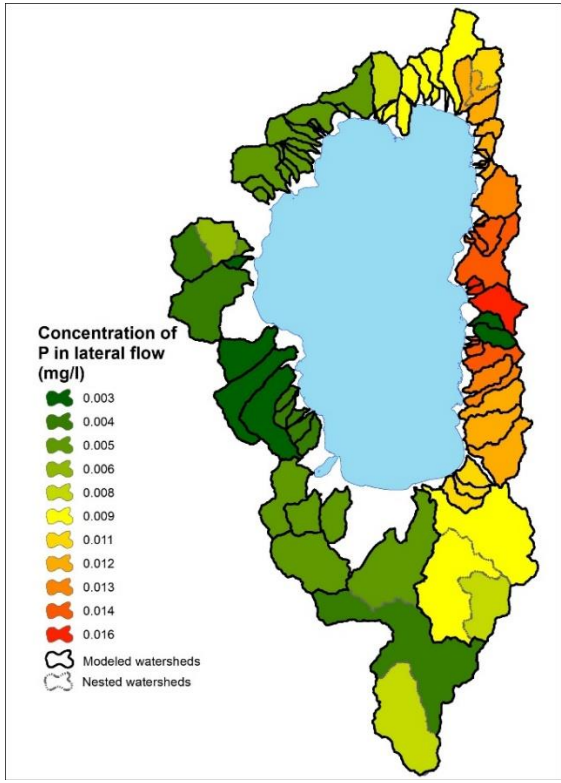
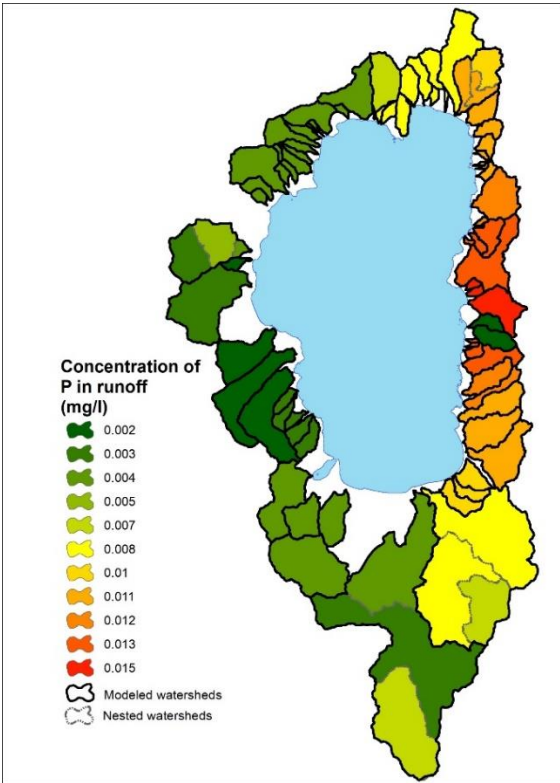
**Interpolated values of baseflow, deep seepage, channel critical shear, and phosphorus.**



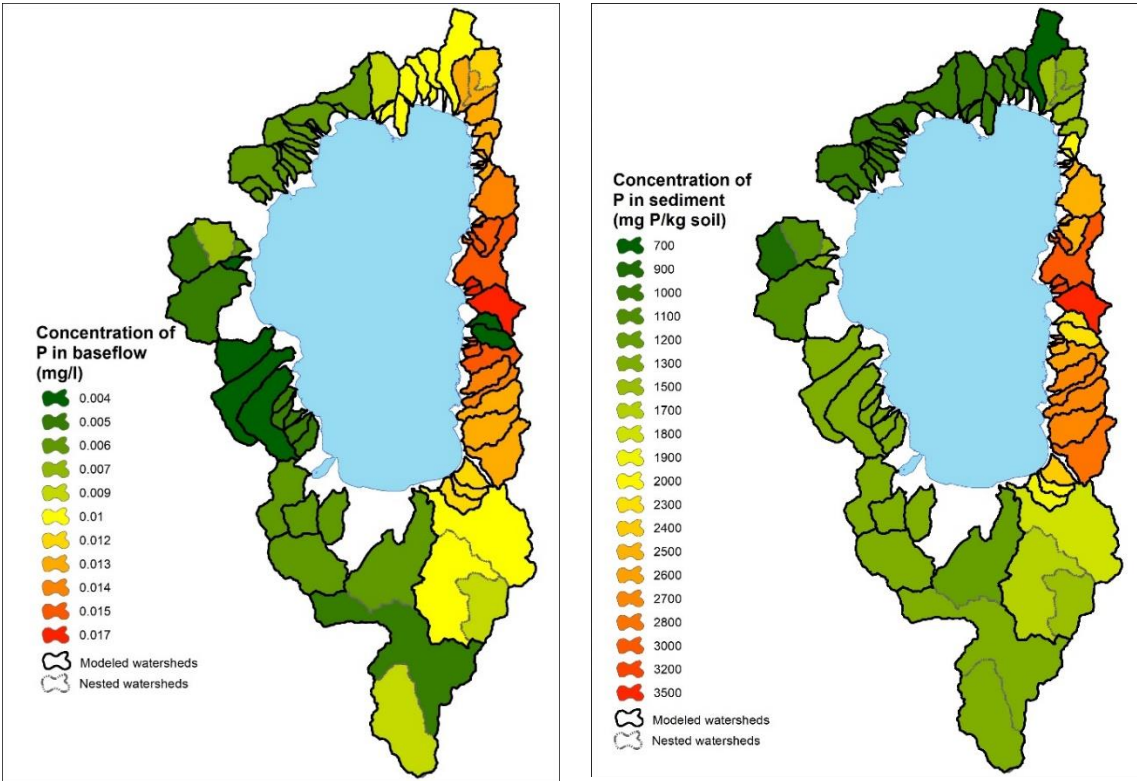
**Figure A1.** Interpolated estimated values of baseflow and deep seepage recession coefficients for Lake Tahoe basin watersheds in California/ Nevada.



**Figure A2.** Interpolated channel critical shear for Lake Tahoe basin watersheds in California/ Nevada.







**Figure A3.** Interpolated phosphorus concentrations in runoff, lateral flow, baseflow and sediment from Lake Tahoe basin watersheds in California/Nevada.

**Table A1.** Watershed information and web links to model runs.

No.	Name	USGS station	USGS Name/Watershed Name Location
<i>California</i>			
1	WC8	10336676	WARD C AT HWY 89 NR TAHOE PINES <a href="https://wepp.cloud/weppcloud/runs/lt_202012_63_Ward_Creek_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_63_Ward_Creek_CurCond/cfg/</a>
2	WC7A	10336675	WARD C A STANFORD ROCK TRAIL XING NR TAHOE CITY <a href="https://wepp.cloud/weppcloud/runs/lt_202012_63_Ward_Creek_WC3A_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_63_Ward_Creek_WC3A_CurCond/cfg/</a>
3	WC3A	10336674	WARD C BL CONFLUENCE NR TAHOE CITY <a href="https://wepp.cloud/weppcloud/runs/lt_202012_63_Ward_Creek_WC7A_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_63_Ward_Creek_WC7A_CurCond/cfg/</a>
4	BC1	10336660	BLACKWOOD C NR TAHOE CITY <a href="https://wepp.cloud/weppcloud/runs/lt_202012_62_Blackwood_Creek_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_62_Blackwood_Creek_CurCond/cfg/</a>
5	GC1	10336645	GENERAL C NR MEEKS BAY <a href="https://wepp.cloud/weppcloud/runs/lt_202012_56_General_Creek_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_56_General_Creek_CurCond/cfg/</a>
6	UTR1	10336610	UPPER TRUCKEE RV AT SOUTH LAKE TAHOE <a href="https://wepp.cloud/weppcloud/runs/lt_202012_44_Upper_Truckee_River_Big_Meadow_Creek_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_44_Upper_Truckee_River_Big_Meadow_Creek_CurCond/cfg/</a>
7	UTR3	103366092	UPPER TRUCKEE RV AT HWY 50 ABV MEYERS <a href="https://wepp.cloud/weppcloud/runs/lt_202012_44_Upper_Truckee_River_UT3_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_44_Upper_Truckee_River_UT3_CurCond/cfg/</a>
8	UTR5	10336580	UPPER TRUCKEE RV AT S UPPER TRUCKEE RD NR MEYERS <a href="https://wepp.cloud/weppcloud/runs/lt_202012_44_Upper_Truckee_River_UT5_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_44_Upper_Truckee_River_UT5_CurCond/cfg/</a>
9	TC4	10336780	TROUT CK NR TAHOE VALLEY <a href="https://wepp.cloud/weppcloud/runs/lt_202012_43_Trout_Creek_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_43_Trout_Creek_CurCond/cfg/</a>
10	TC2	10336775	TROUT CK AT PIONEER TRAIL NR SOUTH LAKE TAHOE <a href="https://wepp.cloud/weppcloud/runs/lt_202012_43_Trout_Creek_TC2_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_43_Trout_Creek_TC2_CurCond/cfg/</a>
11	TC3	10336770	TROUT CK AT USFS RD 12N01 NR MEYERS <a href="https://wepp.cloud/weppcloud/runs/lt_202012_43_Trout_Creek_TC3_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_43_Trout_Creek_TC3_CurCond/cfg/</a>

*Nevada*

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12	LH1	10336740	LOGAN HOUSE CK NR GLENBROOK <a href="https://wepp.cloud/weppcloud/runs/lt_202012_31_Logan_House_Creek_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_31_Logan_House_Creek_CurCond/cfg/</a>
13	GL1	10336730	GLENBROOK CK AT GLENBROOK <a href="https://wepp.cloud/weppcloud/runs/lt_202012_29_Glenbrook_Creek_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_29_Glenbrook_Creek_CurCond/cfg/</a>
14	IN1	10336700	INCLINE CK NR CRYSTAL BAY <a href="https://wepp.cloud/weppcloud/runs/lt_202012_19_Incline_Creek_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_19_Incline_Creek_CurCond/cfg/</a>
15	IN2	103366995	INCLINE CK AT HWY 28 AT INCLINE VILLEGE <a href="https://wepp.cloud/weppcloud/runs/lt_202012_19_Incline_Creek_IN2_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_19_Incline_Creek_IN2_CurCond/cfg/</a>
16	IN3	103366993	INCLINE CK ABV TYROL VILLAGE NR INCLINE VILLAGE <a href="https://wepp.cloud/weppcloud/runs/lt_202012_19_Incline_Creek_IN3_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_19_Incline_Creek_IN3_CurCond/cfg/</a>
17	TH1	10336698	THIRD CK NR CRYSTAL BAY <a href="https://wepp.cloud/weppcloud/runs/lt_202012_18_Third_Creek_CurCond/cfg/">https://wepp.cloud/weppcloud/runs/lt_202012_18_Third_Creek_CurCond/cfg/</a>

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**STAFF REPORT**

Date: February 16, 2022

To: TRPA Governing Board

From: TRPA Staff

Subject: Upper Truckee River Restoration and Golf Course Reconfiguration Project Notice of Preparation and Public Scoping

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**Summary and Staff Recommendation:**

The Tahoe Regional Planning Agency (TRPA) and California Department of Parks and Recreation (State Parks) released a Notice of Preparation (NOP) for a CEQA draft Environmental Impact Report (EIR) and TRPA Environmental Impact Statement (EIS) for the Upper Truckee River Restoration and Golf Course Reconfiguration Project (Project) on January 28, 2022. State Parks will be the joint document lead and the Project implementor. This report is informational, and no action is required.

Historical logging, gravel mining, grazing, channel manipulation, and development of the Lake Tahoe golf course directly adjacent to the floodplain have all negatively impacted this section of the Upper Truckee River. The river is straightened and rarely overbanks or inundates the floodplain. The golf course was built between 1958 – 1963 in the river floodplain and meadow. Golf course bridges constrict the channel and turf extends to the edge of the river in several locations. These impacts have changed the bed and bank dynamics of the river and cause degradation of instream and riparian habitat and increased erosion leading to poor water quality in the Upper Truckee River and eventually Lake Tahoe. The project is a high priority Environmental Improvement Program (EIP # 01.02.01.0010) project that aims to restore priority meadows, wetlands, and Lake Tahoe tributaries

The proposed project will restore a 1.8-mile section of the Upper Truckee River and reconfigure the golf course. The reconfigured golf course will remain an 18-hole regulation golf course completely within the limits of the Lake Valley State Recreation Area (LVSRA). The project goals include:

- Reduce erosion, fine sediment and nutrients into the Upper Truckee River and Lake Tahoe;
- Restore natural river channel to proper geomorphic function and reconnect to floodplain;
- Remove golf from rivers edge and restore habitat corridor with buffer zone;
- Improve aquatic and wildlife habitat;
- Improve and expand riparian and meadow vegetation;
- Reduce impacts of dated golf course by integrating environmentally sensitive designs; and
- Provide wide array of recreation access.

The project website has more information on the history of the project and current project description and may be found here: [Upper Truckee River Restoration & Golf Course Reconfiguration Project \(restoreuppertruckee.net\)](http://restoreuppertruckee.net).

Background:

State Parks circulated a draft EIR/EIS/EIS in 2010. Stakeholders including the public did not support the project at that time because a portion of the golf course would have been moved into Washoe Meadows State Park to make room for the river restoration. The CEQA EIR was litigated and the 2010 EIR/EIS/EIS was never adopted. Since then, State Parks has reevaluated the project and has produced the current proposed project that allows for restoration of the river while keeping the reconfigured golf course completely within the LVSRA.

Public Comment:

Two public scoping meetings were held virtually on January 25, 2022. Ninety people attended the two meetings. The TPRA Governing Board meeting will also serve as an opportunity to receive comments from the public as well as the Governing Board members. All comments received during the meetings will be considered during development of the draft EIR/EIS.

Contact Information :

For questions regarding this agenda item, please contact Shannon Friedman, Senior Planner, at (775) 901-2800 or [sfriedman@trpa.gov](mailto:sfriedman@trpa.gov).

Attachments:

- A. Notice of Preparation
- B. Conceptual Layout

Attachment A  
Notice of Preparation

**To:** California State Clearinghouse, Nevada State Clearinghouse, Responsible and Trustee Agencies, Property Owners, & Interested Parties

**From:** California Department of Parks and Recreation

**Subject:** NOTICE OF PREPARATION (NOP) OF AN ENVIRONMENTAL IMPACT REPORT (EIR) AND ENVIRONMENTAL IMPACT STATEMENT (EIS) AND NOTICE OF A SCOPING MEETING FOR THE UPPER TRUCKEE RIVER RESTORATION AND LAKE TAHOE GOLF COURSE RECONFIGURATION PROJECT

**Date:** January 28, 2022

### **Description of the Project**

The California Department of Parks and Recreation (State Parks) and the Tahoe Regional Planning Agency (TRPA) are initiating preparation of a joint EIR/TRPA EIS for the Upper Truckee River Restoration and Lake Tahoe Golf Course Reconfiguration Project (Project). This joint document is an EIR prepared by State Parks pursuant to CEQA (Public Resource Code Section 21000 et seq.) and State CEQA Guidelines (California Code of Regulations Section 15000 et seq.) and an EIS prepared by TRPA pursuant to the Tahoe Regional Planning Compact, Code of Ordinances, and Rules of Procedure. This notice meets the CEQA and TRPA noticing requirements for an NOP.

State Parks and TRPA are requesting comments on the scope and content of the EIR/EIS. The project includes geomorphic-based river restoration of the Upper Truckee River within the 169-acre Lake Valley State Recreation Area (LVSRA) and portions of Washoe Meadows State Park (WMSP). The purpose of the project is to restore natural river hydrologic conditions, geomorphic processes and ecological function to 1.8 miles of the Upper Truckee River, which will reduce erosion and therefore improve water quality in the Upper Truckee River and Lake Tahoe. The proposed restoration project aims to achieve this goal by constructing a meandering river channel at a grade that would be connected with the floodplain. The present channel would be restored to a more natural, balanced condition that mimics portions of the historic channel, which in general involves actions that reverse past actions that altered the natural course, depth, and velocity of the river. To accomplish this river restoration, the Project also includes reconfiguration of the 135-acre, 18-hole regulation Lake Tahoe Golf Course within LVSRA to allow room for the river meanders and establish a greater buffer between the river and the golf course. Existing undersized bridges would be removed and replaced with floodplain spanning bridges, the golf course would be modernized with a new irrigation system, drought resistant turf, and new restroom facilities, among other improvements. A trail connecting from Highway 50 along the river into Washoe Meadows State Park would also be included.

### **Location of the Project**

The Project would be located within the LVSRA and portions of the 608-acre WMSP, both of which are located at approximately 6,280 feet above mean sea level in El Dorado County, California, approximately 4.5 miles south of Lake Tahoe near the intersection of US Highway 50 and Meadow Vale Drive.

### **Issues to be Addressed in the EIR**

It has been determined that an EIR/TRPA EIS is required because the Project could result in potentially significant impacts to environmental resources. The EIR/TRPA EIS will identify the potentially significant environmental effects of the Project, including those resulting from construction, operation, and maintenance

of the Project. The EIR will also discuss and analyze a reasonable range of alternatives to the Project, including a No Project alternative scenario and a “Stabilize in Place” alternative to the Project that could attain most of its basic objectives at a reduced cost. Other alternatives may be added to the analysis based on input received during the 45-day scoping period following issuance of this NOP, focused on avoiding or reducing any of its significant environmental effects while still attaining the goals of the Project, or by the EIR team in response to potentially significant environmental impacts identified during the EIR process.

Specific areas of analysis to be addressed in the EIR include: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, utilities and service systems, and energy conservation. Where feasible, mitigation measures will be recommended to avoid or reduce potentially significant impacts. The EIR will also address potential cumulative impacts of the Project, considered together with past, other current, and reasonably foreseeable future projects in the area.

Information to be included in the EIR/TRPA EIS will be based, in part, on input and comments received during the scoping period. Decision-makers, responsible and trustee agencies under CEQA, property owners, and members of the public will also have an opportunity to comment on the Draft EIR/TRPA EIS once it is issued. Additional information about the environmental review process for the Project can be found on the State Parks website for the Project at: [https://www.parks.ca.gov/?page\\_id=29860](https://www.parks.ca.gov/?page_id=29860). Further information about the project is available at: <https://restoreuppertruckee.net/>.

### **Public Scoping Period for this Notice of Preparation**

The purpose of the NOP is to solicit comments from interested persons, organizations, and agencies as they relate to the scope and content of the information to be included and analyzed in the EIS/TRPA EIS. Agencies should comment on the elements of the environmental information that are relevant to their legal authority and statutory responsibilities in connection with the project.

The designated public scoping period will extend for 45 calendar days beginning on January 28, 2022 and concluding on March 15, 2022. Please include a name, organization (if applicable), mailing address, and e-mail address of a contact person for all future notification related to this process. Public comments will become part of the public record and will be published in a Scoping Report.

Please send your comments to: **Matt Trask, ECORP Consulting, Inc., 2525 Warren Dr. Rocklin, CA 95677, [mtrask@ecorpconsulting.com](mailto:mtrask@ecorpconsulting.com).**

Two public scoping meeting will be held to provide the opportunity to learn about the Project and to receive comments from the public and other interested parties and agencies regarding the issues that should be addressed in the EIR/TRPA EIS. The scoping meeting will be held as follows:

Wednesday, February 23, 2022  
TRPA Governing Board (GB) Meeting  
Virtual

Wednesday, March 9, 2022  
TRPA Advisory Planning Commission (APC) Meeting  
Virtual

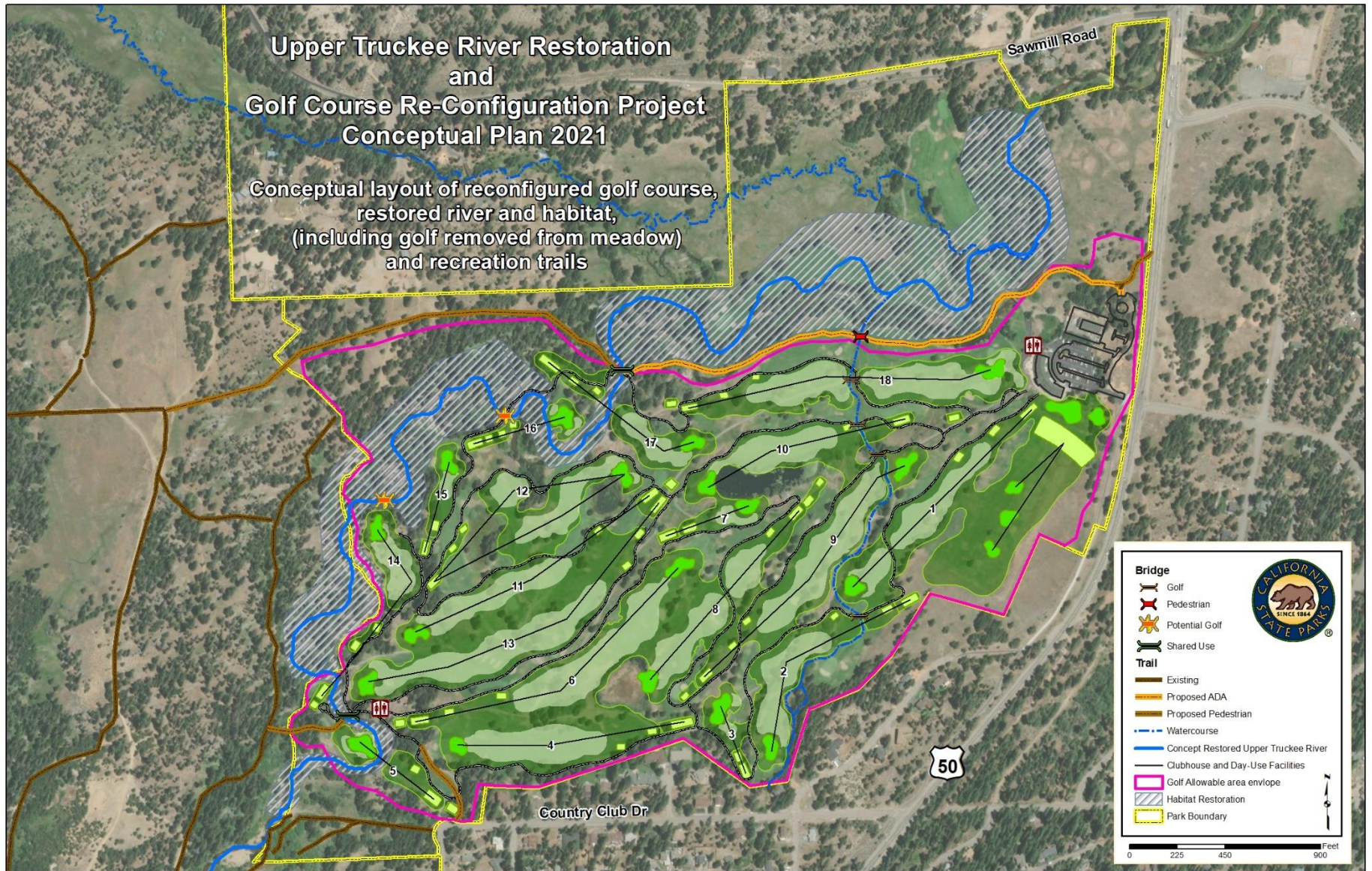
TRPA is concerned for the health and safety of community members, our staff, and our Governing Board. Amid rapidly evolving circumstances, the agency must consider its obligation to continue work while doing our part to slow the spread of the novel Coronavirus. TRPA will utilize technology to hold both public scoping meetings. Any interested member of the public will be able to participate and observe the meeting remotely without coming to a physical location. In-person attendance will not be part of the TRPA public meetings under the current recommendations from the state and local agencies. The staff summary for this project will be

available for review via TRPA.gov seven (7) calendar days prior to the meeting. Interested persons may provide comments and input to the Governing Board and/or Advisory Planning Commission meeting prior to the meeting and day of the meeting. Interested parties can provide comments during the meeting by using the platform GoToWebinar. Visit the service providers website, [www.gotomeeting.com/webinar](http://www.gotomeeting.com/webinar), in advance of the meeting to prepare your system to connect to the meetings (webinar). The link to connect to the meeting will be posted on the Meetings and Notices page of the TRPA website the day of the meeting.

**REMINDER:** All comments will be accepted by postmark or e-mail through March 15, 2022. Please be sure to include your name, organization (if applicable), mailing address, and e-mail address.



Attachment B  
Conceptual Layout





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STAFF REPORT

Date: February 16, 2022

To: TRPA Governing Board

From: TRPA Staff

Subject: Whether to Reconsider Agenda Item No. VII.A from the TRPA January 26, 2022 Governing Board Meeting to Amend the Tourist Core Area Plan for the Tourist Center Gateway District, Special Area #1

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Summary:

The Governing Board will consider whether to reconsider amendments to the Tourist Core Area Plan (TCAP) as proposed by the City of South Lake Tahoe and the applicant Tahoe Wellness Center under Agenda Item No. VII.A heard at the January 26, 2022 Governing Board meeting. At that meeting, the motion to make the appropriate findings failed to obtain four affirmative votes from both states as required by the Compact. The motion garnered only three affirmative votes from Nevada, with one no vote and one abstention. At the meeting, Board member John Friedrich requested reconsideration of that vote at the next Governing Board meeting pursuant to Rules of Procedure Section 2.5.2.

If this reconsideration passes, the proposed TCAP amendments will be presented again and heard as a follow-up agenda item, Agenda Item VI.D, during the February Board meeting.

Required Motion:

To reconsider a vote to approve and adopt proposed TCAP amendments as presented at the January 26, 2022 TRPA Governing Board meeting, the Governing Board must make the following motion:

- 1) A motion to reconsider the motion to approve the required findings and proposed amendments to the Tourist Core Area Plan as presented under Agenda Item No. VII.A at the January 26, 2022 TRPA Governing Board meeting.

For the reconsideration to pass, an affirmative vote of at least four Board members from each state is required.

Contact Information:

For questions regarding this item, please contact Jennifer Self, Principal Planner, at (775) 589-5261 or [jself@trpa.gov](mailto:jself@trpa.gov), or John L. Marshall, Agency Counsel at (775) 303-4882 or [jmarshall@trpa.gov](mailto:jmarshall@trpa.gov).





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STAFF REPORT

Date: February 16, 2022

To: TRPA Governing Board

From: TRPA Staff

Subject: Reconsideration and Possible Approval of Proposed Amendments to the Tourist Core Area Plan for the Tourist Center Gateway District, Special Area #1

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Staff Recommendation:

TRPA staff recommends that the Governing Board approve the amendments to the Tourist Core Area Plan (TCAP) Tourist Center Gateway District Special Area #1 as provided in this packet. This review considers the conformity of the area plan amendments to the Lake Tahoe Regional Plan. The proposed amendments were brought forward by the City of South Lake Tahoe planning staff. These amendments were initiated by the Tahoe Wellness Center, an existing private development within the subject district, through an application with the City.

Required Motions:

To approve and adopt the proposed area plan amendments, the Governing Board must make the following motions, based on this staff report and materials provided within this packet:

- 1) A motion to approve the Required Findings, as described in Attachment D, and a Finding of No Significant Effect, as provided in Attachment B, for adoption of the Tourist Core Area Plan amendments as described in the staff report; and
- 2) A motion to adopt Ordinance 2022-\_\_\_, amending Ordinance 2020-06, as previously amended, to amend the Tourist Core Area Plan as shown in Attachment F.

In order for motions to pass, an affirmative vote of at least four Board members from each state is required.

Summary:

The City of South Lake Tahoe and the TRPA Governing Board adopted the Tourist Core Area Plan (TCAP) in 2013. The proposed amendments, as provided in this packet, would amend the permissible land uses within the TCAP Tourist Center Gateway (TSC-G) District, Special Area #1 to allow tourist-related “small scale manufacturing”, “industrial services”, and “wholesale and distribution”. As part of these amendments, the City would modify the existing land use definition of “industrial services” and would add a definition for “wholesale and distribution” (not currently defined in the TCAP).

The definition for each of the land uses above that are proposed to be included in TSC-G District, Special Area #1 area are as follows:

- **Industrial Services.** Establishments providing light industrial services to an associated retail commercial primary use while providing educational and/or demonstration opportunities to the public.
- **Small Scale Manufacturing.** Establishments primarily engaging in retail sales and secondarily as a fine art or craftsman demonstration workshop of light industrial nature such as sculptor, potter, weaver, carver, jeweler, or other similar art that requires artistic skill. Outside storage or display would require approval of a Special Use Permit.
- **Wholesale and Distribution.** Retail commercial establishments engaged in, as a secondary use, the storage of merchandise and distribution of products for sale.

With these amendments, the City intends to help facilitate the development and redevelopment of a wide range of tourist related commercial uses and enhance the tourist destination goals of the TCAP. The amendments encourage local makers spaces and businesses who make artisan retail products on-site, such as artisan chocolatiers, leather goods, breweries, etc. Small scale manufacturing of this nature is currently permissible within the TCAP Tourist Center, Mixed-Use, Mixed-Use Corridor, and Neighborhood Mixed-Use Districts. (A location map of the subject area is included for reference on a subsequent page.)

The proposed land uses would be subject to a special use permit, which requires discretionary approval by the City Planning Commission or Zoning Administrator. The proposed amendments also specify that each of these new special uses would be allowed only in connection with a retail commercial use where they will enhance the visitor experience and that the additional special use shall be limited in size to thirty percent of the associated retail space.

As required by the Regional Plan, the existing TCAP includes specific design standards, which would be applicable to the proposed land uses, to ensure development is compatible with the natural environment and contributes to the character and quality of the built environment.

The proposed amendments do not include any changes to boundaries, maps, goals and policies, or development and design standards (i.e. height, density, noise standards, etc.) within the TCAP or the Regional Plan. The specific changes (i.e. language) proposed by these amendments is included in Attachment B as tracked changes.

**The proposed amendments were initiated by the Tahoe Wellness Center, an existing private development specializing in medical and recreational cannabis within the TCAP TSC-G District Special Area #1, through an application with the City.** The Tahoe Wellness Center is currently operating with one or more of the proposed land uses as a non-conforming use. The amendments, if adopted, would bring the Tahoe Wellness Center into conformance with the area plan, as well as allow other businesses within the district to operate in ways consistent with the proposed land uses and goals of the TCAP.

TRPA serves as the lead agency to ensure compliance with the Regional Plan and conformance with Chapter 13 of the TRPA Code of Ordinances. City staff worked closely with TRPA staff regarding the amendment language as well as the environmental review to ensure Regional Plan conformance.

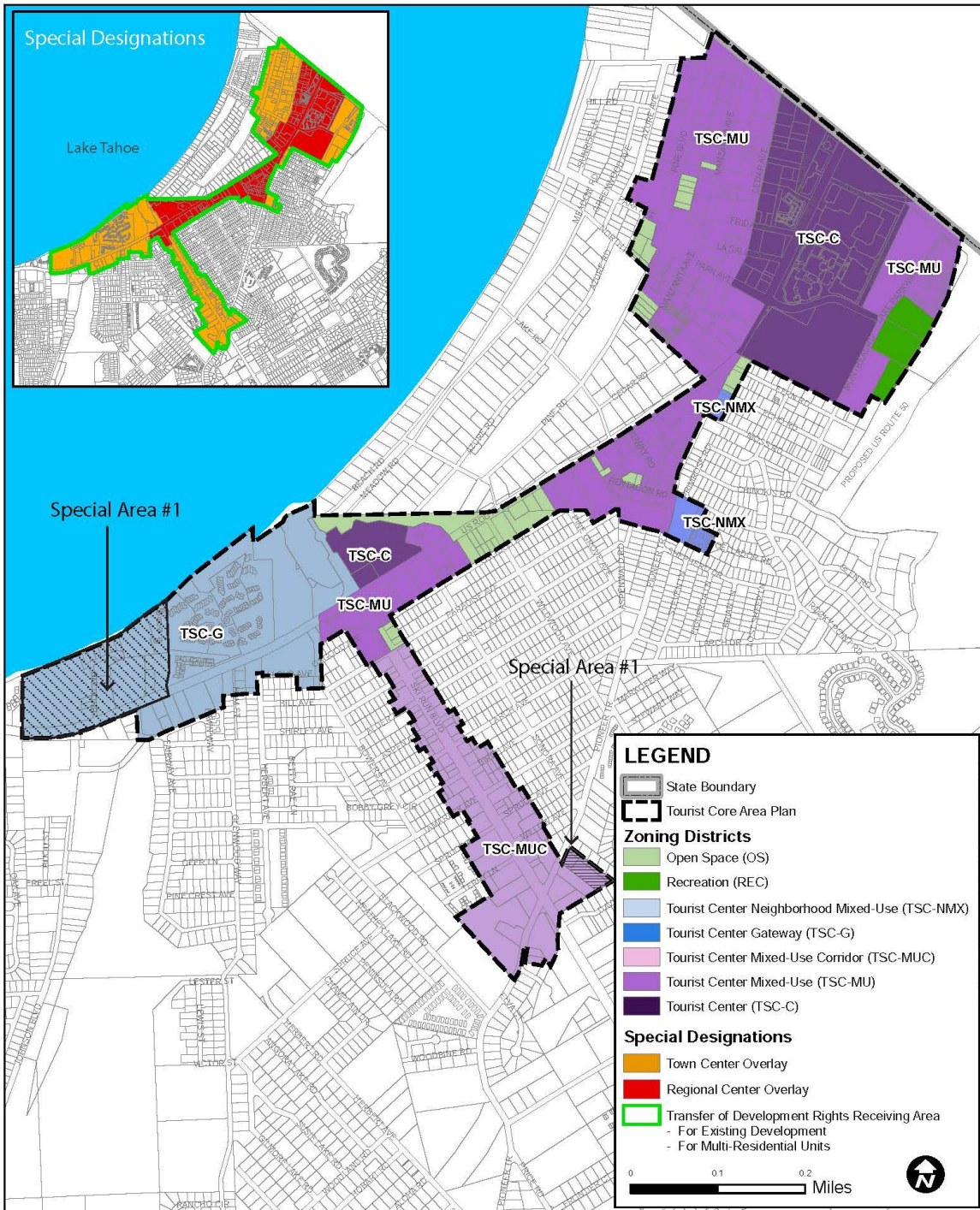
Additional information on the project background and amendments is included in Attachments A - F.

Amendment Description:

The proposed amendments affect Appendix C, Table 1: Permitted Uses by Land Use District and Table 2: List of Primary Uses and Use Definitions of the TCAP as follows:

- Allow small scale manufacturing, industrial services, and wholesale and distribution land uses within the Tourist Center Gateway (TSC-G) District, Special Area #1.
- Add a provision that the subject land uses would only be allowed in connection with a retail commercial use where it will enhance the visitor experience and is limited in size to 30% of the associated retail space.
- Amend the land use definition of industrial services to better reflect the goals and intent of the TCAP.
- Add a new land use definition for wholesale and distribution consistent with the goals of the TCAP.

Specific language that would be added or amended within the area plan are included in Attachment A, Exhibit 1.



Location Map: Tourist Core Area Plan Boundaries Showing the Zoning Districts, including the subject Tourist Center Gateway District (TSC-G) Special Area #1.

Note: the amendments as provided in this packet would not apply to the Mixed-Use Corridor District (TSC-MUC) Special Area #1.



Approval and Adoption Process:

Area plans and area plan amendments are typically first approved and adopted by the local jurisdiction and then by the TRPA Governing Board. Upon TRPA approval and adoption of an area plan, the plan then becomes a component of the Regional Plan. Local jurisdiction staff engage with TRPA staff early and often throughout the development and planning process of area plans and area plan amendments to ensure compliance with the Regional Plan.

The City Planning Commission recommended City Council adoption of the proposed amendments as provided in this packet on October 14, 2021 (City Resolution 2021-14). The City Council then adopted the proposed amendments on November 16, 2021 (City Ordinance 2021-1158).

The TRPA Regional Plan Implementation Committee (RPIC) and Advisory Planning Commission received a presentation and unanimously recommended approval of the proposed amendments as included in this packet to the TRPA Governing Board on December 14, 2021 and January 18, 2022, respectively.

Prior to the RPIC meeting, member Bill Yeates requested corrections to the evaluation form (Attachment C) for compliance measures numbers 206 and 216. Those corrections were included as an errata to the RPIC materials and included as part of their recommended approval.

The APC recommended considering renaming the Tourist Core Gateway District Special Area #1 to Special Area #2 to avoid possible confusion with permissible uses in the Mixed-Use Corridor District Special Area #1. According to the City, no change to the naming of either Special Area #1, as included in the adopted area plan, is requested at this time. The land use table as provided in the area plan lists permissible uses for each distinct district including the Mixed-Use Corridor District, Special Area #1 and Tourist Core Gateway District Special Area #1. APC members also recommended further explanation of the rationale to Chapter 4 findings as provided in this packet and necessary steps, beyond this amendment package, to bring the Tahoe Wellness Center into compliance. Further explanation of the Tahoe Wellness Center's existing uses, compliance and enforcement was provided in the presentation to the Governing Board on January 26, 2022.

This item was heard by the Governing Board under Agenda Item No. VII.A at their January 26, 2022 meeting. At that meeting, the motion to make the appropriate findings failed to obtain four affirmative votes from both states as required by the Compact. The motion garnered only three affirmative votes from Nevada, with one no vote and one abstention. At the meeting, Board member John Friedrich requested reconsideration of that vote at the next Governing Board meeting pursuant to Rules of Procedure Section 2.5.2.

Environmental Review:

TRPA staff prepared an Initial Environmental Checklist (IEC), required findings, Finding of No Significant Effect (FONSE) pursuant to TRPA Code of Ordinances Section 3.3 and Chapter 4 for the proposed amendments. The draft environmental document provides an analysis of potential environmental impacts of the amendment package. The analysis demonstrates that the proposed amendments either have no impact or less than significant impacts in all areas. The IEC, findings, and FONSE are provided as Attachments B and D.

TRPA staff prepared the attached Compliance Measures evaluations pursuant to TRPA Code Section 4.4 and found the amendments will not negatively impact a TRPA adopted threshold indicator or compliance measure. These evaluations are provided as Attachment C.

TRPA staff completed an Area Plan Finding of Conformity Checklist pursuant to Chapter 13 of the TRPA Code of Ordinance as provided in Attachment E.

The City prepared an Initial Study/Negative Declaration pursuant to the California Environmental Quality Act (CEQA) as provided through the following website:  
[https://www.cityofslt.us/DocumentCenter/View/16099/City-SLT-TCAP-Amendment-Draft-IS-ND\\_NOP](https://www.cityofslt.us/DocumentCenter/View/16099/City-SLT-TCAP-Amendment-Draft-IS-ND_NOP) .

Public Outreach:

The City of South Lake Tahoe held an online public workshop on February 17, 2021 to solicit public input on the proposed amendments. In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15070, the City prepared and circulated an Initial Study/Negative Declaration for the proposed amendments and consulted with Native American tribes. The City Planning Commission held public hearing on the proposed amendments on October 14, 2021. The City held the first public reading of the amendments on November 2, 2021, and the second public reading on November 16, 2021.

Public notice of the RPIC meeting on December 14, 2021; APC meeting on January 18, 2022; and this Governing Board meeting and agenda item were provided by TRPA. Pursuant to TRPA Rules of Procedure Chapter 4: Adoption of Ordinances, a draft or summary of the ordinance provided in this packet was made available for public review and prior to each public hearing.

Contact Information:

For questions regarding this item, please contact Jennifer Self, Principal Planner, at (775) 589-5261 or [jself@trpa.gov](mailto:jself@trpa.gov).

Attachments:

- A. City Staff Summary
  - Exhibit 1: Proposed Amendments to the Tourist Core Area Plan, Appendix C
- B. Initial Environmental Checklist (IEC) and Finding of No Significant Effect (FONSE)
- C. Compliance Measures Evaluation
- D. Required Findings/Rationale
- E. Area Plan Conformity Checklist
- F. TRPA Adopting Ordinance 2022-\_\_
  - Exhibit 1: Proposed Amendments to the Tourist Core Area Plan, Appendix C

Attachment A  
City Staff Summary



# City of South Lake Tahoe Report to TRPA Advisory Planning Commission

**Meeting Date:** February 23, 2022

**Title:** Tourist Core Area Plan Amendments

**Location:** Tourist Core Area Plan Tourist Center Gateway District, Special Area 1 - 18.0 Acre Amendment Area with 49 Parcels (Multiple APNs)

**Responsible Staff Members:** John Hitchcock, Planning Manager (530) 542-7405

## **Background:**

Tahoe Wellness Center submitted a development application to the City of South Lake Tahoe proposing an amendment to the Tourist Core Area Plan/Specific Plan. Specifically, the proposed amendment would add the following uses as a special use in the TCAP Tourist Center Gateway (TSC-G) District, Special Area 1: industrial services; wholesale and distribution; and small-scale manufacturing. The proposed amendment specifies that each of these new special uses would be allowed only in connection with a retail commercial use where they will enhance the visitor experience and that the additional special use shall be limited in size to thirty (30) percent of the associated retail space.

The Tourist Core Area Plan was adopted in 2013 (City Ordinance 2013-1060) and replaced the former Stateline/Ski Run Community Plan. The TCAP established seven new zoning districts, two overlay zoning districts, as well as design and development standards for each district.

The Tourist Core Area Plan is considered a specific plan under the City and a component of the Regional Plan.

## **Issue and Discussion:**

The proposed amendment includes modifying the existing TCAP land use definition of "industrial services," and would add a definition for "wholesale and distribution" (not a currently defined use in the TCAP). The proposed definitions for each of these uses is as follows:

- **Industrial Services.** Establishments providing light industrial services to an associated retail commercial primary use while providing educational and/or demonstration opportunities to the public.
- **Small Scale Manufacturing.** Establishments primarily engaging in retail sales and secondarily as a fine art or craftsman demonstration workshop of light industrial nature such as sculptor,

potter, weaver, carver, jeweler, or other similar art that requires artistic skill. Outside storage or display would require approval of a Special Use Permit.

- **Wholesale and Distribution.** Retail commercial establishments engaged in, as a secondary use, the storage of merchandise and distribution of products for sale.

The proposed amendment would modify the TCAP Permissible Use List (TCAP Appendix C – Table 1) and List of Primary Uses and Use definitions (TCAP Appendix C – Table 2). The proposed amendment does not involve any other changes to the TCAP, and does not involve any changes to existing policies, development standards, design standards, or maps.

The proposed additions and deletions to the TCAP are provided in Exhibit 1 attached to this staff report.

### Purpose and Need

Special Area #1 of the TCAP Gateway District is designated as a tourist/commercial district and is intended to provide for an attractive mixed-use commercial and tourist accommodation corridor that provides a welcoming gateway to the tourist core area. The district provides for an array of uses including tourist accommodation, residential, commercial retail, restaurants and recreation uses. The district currently has a mix of tourist accommodation, commercial retail, restaurants and recreation uses that cater to visitors and locals.

The purpose of the proposed amendment is to facilitate implementation of the TCAP objective to develop and redevelop a wide range of tourist-related commercial uses (i.e., light industrial demonstration workshops and product production) that are related to a primary retail commercial use and enhance the tourist destination goals of the Tourist Core Area Plan.

To further enhance and create additional opportunities for expansion of tourist-related retail commercial uses and activate the district, the proposed amendment would allow a primary retail commercial use to expand to include production of products for retail sale and distribution. The area would have to be associated with a primary retail use and will be limited to thirty (30) percent of the primary retail commercial use. The amendment also requires any proposed industrial service, small scale manufacturing, or wholesale and distribution use to obtain a special use permit from the City. The special use permitting process would allow the City to review a project to determine if it is a desirable use in the proposed location, if potential project impacts have been adequately addressed.

Examples of projects that are envisioned as a result of this amendment include but are not limited to retail businesses selling artisanal confectionery items, leather goods, metal works, woodworking, handcrafted goods, small-scale bakery stores, or ice cream parlors. The amendment would also provide the opportunity for production of products for onsite eating and drinking places. The intent is to allow the production, manufacturing and repair of goods on-site and allow retailers the opportunity to demonstrate and educate the public on how products are manufactured for retail sale.

## Tourist Core Area Plan

The Tourist Core Area Plan was adopted by the City “to establish a framework that will achieve redevelopment and reinvestment in properties, on the ground environmental improvement, enhancement of the built environment...and increased access to recreation opportunities.” The proposed amendments will further the goals of the Tourist Core Area Plan by encouraging properties in the amendment area to redevelop or expand and provide unique retail experiences to visitors and locals that activate the TCAP Gateway District as a destination center.

The proposed amendments are also consistent with Land Use Goal LU-1 that encourages redevelopment and development in order to provide high quality services to visitors and the public and to animate the streetscape. In addition, the proposed amendments are consistent with the following policies:

*Policy LU-1.1: Reinforce the Tourist Core as the primary visitor and tourist district in South Lake Tahoe.*

*Policy LU-1.3: Create distinctive, connected, and walkable districts that have a strong sense of identity.*

## Environmental Consideration

To evaluate the potential impacts of the proposed amendment, the City contracted with Cardno to prepare an Initial Study/Negative Declaration (IS/ND). Additionally, TRPA staff prepared an initial environmental checklist (IEC). The IEC and Draft IS/ND provides an analysis of the potential for the project to result in significant environmental impacts. Areas of analysis include aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, utility and services systems, and additional mandatory findings of significance related to potential cumulative impacts. The analysis demonstrates that the project either has no impacts or has less than significant impacts in all of these areas.

## Tribal Consultation

Pursuant to state law, the City has completed requirements for consultation with Native American tribes under Assembly Bill 52 and the California Environmental Quality Act (CEQA) Guidelines. The City received a comment from the United Auburn Indian Community acknowledging the proposed project and deferring to the Washoe Tribe of Nevada and California. No other comments were received. Staff sent a notice to the Washoe Tribe of Nevada and California on February 16,

2021. At this time no comments have been received from the Washoe Tribe of Nevada and California.

### Public Workshop

A public workshop was held on February 17, 2021 via an online meeting to take public comment on the proposed amendment and the scope of the environmental analysis. The meeting was attended by a few members of the public who asked clarifying questions. One member of the public who lived in a nearby timeshare (Sierra Shores) did object to the proposed amendments. Subsequently, the City did receive a written comment from Mr. Jeffrey Sun, objecting to the proposed amendment.

### Public Comment Period, Public Noticing and Public Hearing

The Draft IS/ND has been sent, along with a Notice of Completion, to the California State Clearinghouse for distribution to state and regional agencies for review. The IS/ND has also been available at City offices (1052 Tata Lane) and online at: <https://www.cityofslt.us/DocumentCenter/View/16100/Project-Summary-Page-TWC-TCAP-Amendment> . The public review and comment period was August 17, 2021 to September 17, 2021. A Notice of Availability and Notice of Intent, advertising the review period was mailed to all affected property owners within 300 feet of TCAP Gateway District Special Area #1 and published in the Tahoe Daily Tribune on August 20, 2021.

Due to the cancellation of the September Planning Commission meeting and a change in the public hearing date, a second public notice indicating a new date, time and location of the Planning Commission meeting to consider the proposed amendment and the IS/ND was sent on September 9, 2021 and published in the Tahoe Daily Tribune on October 1, 2021.

On October 14, 2021, the Planning Commission held a duly noticed public hearing, receive public comment, deliberated and passed Resolution 2021-14 recommending the City Council adopt the IS/ND and the Tourist Core Area Plan/Specific Plan amendments.

A public notice indicating the date, time and location of the City Council meeting to consider the proposed amendment and the IS/ND was mailed to all affected property owners on October 19, 2021 and published in the Tahoe Daily Tribune on October 22, 2021.

The City Council adopted the TCAP amendments as provided in this packet on November 16, 2021 during a regular public meeting.

Exhibit 1 to Attachment A

Proposed Amendments to the Tourist Core Area Plan, Appendix C



# EXHIBIT 1

Amendment is **red** and underlined. Language that would be deleted is **blue** and is struck through. No other changes to the TCAP are proposed.

Table 1: PERMITTED USES BY ZONING DISTRICT								
Permitted Uses Key: "A" – Allowed Use "S" – Special Use "T" – Temporary Use "TRPA" – TRPA Review Required "." – Use Not Permitted	TSC-C	TSC-MU	TSC-MUC	TSC-NMX	TSC-G	TSC-G Special Area 1	REC	OS
	<b>RESIDENTIAL</b>							
Domestic Animal Raising	-	-	-	-	-	-	S	-
Employee Housing	S	S	A	S	S	S	A	-
Multiple Family Dwelling	A	A	A	A	A	A	-	-
Multi-Person Dwelling	S	S	S	S	S	S	-	-
Single Family Dwelling (includes condominiums)	A <sup>B</sup>	A	A	A	A	A	S <sup>1</sup>	-
<b>TOURIST ACCOMMODATION</b>								
Bed & Breakfast Facilities	-	A	A <sup>9</sup>	S	A	A	-	-
Hotel, Motel, Other Transient Dwelling Units	A	A	A <sup>9</sup>	S	A	A	-	-
Time Sharing	A	A	A <sup>9</sup>	S	S	A	-	-
<b>RETAIL COMMERCIAL</b>								
General Retail and Personal Services	A	A	A <sup>9</sup>	S	A	A	-	-
Building Material & Hardware	S <sup>6</sup>	-	-	-	-	S	-	-
Nursery	-	-	A <sup>9</sup>	-	-	S	-	-
Outdoor Retail Sales	A	-	S <sup>9</sup>	-	-	S	-	-
Eating & Drinking Places	A	S	A <sup>9</sup>	S	A	A	-	-
Service Stations <sup>11</sup>	S	S	-	-	S	S	-	-
<b>ENTERTAINMENT COMMERCIAL</b>								
Amusement & Recreation	S	S	-	-	-	A	-	-
Privately Owned Assembly and Entertainment	S	S	-	-	-	S	S	-
Outdoor Amusements	-	S	S	-	S	S	S	-
<b>SERVICE COMMERCIAL</b>								
Business Support Services	A <sup>7</sup>	S	S <sup>9</sup>	-	S	A	-	-
Health Care Services	A <sup>2,5</sup>	-	A <sup>9</sup>	-	A	A	-	-
Professional Offices	A <sup>3,4</sup>	A	A <sup>9</sup>	A	A	A	-	-
Schools – Business & Vocational	S	-	S <sup>9</sup>	-	S	A	-	-
<b>LIGHT INDUSTRIAL COMMERCIAL</b>								
Small Scale Manufacturing	S	S	S <sup>9</sup>	S	-	<u>S<sup>12</sup></u>	-	-

**Table 1: PERMITTED USES BY ZONING DISTRICT**

Permitted Uses Key: "A" – Allowed Use "S" – Special Use "T" – Temporary Use "TRPA" – TRPA Review Required "- " – Use Not Permitted	TSC-C	TSC-MU	TSC-MUC	TSC-NMX	TSC-G	TSC-G Special Area 1	REC	OS
<u>Industrial Services</u> <sup>11</sup>	-	-	-	-	-	S <sup>12</sup>	-	-
<b>WHOLESALE/STORAGE COMMERCIAL</b>								
Vehicle Storage & Parking <sup>11</sup>	S	S	S <sup>9</sup>	S	S	S	-	-
<u>Wholesale and Distribution</u>						S <sup>12</sup>		
<b>GENERAL PUBLIC SERVICE</b>								
Religious Assembly	-	S	S <sup>9</sup>	-	S	A	-	-
Cultural Facilities	S	S	S <sup>9</sup>	-	S	A	-	-
Daycare Centers/Preschool	A	A	A <sup>10</sup>	A	A	A	-	-
Government Offices	-	-	A <sup>9</sup>	-	-	S	-	-
Local Assembly & Entertainment	S	S	-	-	-	S	-	-
Local Public Health and Safety Facilities <sup>11</sup>	A	A	A	A	A	A	A	A
Public Owned Assembly & Entertainment	S	S	-	-	-	-	S	-
Public Utility Centers <sup>11</sup>	-	S	-	-	-	-	-	-
Social Service Organizations	-	-	A <sup>9</sup>	-	A	A	-	-
<b>LINEAR PUBLIC FACILITIES</b>								
Pipelines & Power Transmission	S	S	S	S	S	S	S	S
Transit Stations & Terminals	S	S	S	S	S	S	S	S
Transportation Routes	S	S	S	S	S	S	S	S
Transmission & Receiving Facilities	S	S	S	S	S	S	S	S
<b>RECREATION</b>								
Cross Country Ski Courses	-	-	-	-	-	-	S	-
Day Use Areas	A	A	A	A	A	A	A	A
Group Facilities	-	-	-	-	-	-	S	-
Outdoor Recreation Concessions	-	-	-	-	S	S	-	-
Participant Sport Facilities	S	-	-	-	-	-	-	-
Riding and Hiking Trails	-	-	-	-	-	-	S	-
Rural Sports	-	-	-	-	-	-	S	-
Snowmobile Courses	-	-	-	-	-	-	S	-
Visitor Information Centers	S	S	-	-	S	A	-	-
<b>RESOURCE MANAGEMENT</b>								

**Table 1: PERMITTED USES BY ZONING DISTRICT**

Permitted Uses Key: "A" – Allowed Use "S" – Special Use "T" – Temporary Use "TRPA" – TRPA Review Required "-" – Use Not Permitted	TSC-C	TSC-MU	TSC-MUC	TSC-NMX	TSC-G	TSC-G Special Area 1	REC	OS
Forest and Timber Resource Management	A	A	A	A	A	A	A	A
Vegetation Resource Management	A	A	A	A	A	A	A	A
Water Quality Improvements and Watershed Management	A	A	A	A	A	A	A	A
Wildlife and Fisheries Resource Management	A	A	A	A	A	A	A	A
Range Management	-	-	-	-	-	-	A	-
<b>OPEN SPACE</b>								
Allowed in all areas of the Region	A	A	A	A	A	A	A	A
<b>SHOREZONE (Tolerance Districts 1 and 4)</b>								
Water Oriented Outdoor Recreation Concession					TRPA-A	TRPA-A		
Beach Recreation					TRPA-A	TRPA-A		
Water Borne Transit					TRPA-S	TRPA-S		
Boat Launching Facilities					TRPA-S	TRPA-S		
Tour Boat Operations					TRPA-S	TRPA-S		
Safety and Navigation Devices (Shorezone District 4)					TRPA-A	TRPA-A		
Marinas					TRPA-S	TRPA-S		
Buoys					TRPA-A	TRPA-A		
Piers					TRPA-S	TRPA-S		
Fences					TRPA-S	TRPA-S		
Boat Ramps					TRPA-S	TRPA-S		
Floating Docks and Platforms					TRPA-S	TRPA-S		
Shoreline Protective Devices					TRPA-S	TRPA-S		

**Table 1: PERMITTED USES BY ZONING DISTRICT**

Permitted Uses Key: "A" – Allowed Use "S" – Special Use "T" – Temporary Use "TRPA" – TRPA Review Required "." – Use Not Permitted	TSC-C	TSC-MU	TSC-MUC	TSC-NMX	TSC-G	TSC-G Special Area 1	REC	OS
Water Intake Lines					TRPA-A	TRPA-A		

Note: In the Regional Center all residential projects equal to or exceeding 100,000 square feet of new floor area or non-residential projects equal to or exceeding 80,000 square feet of new floor area require TRPA review and approval. In the Town Center all residential projects equal to or exceeding 50,000 square feet of new floor area or non-residential projects equal to or exceeding 40,000 square feet of new floor area require TRPA review and approval.

1. Caretaker Residence Only
2. All Health Care Services are allowed except emergency outpatient or urgent care facilities which shall only be considered along Heavenly Village Way, formerly Park Avenue.
3. Allow Realty Offices within the district and limit financial services to ATMs.
4. Allow consideration for placement of Realty Offices within the district, and only when operated in conjunction with approved Park Avenue Redevelopment fractional ownership tourist accommodation projects. Such use shall occupy no more than five percent (5%) of the commercial floor area with any project area within the district.
5. All Health Care Services uses permissible throughout special district; provided that any Health Care Services uses proposed to front on either side of US Highway 50 and/or the intersections of Heavenly Village Way (formerly Park Avenue) and Stateline Avenue are limited to second floor or higher. See TRPA Ordinance 2009-05 Exhibit 2 for specific limitation locations.
6. Outdoor storage and display is prohibited.
7. Shall not front on US Highway 50.
8. Condominiums only.
9. Use not permitted in Special Area #1, which comprises of APNs 028-081-02, 028-081-04 & 028-081-15.
10. Daycare center allowed as an accessory use.
11. Land use category is identified in TRPA Code Section 60.3 as a "possible contaminating activity," triggering special requirements pursuant to TRPA Code Section 60.4 if located within a Source Water Protection Zone.
12. Use only allowed in connection with a retail commercial use where it will enhance the visitor experience and is limited in size to 30% of the associated retail space.

**Table 2: LIST OF PRIMARY USES AND USE DEFINITIONS**

USE	DEFINITIONS
LIGHT INDUSTRIAL COMMERCIAL	

**Table 2: LIST OF PRIMARY USES AND USE DEFINITIONS**

USE	DEFINITIONS
Industrial Services	<p><del>Establishments providing light industrial services to an associated retail commercial primary use while providing educational and/or demonstration opportunities to the public. Services establishments providing other businesses with services, including maintenance, repair, service, testing, publishing, and rental. This includes establishments such as: welding repair, armature rewinding, and heavy equipment repair, vehicle repair, (except vehicle repair, see "Auto Repair and Service"); research and development laboratories, including testing facilities, soils and materials testing laboratories; equipment rental businesses that are entirely within buildings (for equipment rental yards, see "Sales Lots"), including leasing tools, machinery and other business items except vehicles; and other business services of a "heavy service" nature. Outside storage or display is included as part of the use.</del></p>
Small Scale Manufacturing	<p>Establishments primary engaging in retail sales and secondarily as a fine art or craftsman demonstration workshop of light industrial nature such as sculptor, potter, weaver, carver, jeweler, or other similar art that requires artistic skill . Outside storage or display would require approval of a Special use Permit.</p>
<b>WHOLESALE/STORAGE COMMERCIAL</b>	
Vehicle Storage & Parking	<p>Service establishments primarily engaged in the business of storing operative cars, buses, or other motor vehicles. The use includes both day use and long-term public and commercial garages, parking lots, and structures. Outside storage or display is included as part of the use. The use does not include wrecking yards (see "Recycling and Scrap").</p>
<u>Wholesale and Distribution</u>	<p><u>Retail commercial establishments engaged in, as a secondary use, the storage of merchandise and distribution of products for sale.</u></p>

Attachment B

Initial Environmental Checklist (IEC) and Finding of No Significant Effect (FONSE)



**Mail**  
PO Box 5310  
Stateline, NV 89449-5310

**Location**  
128 Market Street  
Stateline, NV 89449

**Contact**  
Phone: 775-588-4547  
Fax: 775-588-4527  
www.trpa.gov

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## ***INITIAL DETERMINATION OF ENVIRONMENTAL IMPACT CHECKLIST***

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### **Project Name:**

Tourist Core Area Plan Amendment (Tahoe Wellness Center)

**APN/Project Location:** Tourist Core Area Plan, Tourist Center Gateway (TSC-G) District, Special Area #1

**County/City:** City of South Lake Tahoe

### **Project Description:**

The proposed amendments affect Appendix C, Table 1: Permitted Uses by Land Use District and Table 2: List of Primary Uses and Use Definitions of the Tourist Core Area Plan as follows:

- Allow small scale manufacturing, industrial services, and wholesale and distribution land uses within the Tourist Center Gateway (TSC-G) District, Special Area #1.
- Add a provision that the subject land uses would only be allowed in connection with a retail commercial use where it will enhance the visitor experience and is limited in size to 30% of the associated retail space.
- Amend the land use definition of industrial services to better reflect the goals and intent of the TCAP.
- Add a land use definition for wholesale and distribution consistent with the goals of the TCAP.

Pursuant to the California Environmental Quality Act, the City also prepared an initial study/negative declaration: [https://www.cityofslt.us/DocumentCenter/View/16099/City-SLT-TCAP-Amendment-Draft-IS-ND\\_NOP](https://www.cityofslt.us/DocumentCenter/View/16099/City-SLT-TCAP-Amendment-Draft-IS-ND_NOP)



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 Stateline, NV 89449

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 www.trpa.gov

The following questionnaire will be completed by the applicant based on evidence submitted with the application. All "Yes" and "No, With Mitigation" answers will require further written comments. Use the blank boxes to add any additional information. If more space is required for additional information, please attached separate sheets and reference the question number and letter.

For information on the status of TRPA environmental thresholds click on the links to the Threshold Dashboard.

## I. Environmental Impacts

### 1. Land

Current and historic status of soil conservation standards can be found at the links below:

- [Impervious Cover](#)
- [Stream Environment Zone](#)

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Unstable soil conditions during or after completion of the proposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The continuation of or increase in wind or water erosion of soils, either on or off the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Discussion

n/a



## 2. Air Quality

Current and historic status of air quality standards can be found at the links below:

- [Carbon Monoxide \(CO\)](#)
- [Nitrate Deposition](#)
- [Ozone \(O3\)](#)
- [Regional Visibility](#)
- [Respirable and Fine Particulate Matter](#)
- [Sub-Regional Visibility](#)

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. Substantial air pollutant emissions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Deterioration of ambient (existing) air quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The creation of objectionable odors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Increased use of diesel fuel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The Tourist Core Area Plan amendments as provided in this packet would not alter, revise, conflict or obstruct the regulations pertaining to air quality. Consistent with existing conditions, subsequent projects that could occur under the Tourist Core Area Plan would be subject to subsequent environmental review and permitting and would be required to comply with Chapter 65 of the TRPA Code. Chapter 65 includes provisions that apply to direct sources of air pollution in the Tahoe region, including certain motor vehicles registered in the region, combustion heaters installed in the region, open burning, stationary sources of air pollution, and idling combustion engines.



### 3. Water Quality

Current and historic status of water quality standards can be found at the links below:

- [Aquatic Invasive Species](#)
- [Deep Water \(Pelagic\) Lake Tahoe](#)
- [Groundwater](#)
- [Nearshore \(Littoral\) Lake Tahoe](#)
- [Other Lakes](#)
- [Surface Runoff](#)
- [Tributaries](#)
- [Load Reductions](#)

<b>Will the proposal result in:</b>	Yes	No	No, with mitigation	Data insufficient
a. Changes in currents, or the course or direction of water movements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Alterations to the course or flow of 100-year flood waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Change in the amount of surface water in any water body?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Alteration of the direction or rate of flow of ground water?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Substantial reduction in the amount of water otherwise available for public water supplies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Discussion

The Tourist Core Area Plan amendments would not alter, revise, conflict or obstruct the regulations pertaining water quality and flow, surface water runoff, groundwater protection, or shorezone and source water protection. Any potential effects related to water quality were analyzed in the RPU EIS (TRPA 2012a, page 3.8-41). Additionally, all development within the Tourist Core Area Plan would be required to meet existing best management practices (BMP) standards to control potential increases in stormwater runoff and pollutant

loading from the additional coverage. As specified in Section 60.4.6 of the TRPA Code, except where special conditions exist and are approved by TRPA, infiltration facilities designed to accommodate the volume of runoff generated by a 20-year 1-hour storm are required for approval of all projects within the Tahoe Basin, including the Tourist Core Area Plan. Consistent with existing requirements, projects that could occur under the Tourist Core Area Plan that could alter the course or direction of water movements would be subject to subsequent permitting and environmental review, and TRPA Code sections described above as well as all other federal, state, and local regulations pertaining to the course or direction of water movements.

#### 4. Vegetation

**Current and historic status of vegetation preservation standards can be found at the links below:**

- [Common Vegetation](#)
- [Late Seral/Old Growth Ecosystems](#)
- [Sensitive Plants](#)
- [Uncommon Plant Communities](#)

**Will the proposal result in:**

	Yes	No	No, with mitigation	Data insufficient
a. Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora, and aquatic plants)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Reduction of the numbers of any unique, rare, or endangered species of plants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Removal of stream bank and/or backshore vegetation, including woody vegetation such as willows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. A change in the natural functioning of an old growth ecosystem?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion**

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for vegetation protection.



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## 5. Wildlife

Current and historic status of vegetation preservation standards can be found at the links below:

- [Special Interest Species](#)

Current and historic status of the fisheries standards can be found at the links below:

- [Instream Flow](#)
- [Lake Habitat](#)
- [Stream Habitat](#)

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Reduction of the number of any unique, rare or endangered species of animals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Deterioration of existing fish or wildlife habitat quantity or quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for wildlife protection.

## 6. Noise

Current and historic status of the noise standards can be found at the links below:

- [Cumulative Noise Events](#)
- [Single Noise Events](#)

### Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Area Plan, Plan Area Statement, Community Plan or Master Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of people to severe noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Exposure of existing structures to levels of ground vibration that could result in structural damage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for noise limitations. The existing TCAP specifies a maximum community noise equivalent level (CNEL) for each zone within the Tourist Core Area, which is 60 within Special Area 1 (55 within the shorezone). The proposed amendment would not change the CNEL; therefore, exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies would not occur. Maximum levels for groundborne vibrations or noise levels are also regulated in the TCAP. Construction operations must be designed to avoid or mitigate for vibrations above 0.02 inches/second. Ambient noise levels are not expected to increase substantially as a result of the proposed amendment, because the new special uses are only permissible in connection with a retail commercial use where they will enhance the visitor experience and shall be limited in size to 30% of the associated retail space. In addition, certain special uses such as wholesale and distribution may decrease ambient noise levels.

## 7. Light and Glare

<b>Will the proposal:</b>	Yes	No	No, with mitigation	Data insufficient
a. Include new or modified sources of exterior lighting?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create new illumination which is more substantial than other lighting, if any, within the surrounding area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Cause light from exterior sources to be cast off -site or onto public lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create new sources of glare through the siting of the improvements or through the use of reflective materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations design and development standards for light and glare.

## 8. Land Use

<b>Will the proposal:</b>	Yes	No	No, with mitigation	Data insufficient
a. Include uses which are not listed as permissible uses in the applicable Area Plan, Plan Area Statement, adopted Community Plan, or Master Plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Expand or intensify an existing non-conforming use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The area plan amendments would revise the definition of “industrial services” as provided within the existing TCAP and add a new definition for “wholesale and distribution” to the TCAP. These uses are conformance with land use definitions of TRPA Code of Ordinances Chapter 21: Permissible Uses.

## 9. Natural Resources

<b>Will the proposal result in:</b>	Yes	No	No, with mitigation	Data insufficient
a. A substantial increase in the rate of use of any natural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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- b. Substantial depletion of any non-renewable natural resource?

**Discussion**

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for natural resources.

**10. Risk of Upset**

<b>Will the proposal:</b>	Yes	No	No, with mitigation	Data insufficient
a. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Involve possible interference with an emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion**

Development activities within the Tourist Core Area Plan may involve the storage, use, and transport of hazardous materials. However, use of hazardous materials would be typical of urban development projects in the Tahoe Region and would occur in compliance with all local, state, and federal regulations. Further, the types of uses that would be permissible within the Tourist Core Area Plan are not of the nature that would involve storage, use, and transport of large quantities of hazardous substances that would increase the risk of incident. The types of uses (e.g., commercial and light industrial) are consistent with the types of uses already allowed under existing conditions, such that the Tourist Core Ski Run area would not be expected to create a new risk of accident or upset conditions. Therefore, the Tourist Core Area Plan would not result in a risk of explosion or the release of hazardous substances. Project level permitting for a proposed use would be subject to TRPA and local building permitting requirement. Further, the amendments would require a special use permit and applicants would also be required to demonstrate that the new uses are “not injurious to the neighborhood”. Demonstrating a “not injurious to the neighborhood” finding would require consideration of potential hazards and their effects.



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## 11. Population

<b>Will the proposal:</b>	Yes	No	No, with mitigation	Data insufficient
a. Alter the location, distribution, density, or growth rate of the human population planned for the Region?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Include or result in the temporary or permanent displacement of residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for growth management within the region, including but not limited to density and the development rights system.

## 12. Housing

<b>Will the proposal:</b>	Yes	No	No, with mitigation	Data insufficient
a. Affect existing housing, or create a demand for additional housing?				
<i>To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions:</i>				
1. Will the proposal decrease the amount of housing in the Tahoe Region?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for housing within the region.





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### 13. Transportation / Circulation

Will the proposal result in:	Yes	No	No, with mitigation	Data insufficient
a. Generation of 650 or more new average daily Vehicle Miles Travelled?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Changes to existing parking facilities, or demand for new parking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Alterations to present patterns of circulation or movement of people and/or goods?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Alterations to waterborne, rail or air traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Discussion

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for transportation or circulation within the region. Special Area 1 is centrally located in the City of South Lake Tahoe and contains commercial, lodging, and residential land uses. Bijou Center is located to the north of the intersection of U.S. 50 and Fairway Avenue. Fairway Avenue is the primary signalized access route to U.S. 50 that serves the Bijou residential area. Existing roadways within or adjacent to the Special Area 1 include: US 50, the main thoroughfare in the City of South Lake Tahoe, and Bal Bijou Road, a local roadway located along the west and north side of Bijou Center. Bal Bijou Road intersects U.S. 50 and is controlled with a stop sign. Bal Bijou Road provides access to lodging, residential, and commercial land uses, including a secondary access to the Bijou Center.

The adopted Regional Plan, Regional Transportation Plan and the City General Plan all include goals and policies that encourage a land use pattern that promotes the use of alternative modes of transportation. Transportation-specific goals in the TCAP include promoting the area as a pedestrian and transit-oriented center and seeking to establish development and design standards that improve the pedestrian and transit environment through complete streets. Recent improvements in the vicinity include enhanced pedestrian sidewalks and bike lanes along U.S. 50.

The Project is a policy change with no relationship to transportation or traffic features, and would not change any emergency access conditions. Applicable transportation and general plans including the Regional Plan, Regional Transportation Plan, the City General Plan, and the TCAP, and their associated goals and policies, would continue apply to any new project proposed associated with the new special uses. For larger projects such as building additions, redevelopment, and/or new commercial structures proposed by applicants seeking to take advantage of the additional permissible uses, this consistency would be assured by project level environmental review and permitting that would include consistency evaluations of proposed projects with applicable transit, pedestrian and bicycle goals and policies.



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Applicants proposing uses made permissible by this amendment would be decreasing their existing retail space by up to 30% to accommodate one of the new uses. As discussed previously, retail uses generally attract more traffic than industrial, wholesale and distribution, or small-scale manufacturing uses, and therefore it is reasonable to assume that VMT to and around Special Area 1 would decrease if all existing retail spaces converted up to 30% of their space to one of the new special uses. Though any change in VMT from existing conditions would be negligible, any decrease in VMT would be consistent with local, regional and state plans and regulations, many of which are focused on reducing VMT and associated traffic congestion and vehicle emissions. Likewise, the new uses would not conflict with CEQA guidelines section 15064.3, which relates to VMT thresholds of significance.



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## 14. Public Services

**Will the proposal have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?:**

	Yes	No	No, with mitigation	Data insufficient
a. Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Parks or other recreational facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Maintenance of public facilities, including roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Other governmental services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for public service infrastructure within the region. The new special uses would not result in an increase in population to Special Area 1, and would therefore have no impact on service ratios, delayed response times, or decreased access to public facilities.



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## 15. Energy

<b>Will the proposal result in:</b>	Yes	No	No, with mitigation	Data insufficient
a. Use of substantial amounts of fuel or energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

Special Area 1 is currently served by existing electric and gas infrastructure. Electrical services are provided by Liberty Utilities. Natural gas services are provided by Southwest Gas. Commercial businesses account for the majority of energy consumption within Special Area 1.

In 2020, the City adopted a Climate Action Plan (CAP), which serves as a long-term plan to reduce greenhouse gas emissions from community activities. The CAP provides several specific greenhouse gas reduction strategies and measures, including building energy strategies such as weatherization, deep energy retrofits, building electrification, and the installation of renewable energy in new construction

Implemented projects associated with the new uses – industrial services, wholesale and distribution, and small-scale manufacturing – may produce less or more energy use than under existing conditions. Because the new uses are allowed only in connection with a retail commercial use and shall be limited in size to 30% of the associated retail space, most applicants proposing uses made permissible by this amendment would likely be requesting a Special Use Permit associated with redesigning or remodeling the interior of an existing space to accommodate one of the new uses. Consistent with existing conditions, new construction would be subject to permission and review by the City, and would be required to demonstrate compliance with current building codes, including codes and policies pertaining to energy use and efficiency. In general, updating buildings to comply with modern code requirements usually results in an increase in energy efficiency compared to existing conditions. However, energy efficiency improvements could be offset if the proposed use is more energy intensive than the existing use. Certain special uses such as wholesale and distribution use may result in less energy consumption overall.

The proposed amendments would not conflict with or obstruct state or local renewable energy goals. Larger projects such as building additions, redevelopment, and/or new commercial structures would, consistent with existing conditions, be subject to subsequent project level environmental review and permitting at which time the applicant would be required to demonstrate compliance with all federal, state, and TRPA regulations pertaining to energy. Energy consumption may temporarily increase as a result of construction activities associated with any construction. However, such increases would be limited in scope and duration. The proposed amendment would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption

of energy resources, during project construction or operation and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

## 16. Utilities

**Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:**

	Yes	No	No, with mitigation	Data insufficient
a. Power or natural gas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Communication systems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Storm water drainage?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Solid waste and disposal?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

Special Area 1 is currently served by existing electric and gas infrastructure. Electrical services are provided by Liberty Utilities. Natural gas services are provided by Southwest Gas. Commercial businesses account for the majority of energy consumption within Special Area 1. Any future development within the area plan would be subject to project level review. All development permitted through the Tourist Core Area Plan would occur in accordance with the Regional Plan and City Code. While any new construction would require electric and/or natural gas service as part of the basic services (Chapter 32 of the TRPA Code) the entire area within the Tourist Core Area Plan is located within close proximity to existing electric and gas infrastructure. Additionally, projects requiring new or modified connections would be subject the requirements and fees of the applicable utility providers. The utility companies project that based on their forecasting and recent growth trends, the available capacity would far exceed the demand generated at build-out of the Regional Plan (TRPA 2012a, page 3.13-20).

## 17. Human Health

<b>Will the proposal result in:</b>	Yes	No	No, with mitigation	Data insufficient
a. Creation of any health hazard or potential health hazard (excluding mental health)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of people to potential health hazards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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**Discussion**

See response to number 10 "Risk of Upset".

**18. Scenic Resources / Community Design**

Current and historic status of the scenic resources standards can be found at the links below:

- [Built Environment](#)
- [Other Areas](#)
- [Roadway and Shoreline Units](#)

Will the proposal:	Yes	No	No, with mitigation	Data insufficient
a. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Be visible from any public recreation area or TRPA designated bicycle trail?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion**

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for scenic resources and do not alter existing development and design guidelines for the built environment within the TCAP. The amendments would encourage redevelopment of an aging town center that is visible from scenic corridors, a designated multi-use path and the waters of Lake Tahoe. These existing design and development guidelines serve to mitigate potential impacts on scenic resources and design. Future redevelopment of the area is likely to result in improvements to environmental threshold standards such as water quality for improved stormwater management on site and landscaping and scenic quality improvements along the roadway corridor.



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## 19. Recreation

Current and historic status of the recreation standards can be found at the links below:

- [Fair Share Distribution of Recreation Capacity](#)
- [Quality of Recreation Experience and Access to Recreational Opportunities](#)

### Will the proposal:

	Yes	No	No, with mitigation	Data insufficient
a. Create additional demand for recreation facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create additional recreation capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have the potential to create conflicts between recreation uses, either existing or proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in a decrease or loss of public access to any lake, waterway, or public lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for recreational facilities.



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## 20. Archaeological / Historical

<b>Will the proposal result in:</b>	Yes	No	No, with mitigation	Data insufficient
a. An alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Is the property associated with any historically significant events and/or sites or persons?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

The area plan amendments do not alter, revise, conflict or obstruct provisions or regulations for the protection of archaeological or historic resources. The Bijou Marketplace building is recognized by the City of South Lake Tahoe as a potential historic resource. Any future modification or alteration of the building will require project level review per TRPA Code of Ordinances Chapter 67: Historic Resources and applicable municipal building code.





**Mail**  
 PO Box 5310  
 Stateline, NV 89449-5310

**Location**  
 128 Market Street  
 Stateline, NV 89449

**Contact**  
 Phone: 775-588-4547  
 Fax: 775-588-4527  
 www.trpa.gov

## 21. Findings of Significance

	Yes	No	No, with mitigation	Data insufficient
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Does the project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion




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**DECLARATION:**

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signature: 

	Douglas	11/30/21
Jennifer Self at		
Person preparing application	County	Date

**Applicant Written Comments:** (Attach additional sheets if necessary)

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## Determination:

### On the basis of this evaluation:

- a. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure  YES  NO
- b. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules and Procedures.  YES  NO
- c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and TRPA's Rules of Procedures.  YES  NO



\_\_\_\_\_  
Signature of Evaluator

\_\_\_\_\_  
Principal Planner, TRPA

\_\_\_\_\_  
Title of Evaluator

Date 11/30/21



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**FINDING OF NO SIGNIFICANT EFFECT**

- Project Description:** Proposed amendments to the City of South Lake Tahoe’s Tourist Core Area Plan.
- Staff Analysis:** In accordance with Article IV of the Tahoe Regional Planning Compact, as amended, and Section 6.6 of the TRPA Rules of Procedure, TRPA staff reviewed the information submitted with the subject project.
- Determination:** Based on the Initial Environmental Checklist, Agency staff found that the subject project will not have a significant effect on the environment.

A handwritten signature in black ink, appearing to read "Jennifer J. J.", written over a horizontal line.

TRPA Executive Director/Designee

November 30, 2021  
Date

Attachment C

Compliance Measures Evaluation

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
<b>WATER QUALITY/SEZ - IN PLACE</b>				
1	BMP requirements, new development: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish	N	The Tourist Core Area Plan (TCAP) amendments will not change existing BMP requirements in Chapter 60 of the TRPA Code of Ordinances and is expected to promote redevelopment activities on the school district property, which will increase the rate of BMP compliance.
2	BMP implementation program -- existing streets and highways: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Trans, Fish	N	
3	BMP implementation program -- existing urban development: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish	N	
4	BMP implementation program -- existing urban drainage systems: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Trans, Fish	N	
5	Capital Improvements Program for Erosion and Runoff Control	WQ, Soils/SEZ, Trans, Fish	N	The TCAP amendments do not adversely affect the Capital Improvements Program for Erosion and Runoff Control. The plan recognizes existing programmed water quality improvements and encourages future improvements.
6	Excess land coverage mitigation program: <i>Code of Ordinances</i> Chapter 30	WQ, Soils/SEZ	N	The TCAP amendments will not change excess coverage mitigation requirements.
7	Effluent (Discharge) limitations: California (SWRCB, Lahontan Board) and Nevada (NDEP): <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish	N	The effluent limitations in Chapter 5 of the TRPA Code of Ordinances are not being modified.
8	Limitations on new subdivisions: (See the Goals and Policies: Land Use Element)	WQ, Soils/SEZ, Rec, Scenic	N	All new subdivisions will continue to be limited by the provisions in Chapter 39, Subdivision, of the TRPA Code of Ordinances.
9	Land use planning and controls: See the Goals and Policies: Land Use Element and Code of Ordinances Chapters 11, 12, 13, 14, and 21	WQ, Soils/SEZ, Trans, Scenic	N	The TCAP was developed to meet Regional Plan and Code of Ordinances requirements. The amendments maintain consistency with Regional Plan goals and policies and Code of Ordinances standards.
10	Residential development priorities, The Individual Parcel Evaluation System (IPES): Goals and Policies: Implementation Element and Code of Ordinances Chapter 53	WQ, Soils/SEZ	N	The TCAP amendments do not affect residential development.

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
11	Limits on land coverage for new development: Goals and Policies: Land Use Element and Code of Ordinances Chapter 30	WQ, Soils/SEZ, Scenic	N	The TCAP amendments do not affect land coverage.
12	Transfer of development: Goals and Policies: Land Use Element and Implementation Element	WQ, Soils/SEZ	N	The TCAP amendments do not change Goals and Policies from the Land Use Element and Implementation Element of the Regional Plan regarding the transfer of development.
13	Restrictions on SEZ encroachment and vegetation alteration: <i>Code of Ordinances Chapters 30 and 61</i>	WQ, Soils/SEZ, Veg, Wildlife, Fish, Rec, Scenic	N	The TCAP amendments will not alter existing restrictions on SEZ encroachment and vegetation alteration in the TRPA Code of Ordinances, Chapters 30 and 61.
14	SEZ restoration program: Environmental Improvement Program.	WQ, Soils/SEZ, Veg, Wildlife, Fish, Scenic	N	The TCAP amendments do not change policies and provisions that require the protection and restoration of SEZs.
15	SEZ setbacks: <i>Code of Ordinances Chapter 53</i>	WQ, Soils/SEZ, Veg, Wildlife, Fish	N	SEZ setback requirements in the TRPA Code of Ordinances, Chapter 53, Individual Parcel Evaluation System, Section 53.9, will not be altered by the TCAP amendments.
16	Fertilizer reporting requirements: <i>Code of Ordinances Chapter 60</i>	WQ, Soils/SEZ, Fish, Rec	N	The TCAP amendments will not modify the Resource Management and Protection regulations, Chapters 60 through 68, of the TRPA Code of Ordinances. Thus, fertilizer reporting and water quality mitigation requirements will stay in effect.
17	Water quality mitigation: <i>Code of Ordinances Chapter 60</i>	WQ, Soils/SEZ	N	
18	Restrictions on rate and/or amount of additional development	WQ, Soils/SEZ, Wildlife, Scenic	N	The TCAP amendments do not affect the RPU's restrictions on the rate and amount of additional development.
19	Improved BMP implementation/enforcement program	WQ, Soils/SEZ	N	See response to Compliance Measures 1 through 4.
20	Increased funding for EIP projects for erosion and runoff control	WQ, Soils/SEZ	N	The TCAP amendments will not increase funding for EIP projects for erosion and runoff control.
21	Artificial wetlands/runoff treatment program	WQ, Soils/SEZ	N	There are no changes to the artificial wetlands/runoff treatment program proposed with the TCAP amendments.

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
22	Transfer of development from SEZs	WQ, Soils/SEZ, Scenic	N	The TCAP amendments do not provide any additional incentives beyond those already addressed in the Regional Plan and Code of Ordinances to hasten the transfer of development rights from sensitive lands, including SEZs, or outlying areas to Town Centers and the Regional Center.
23	Improved mass transportation	WQ, Trans, Noise	N	The TCAP amendments do not affect mass transportation.
24	Redevelopment and redirection of land use: Goals and Policies: Land Use Element and Code of Ordinances Chapter 13	WQ, Soils/SEZ, Scenic	N	The TCAP does not affect the redirection of land use. The amendments are intended to help encourage environmentally beneficial redevelopment within an aging town center. These amendments are in-keeping with the Goals and Policies of the Regional Plan and Code of Ordinances Chapter 13.
25	Combustion heater rules, stationary source controls, and related rules: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N	No changes are being proposed in the TCAP amendments that would impact these Compliance Measures. The existing TRPA Code of Ordinance provisions will remain in effect.
26	Elimination of accidental sewage releases: Goals and Policies: Land Use Element	WQ, Soils/SEZ	N	
27	Reduction of sewer line exfiltration: Goals and Policies: Land Use Element	WQ, Soils/SEZ	N	
28	Effluent limitations	WQ, Soils/SEZ	N	
29	Regulation of wastewater disposal at sites not connected to sewers: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ	N	
30	Prohibition on solid waste disposal: Goals and Policies: Land Use Element	WQ, Soils/SEZ	N	
31	Mandatory garbage pick-up: Goals and Policies: Public Service Element	WQ, Soils/SEZ, Wildlife	N	
32	Hazardous material/wastes programs: Goals and Policies: Land Use Element and Code of Ordinances Chapter 60	WQ, Soils/SEZ	N	
33	BMP implementation program, Snow and ice control practices: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, AQ	N	
34	Reporting requirements, highway abrasives and deicers: Goals and Policies:, Land Use Element and Code of Ordinances Chapter 60	WQ, Soils/SEZ, Fish	N	
35	BMP implementation program--roads, trails, skidding, logging practices: <i>Code of Ordinances</i> Chapter 60, Chapter 61	WQ, Soils/SEZ, Fish	N	



**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
36	BMP implementation program-- outdoor recreation: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish, Rec	N	
37	BMP implementation program-- livestock confinement and grazing: <i>Code of Ordinances</i> Chapter 21, Chapter 60, Chapter 64	WQ, Soils/SEZ, Veg, Wildlife, Fish	N	
38	BMP implementation program-- pesticides	WQ, Soils/SEZ	N	
39	Land use planning and controls -- timber harvesting: <i>Code of Ordinances</i> Chapter 21	WQ, Soils/SEZ, AQ, Wildlife, Fish, Scenic	N	There are no changes to allowable timber harvesting in any of the regulatory zones as part of the TCAP amendments.
40	Land use planning and controls - outdoor recreation: <i>Code of Ordinances</i> Chapter 21	WQ, Soils/SEZ, Wildlife, Noise, Rec, Scenic	N	The TCAP amendments do not affect outdoor recreation. Land uses changes are in keeping with the Regional Plan and land use designations.
41	Land use planning and controls-- ORV use: Goals and Policies: Recreation Element	WQ, Soils/SEZ, AQ, Wildlife, Fish, Noise, Rec, Scenic	N	Regional Plan Policy R-1.5 states that "Off-road vehicle (ORV) use is prohibited in the Lake Tahoe Region except on specified roads, trails, or designated areas where the impacts can be mitigated." The TCAP amendments does not include the expansion of ORV use.
42	Control of encroachment and coverage in sensitive areas	WQ, Soils/SEZ, Wildlife, Rec, Scenic	N	See response to Compliance Measure 11.
43	Control on shorezone encroachment and vegetation alteration: <i>Code of Ordinances</i> Chapter 83	WQ, Soils/SEZ, Scenic	N	TRPA will continue to be responsible for enforcing and implementing Shorezone regulations, Chapters 80 through 85, of the TRPA Code of Ordinances, as well as other code provisions applicable to projects within the Shorezone. No changes are being proposed with the TCAP amendments that would modify existing code provisions related to the Shorezone or impact these compliance measures.
44	BMP implementation program-- shorezone areas: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ	N	
45	BMP implementation program-- dredging and construction in Lake Tahoe: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ	N	
46	Restrictions and conditions on filling and dredging: <i>Code of Ordinances</i> Chapter 84	WQ, Soils/SEZ, Fish	N	
47	Protection of stream deltas	WQ, Soils/SEZ, Wildlife, Fish, Scenic	N	
48	Marina master plans: <i>Code of Ordinances</i> Chapter 14	WQ, AQ/Trans, Fish, Scenic	N	
49	Additional pump-out facilities: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ	N	

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
50	Controls on anti-fouling coatings: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish	N	
51	Modifications to list of exempt activities	WQ, Soils/SEZ	N	The TCAP amendments will not alter the list of exempt activities.
<b>WATER QUALITY/SEZ - SUPPLEMENTAL</b>				
52	More stringent SEZ encroachment rules	WQ, Soils/SEZ, Wildlife, Fish	N	The TCAP amendments do not include any provisions that would impact Compliance Measures 52 through 61.
53	More stringent coverage transfer requirements	WQ, Soils/SEZ	N	
54	Modifications to IPES	WQ, Soils/SEZ	N	
55	Increased idling restrictions	WQ, Soils/SEZ, AQ	N	
56	Control of upwind pollutants	WQ, Soils/SEZ, AQ	N	
57	Additional controls on combustion heaters	WQ, Soils/SEZ, AQ	N	
58	Improved exfiltration control program	WQ, Soils/SEZ	N	
59	Improved infiltration control program	WQ, Soils/SEZ	N	
60	Water conservation/flow reduction program	WQ, Soils/SEZ, Fish	N	
61	Additional land use controls	WQ, Soils/SEZ, Wildlife	N	
<b>AIR QUALITY/TRANSPORTATION - IN PLACE</b>				
62	Fixed Route Transit - South Shore	Trans, Rec	N	The TCAP amendments do not impact any transit services bikeways, or pedestrian facilities, except to encourage Town Center redevelopment and the completion of identified transportation improvements.
63	Fixed Route Transit - North Shore: TART	Trans, Rec	N	
64	Demand Responsive Transit - South Shore	Trans	N	
65	Seasonal Trolley Services - North and South Shores: South Shore TMA and Truckee-North Tahoe TMA	Trans, Rec	N	
66	Social Service Transportation	Trans	N	
67	Shuttle programs	Trans	N	
68	Ski shuttle services	Trans, Rec	N	
69	Intercity bus services	Trans	N	
70	Passenger Transit Facilities: South Y Transit Center	Trans	N	
71	Bikeways, Bike Trails	Trans, Noise, Rec, Scenic	N	
72	Pedestrian facilities	Trans, Rec,	N	
73	Wood heater controls: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N	
74	Gas heater controls: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N	
75	Stationary source controls: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N	

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
76	U.S. Postal Service Mail Delivery	Trans	N	The TCAP amendments do not include any provisions that would impact U.S. Postal Service Delivery.
77	Indirect source review/air quality mitigation: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N	The TCAP amendments do not make any changes to indirect source review/air quality mitigation requirements, or idling restrictions.
78	Idling Restrictions: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N	
79	Vehicle Emission Limitations(State/Federal)	WQ, AQ	N	
80	Open Burning Controls: <i>Code of Ordinances</i> Chapters 61 and Chapter 65	WQ, AQ, Scenic	N	The TCAP does not make any changes to open burning controls.
81	BMP and Revegetation Practices	WQ, AQ, Wildlife, Fish	N	See response to Compliance Measures 1 through 4.
82	Employer-based Trip Reduction Programs: <i>Code of Ordinances</i> Chapter 65	Trans	N	The TCAP amendments do not make any changes to the employer-based trip reduction programs or vehicle rental programs described in Chapter 65.
83	Vehicle rental programs: <i>Code of Ordinances</i> Chapter 65	Trans	N	
84	Parking Standards	Trans	N	
85	Parking Management Areas	Trans	N	The TCAP amendments do not make any changes that would impact parking standards, parking management, parking fees or facilities, traffic management, signal synchronization, aviation, waterborne transit or excursions, air quality monitoring, alternative fueled vehicle fleets or infrastructure improvements, north shore transit, or the Heavenly Ski Resort Gondola. The TCAP amendments were shown to have an insignificant impact on total daily trips and was not required to conduct a traffic analysis. Additional development associated with the amendment is within the Regional Plan's growth management system and would not generate additional demand for waterborne transit services.
86	Parking Fees	Trans	N	
87	Parking Facilities	Trans	N	
88	Traffic Management Program - Tahoe City	Trans	N	
89	US 50 Traffic Signal Synchronization - South Shore	Trans	N	
90	General Aviation, The Lake Tahoe Airport	Trans, Noise	N	
91	Waterborne excursions	WQ, Trans, Rec	N	
92	Waterborne transit services	WQ, Trans, Scenic	N	
93	Air Quality Studies and Monitoring	WQ, AQ	N	
94	Alternate Fueled Vehicle - Public/Private Fleets and Infrastructure Improvements	Trans	N	
95	Demand Responsive Transit - North Shore	Trans	N	
96	Tahoe Area Regional Transit Maintenance Facility	Trans	N	
97	Heavenly Ski Resort Gondola	Trans	N	
<b>AIR QUALITY/TRANSPORTATION - SUPPLEMENTAL</b>				
98	Demand Responsive Transit - North Shore	Trans	N	See response to Compliance Measures 62 through 97, and 1-4 (Road improvements, BMPs). The TCAP amendments are not expected to affect transportation.
99	Transit System - South Shore	Trans	N	
100	Transit Passenger Facilities	Trans	N	
101	South Shore Transit Maintenance Facility - South Shore	Trans	N	
102	Transit Service - Fallen Leaf Lake	WQ, Trans	N	
103	Transit Institutional Improvements	Trans	N	

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments	
104	Transit Capital and Operations Funding Acquisition	Trans	N		
105	Transit/Fixed Guideway Easements-South Shore	Trans	N		
106	Visitor Capture Program	Trans	N		
107	Pedestrian and Bicycle Facilities--South Shore	Trans, Rec	N		
108	Pedestrian and Bicycle Facilities--North Shore	Trans, Rec	N		
109	Parking Inventories and Studies Standards	Trans	N		
110	Parking Management Areas	Trans	N		
111	Parking Fees	Trans	N		
112	Establishment of Parking Task Force	Trans	N		
113	Construct parking facilities	Trans	N		
114	Intersection improvements--South Shore	Trans, Scenic	N		
115	Intersection improvements--North Shore	Trans, Scenic	N		
116	Roadway Improvements - South Shore	Trans, Scenic	N		
117	Roadway Improvements - North Shore	Trans, Scenic	N		
118	Loop Road - South Shore	Trans, Scenic	N		
119	Montreal Road Extension	Trans	N		
120	Kingsbury Connector	Trans	N		
121	Commercial Air Service: Part 132 commercial air service	Trans	N		
122	Commercial Air Service: commercial air service that does not require Part 132 certifications	Trans	N		
123	Expansion of waterborne excursion service	WQ, Trans	N		
124	Re-instate the oxygenated fuel program	WQ, AQ	N		
125	Management Programs	Trans	N		
126	Around the Lake Transit	Trans	N		
<b>VEGETATION - IN PLACE</b>					
127	Vegetation Protection During Construction: <i>Code of Ordinances</i> Chapter 33	WQ, AQ, Veg, Scenic	N		The TCAP amendments will not alter the provisions of Chapter 33 in the TRPA Code of Ordinances.
128	Tree Removal: <i>Code of Ordinances</i> Chapter 61	Veg, Wildlife, Scenic	N		The TCAP amendments do not alter tree removal, prescribed burning, vegetation management or plant protection and fire hazard reduction provisions of Chapter 61 of the Code.
129	Prescribed Burning: <i>Code of Ordinances</i> Chapter 61	WQ, AQ, Veg, Wildlife, Scenic	N		
130	Remedial Vegetation Management: <i>Code of Ordinances</i> Chapter 61	WQ, Veg, Wildlife	N		
131	Sensitive and Uncommon Plant Protection and Fire Hazard Reduction: <i>Code of Ordinances</i> Chapter 61	Veg, Wildlife, Scenic	N		
132	Revegetation: <i>Code of Ordinances</i> Chapter 61	WQ, Veg, Wildlife, Scenic	N		

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
133	Remedial Action Plans: <i>Code of Ordinances</i> Chapter 5	WQ, Veg	N	TRPA will continue to be responsible for preparing Remedial Action Plans, in coordination with the city, pursuant to Chapter 5, Compliance, of the TRPA Code of Ordinances.
134	Handbook of Best Management Practices	WQ, Soils/SEZ, Veg, Fish	N	The Handbook of Best Management Practices will continue to be used to design and construct BMPs.
135	Shorezone protection	WQ, Soils/SEZ, Veg	N	See response to Compliance Measures 43 through 50.
136	Project Review	WQ, Veg	N	The TCAP amendments will not affect project review and compliance inspection procedures.
137	Compliance inspections	Veg	N	
138	Development Standards in the Backshore	WQ, Soils/SEZ, Veg, Wildlife, Scenic	N	See response to Compliance Measures 43 through 50.
139	Land Coverage Standards: <i>Code of Ordinances</i> Chapter 30	WQ, Veg, Wildlife, Fish, Scenic	N	See response to Compliance Measure 11.
140	Grass Lake, Research Natural Area	WQ, Veg, Wildlife, Fish, Scenic	N	N/A
141	Conservation Element, Vegetation Subelement: Goals and Policies	Veg, Wildlife, Fish	N	The TCAP amendments is consistent with the 2012 Regional Plan, including the Conservation Element and Vegetation Subelement Goals and Policies.
142	Late Successional Old Growth (LSOG): <i>Code of Ordinances</i> Chapter 61	Veg, Wildlife, Fish	N	The TCAP amendments do not make any changes to provisions of Lake Successional Old Growth and Stream Environment Zone Vegetation.
143	Stream Environment Zone Vegetation: <i>Code of Ordinances</i> Chapter 61	WQ, Veg, Wildlife, Fish	N	
144	Tahoe Yellow Cress Conservation Strategy	Veg	N	The TCAP amendments will not impact efforts to conserve the Tahoe Yellow Cress.
145	Control and/or Eliminate Noxious Weeds	Veg, Wildlife	N	The TCAP amendments will not impact efforts to control or eliminate noxious weeks.
146	Freel Peak Cushion Plant Community Protection	Veg	N	N/A
<b>VEGETATION - SUPPLEMENTAL</b>				
147	Deepwater Plant Protection	WQ, Veg	N	See response to Compliance Measures 16 and 17 and 43 through 50.
<b>WILDLIFE - IN PLACE</b>				
148	Wildlife Resources: <i>Code of Ordinances</i> Chapter 62	Wildlife, Noise	N	See response to Compliance Measures 16 and 17.
149	Stream Restoration Program	WQ, Soils/SEZ, Veg, Wildlife, Fish, Rec, Scenic	N	The TCAP amendments do not include any changes to the Stream Restoration Program.
150	BMP and revegetation practices	WQ, Veg, Wildlife, Fish, Scenic	N	TheTCAP amendments do not include any changes to existing BMP and revegetation requirements.

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
151	OHV limitations	WQ, Soils/SEZ, AQ, Wildlife, Noise, Rec	N	TheTCAP amendments do not include any changes to OHV limitations.
152	Remedial Action Plans: <i>Code of Ordinances</i> Chapter 5	Wildlife	N	See response to Compliance Measure 133.
153	Project Review	Wildlife	N	See response to Compliance Measure 136 and 137.
<b>FISHERIES - IN PLACE</b>				
156	Fish Resources: <i>Code of Ordinances</i> Chapter 63	WQ, Fish	N	See response to Compliance Measures 16 and 17.
157	Tree Removal: <i>Code of Ordinances</i> Chapter 61	Wildlife, Fish	N	The TCAP amendments do not change tree removal provisions of Chapter 61.
158	Shorezone BMPs	WQ, Fish	N	See response to Compliance Measures 43 through 50.
159	Filling and Dredging: <i>Code of Ordinances</i> Chapter 84	WQ, Fish	N	
160	Location standards for structures in the shorezone: <i>Code of Ordinances</i> Chapter 84	WQ, Fish	N	
161	Restrictions on SEZ encroachment and vegetation alteration	WQ, Soils/SEZ, Fish	N	See response to Compliance Measures 16 and 17.
162	SEZ Restoration Program	WQ, Soils/SEZ, Fish	N	See response to Compliance Measure 14.
163	Stream restoration program	WQ, Soils/SEZ, Fish	N	See response to Compliance Measures 16 and 17.
164	Riparian restoration	WQ, Soils/SEZ, Fish	N	
165	Livestock: <i>Code of Ordinances</i> Chapter 64	WQ, Soils/SEZ, Fish	N	
166	BMP and revegetation practices	WQ, Fish	N	See response to Compliance Measures 1 through 4.
167	Fish habitat study	Fish	N	See response to Compliance Measures 16 and 17.
168	Remedial Action Plans: <i>Code of Ordinances</i> Chapter 5	Fish	N	See response to Compliance Measure 133.
169	Mitigation Fee Requirements: <i>Code of Ordinances</i> Chapter 86	Fish	N	The mitigation fee requirements formerly in Chapter 86 of the TRPA Code of Ordinances (now in the Rules of Procedure) are not being modified with the TCAP amendments.
170	Compliance inspection	Fish	N	The TCAP amendments are not modifying existing compliance or inspection programs or provisions.
171	Public Education Program	Wildlife, Fish	N	The TCAP amendments do not make any changes to the city's education and outreach efforts.
<b>NOISE - IN PLACE</b>				
172	Airport noise enforcement program	Wildlife, Fish	N	The TCAP amendments are not modifying existing enforcement programs.
173	Boat noise enforcement program	Wildlife, Fish, Rec	N	

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
174	Motor vehicle/motorcycle noise enforcement program: <i>Code of Ordinances</i> Chapters 5 and 23	Wildlife, Fish	N	
175	ORV restrictions	AQ, Wildlife, Noise, Rec	N	The TCAP amendments are not modifying existing ORV or snowmobile conditions.
176	Snowmobile Restrictions	WQ, Wildlife, Noise, Rec	N	
177	Land use planning and controls	Wildlife, Noise	N	See response to Compliance Measure 9.
178	Vehicle trip reduction programs	Trans, Noise	N	The TCAP amendments do not make any changes to vehicle trip reduction programs.
179	Transportation corridor design criteria	Trans, Noise	N	The TCAP amendments do not affect transportation corridor design.
180	Airport Master Plan South Lake Tahoe	Trans, Noise	N	N/A
181	Loudspeaker restrictions	Wildlife, Noise	N	The TCAP is not modifying loudspeaker restrictions.
182	Project Review	Noise	N	See response to Compliance Measures 136 and 137.
183	Complaint system: <i>Code of Ordinances</i> Chapters 5 and 68	Noise	N	Existing complaint systems are not being modified by the TCAP.
184	Transportation corridor compliance program	Trans, Noise	N	None of these compliance measures will be modified with the TCAP amendments.
185	Exemptions to noise limitations	Noise	N	
186	TRPA's Environmental Improvement Program (EIP)	Noise	N	
187	Personal watercraft noise controls	Wildlife, Noise	N	
<b>NOISE - SUPPLEMENTAL</b>				
188	Create an interagency noise enforcement MOU for the Tahoe Region.	Noise	N	An interagency noise enforcement MOU for the Tahoe Region is not being proposed as part of the TCAP amendments.
<b>RECREATION - IN PLACE</b>				
189	Allocation of Development: <i>Code of Ordinances</i> Chapter 50	Rec	N	The TCAP amendments are not proposing any changes to the Basin's allocation of development system, or to directly draw from any allocation pools.
190	Master Plan Guidelines: <i>Code of Ordinances</i> Chapter 14	Rec, Scenic	N	The TRPA, in coordination with the city, will continue to process Specific and Master Plan Plans pursuant to Chapter 14 of the TRPA Code of Ordinances.
191	Permissible recreation uses in the shorezone and lake zone: <i>Code of Ordinances</i> Chapter 81	WQ, Noise, Rec	N	See response to Compliance Measures 43 through 50.
192	Public Outdoor recreation facilities in sensitive lands	WQ, Rec, Scenic	N	The TCAP amendments are not altering provisions regarding public outdoor recreation in sensitive lands.
193	Hiking and riding facilities	Rec	N	The TCAP amendments do not alter where hiking and riding facilities are permissible. See also Compliance Measure 40.

**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
194	Scenic quality of recreation facilities	Rec, Scenic	N	The TCAP amendments do not propose any changes to provisions related to scenic quality of recreation facilities.
195	Density standards	Rec	N	The TCAP amendments complies with all applicable density standards in Chapters 13 and 31 of the Code of Ordinances.
196	Bonus incentive program	Rec	N	The TCAP amendments do not alter existing bonus incentive programs.
197	Required Findings: <i>Code of Ordinances</i> Chapter 4	Rec	N	All applicable TRPA Code Of Ordinance findings will continue to have to be met with the future approval of projects within the TCAP.
198	Lake Tahoe Recreation Sign Guidelines	Rec, Scenic	N	The TCAP amendments will not impact the Lake Tahoe Recreation Sign Guidelines.
199	Annual user surveys	Rec	N	The TCAP amendments will not affect user surveys.
<b>RECREATION - SUPPLEMENTAL</b>				
200	Regional recreational plan	Rec	N	The TCAP does not modify any portion of the Goals and Policies in the Regional Recreation Plan, which is the Recreation Element in the Regional Plan.
201	Establish fairshare resource capacity estimates	Rec	N	The TCAP amendments do not establish or alter fair share resource capacity estimates, alter reservations of additional resource capacity, or include economic modeling.
202	Reserve additional resource capacity	Rec	N	
203	Economic Modeling	Rec	N	
<b>SCENIC - IN PLACE</b>				
204	Project Review and Exempt Activities: <i>Code of Ordinances</i> Chapter 2	Scenic	N	See response to Compliance Measures 136 and 137.
205	Land Coverage Limitations: <i>Code of Ordinances</i> Chapter 30	WQ, Scenic	N	See response to Compliance Measure 11.
206	Height Standards: <i>Code of Ordinances</i> Chapter 37	Scenic	N	The amendments would not alter the TCAP Appendix C: Development and Design standards, including height standards. Any development is subject to compliance with Appendix C and the citywide design standards and guidelines, which are designed to ensure compatibility with scenic thresholds.
207	Driveway and Parking Standards: <i>Code of Ordinances</i> Chapter 34	Trans, Scenic	N	The TCAP amendments do not make changes to current design standards and guidelines relating to parking and driveway design.
208	Signs: <i>Code of Ordinances</i> Chapter 38	Scenic	N	The TCAP carries forward existing design standards and guidelines pertaining to signage (See TCAP Appendix C) for mixed-use and tourist areas. These standards meet or exceed Chapter 38 standards. Outside of these areas, Chapter 38 will continue to apply.
209	Historic Resources: <i>Code of Ordinances</i> Chapter 67	Scenic	N	See response to Compliance Measures 16 and 17.



**ATTACHMENT C: COMPLIANCE MEASURES EVALUATION**

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
210	Design Standards: <i>Code of Ordinances</i> Chapter 36	Scenic	Y	Citywide design standards and guidelines apply in substitute of Chapter 36 standards in the TCAP area. The TCAP amendments carry forward these existing design standards and guideline. These standards meet or exceed Chapter 36 standards. The proposed amendment would affect some design provisions within the TCAP, but such modifications maintain consistency with the citywide design standards and guidelines.
211	Shorezone Tolerance Districts and Development Standards: <i>Code of Ordinances</i> Chapter 83	Scenic	N	See response to Compliance Measures 43 through 50.
212	Development Standards Lakeward of Highwater: <i>Code of Ordinances</i> Chapter 84	WQ, Scenic	N	
213	Grading Standards: <i>Code of Ordinances</i> Chapter 33	WQ, Scenic	N	Grading and vegetation protection during construction shall continue to meet the provisions of the TRPA Code of Ordinances, Chapter 33, Grading and Construction.
214	Vegetation Protection During Construction: <i>Code of Ordinances</i> Chapter 33	AQ, Veg, Scenic	N	
215	Revegetation: <i>Code of Ordinances</i> Chapter 61	Scenic	N	See response to Compliance Measures 16 and 17.
216	Design Review Guidelines	Scenic	N	The amendments would not alter the TCAP Appendix C: Development and Design standards, including height standards. Any development is subject to compliance with Appendix C and the citywide design standards and guidelines, which are designed to ensure compatibility with scenic thresholds.
217	Scenic Quality Improvement Program(SQIP)	Scenic	N	See response to Compliance Measure 194.
218	Project Review Information Packet	Scenic	N	
219	Scenic Quality Ratings, Features Visible from Bike Paths and Outdoor Recreation Areas Open to the General Public	Trans, Scenic	N	
220	Nevada-side Utility Line Undergrounding Program	Scenic	N	N/A
<b>SCENIC - SUPPLEMENTAL</b>				
221	Real Time Monitoring Program	Scenic	N	No changes to the real time monitoring program are being proposed with the TCAP amendments.
222	Integrate project identified in SQIP	Scenic	Y	The TCAP amendments are anticipated to result in redevelopment along Highway 50. The SQIP notes that redevelopment, remodeling, and facade improvements are the most effective strategy at improving scenic threshold compliance in Roadway Travel Unit #33. As a result, the amendment is anticipated to improve integration with the SQIP.

Attachment D

Required Findings/Rationale

## ATTACHMENT D

### REQUIRED FINDINGS FOR AMENDMENTS OF THE CITY OF SOUTH LAKE TAHOE'S TOURIST CORE AREA PLAN

This document contains required findings per Chapter 3, 4, and 13 of the TRPA Code of Ordinances for amendments to the City of South Lake Tahoe's Tourist Core Area Plan (TCAP):

Chapter 3 Findings: The following finding must be made prior to amending the TCAP:

1. Finding: The proposed amendments could not have a significant effect on the environment with the incorporation of mitigation and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure.

Rationale: Based on the completed Initial Environmental Checklist/Mitigated Finding of No Significant Effect (IEC/FONSE), no significant environmental impacts have been identified as a result of the proposed amendments. The IEC was prepared to evaluate the potential environmental impacts of the amendments and tiers from and incorporates by reference specific analyses contained in the following environmental review documents:

- TRPA, *Regional Plan Update EIS*, certified by the TRPA Governing Board on December 12, 2012 (RPU EIS)
- TRPA, *Tourist Core Area Plan IEC/FONSE*, certified by the TRPA Governing Board on November 11, 2013 (TCAP IEC).
- TRPA/Tahoe Metropolitan Planning Organization (TMPO), *Transportation Plan/Sustainable Communities Strategy IS/MND/IEC/FONSE*, certified by the TMPO Board and the TRPA Governing Board on April 25, 2017 (RTP IS/IEC)

These program-level environmental documents include a regional and county-wide cumulative scale analysis and a framework of mitigation measures that provide a foundation for subsequent environmental review at an Area Plan level. Because the amendments are consistent with the Regional Plan, Regional Transportation Plan (RTP), and General Plan, which have approved program-level EISs/EIRs, the TCAP amendment is within the scope of these program-level EISs/EIRs.

The proposed project evaluated by the IEC are the amendments of the TCAP as summarized in this packet.

This IEC is tiered from the TRPA 2012 Regional Plan Update EIS in accordance with Section 6.12 of the TRPA Rules of Procedures. The 2012 RPU EIS is a Program EIS that was prepared pursuant to Article VI of TRPA Rules of Procedures (Environmental Impact Statements) and Chapter 3 (Environmental Documentation) of the TRPA Code of

Ordinances. The 2012 Regional Plan Update (RPU) is a comprehensive land use plan that guides physical development within the Lake Tahoe Region through 2035. The 2012 RPU EIS analyzes full implementation of uses and physical development proposed under the 2012 RPU, and it identifies measures to mitigate the significant adverse program-level and cumulative impacts associated with that growth. The TCAP is an element of the growth that was anticipated in the 2012 RPU and evaluated in the 2012 RPU EIS. By tiering from the 2012 RPU EIS, this IEC relies on the 2012 RPU EIS for the following:

- a discussion of general background and setting information for environmental topic areas;
- overall growth-related issues;
- issues that were evaluated in sufficient detail in the 2012 RPU EIS for which there is no significant new information or change in circumstances that would require further analysis; and
- assessment of cumulative impacts.

This IEC evaluates the potential environmental impacts of the proposed amendments with respect to the 2012 RPU EIS to determine what level of additional environmental review, if any, is appropriate. As shown in the Determination in Section V of the IEC and based on the analysis contained in the IEC, it has been determined that the proposed project would not have significant effects on the environment. Therefore, a Finding of No Significant Effect will be prepared.

This IEC concludes that many potentially significant project impacts are addressed by the measures that have been adopted as part of the approval of the 2012 RPU. Therefore, those 2012 RPU EIS mitigation measures that are related to, and may reduce the impacts of, this project are identified in the IEC.

Nothing in this IEC in any way alters the obligations of the City or TRPA to implement the mitigation measures adopted as part of the RPU.

The amendments proposed include addition of land uses within the Tourist Core Area Plan Tourist Center Gateway District, Special Area #1; addition of a provision related to the restriction of these land uses; and the amendment and addition of land use definitions to align with the goals of the TCAP. These amendments, as described in this packet, will become part of the Regional Plan and will replace existing plans for this geographical area within the City of South Lake Tahoe.

The IEC assessed potential impacts to the affected physical environment from the amendments to design standards in Appendix C of the TCAP. It

did not evaluate project specific environmental impacts. Project level environmental analysis will be required based on the specific project design once submitted. Based on the review of the evidence, the analysis and conclusion in the IEC determined the amendments will not have a significant impact on the environment not otherwise evaluated in the RPU EIS and TCAP IEC and potential significant impacts will be mitigated or addressed through implementation of the RPU, RTP, and the City's General Plan.

Chapter 4 Findings: The following findings must be made prior to adopting the TCAP Amendments:

1. Finding: The proposed Area Plan Amendment is consistent with, and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, Community Plan/Plan Area Statements, the TRPA Code of Ordinances, and other TRPA plans and programs.

Rationale: Land Use Policy 4.6 of TRPA's Goals and Policies encourages the development of Area Plans that improve upon existing Plan Area Statements and Community Plans or other TRPA regulations in order to be responsive to the unique needs and opportunities of the various communities in the Tahoe Region. The amendments include all required elements identified in Land Use Policies 4.8, 4.9 and 4.10 as demonstrated in the Conformance Review Checklist.

The amendments were prepared in conformance with the substantive and procedural requirements of the Goals and Policies, as implemented through TRPA Code of Ordinances, Chapter 13, *Area Plans*. The TCAP is consistent with the Tahoe Regional Plan and TRPA Code of Ordinances, as shown in the Conformance Review Checklist and as demonstrated by the IEC. The amendments proposed include addition of land uses within the Tourist Core Area Plan Tourist Center Gateway District, Special Area #1; addition of a provision related to the restriction of these land uses; and the amendment and addition of land use definitions to align with the goals of the TCAP.

Pursuant to Code Section 4.4.2, TRPA considers, as background for making the Section 4.4.1.A through C findings, the proposed project's effects on compliance measures (those implementation actions necessary to achieve and maintain thresholds), supplemental compliance measures (actions TRPA could implement if the compliance measures prove inadequate to achieve and maintain thresholds), the threshold indicators (adopted measurable physical phenomena that relate to the status of threshold attainment or maintenance), additional factors (indirect measures of threshold status, such as funding levels for Environmental Improvement Program (EIP) projects), and interim and target dates for threshold achievement. TRPA identifies and reports on threshold compliance measures, indicators, factors and targets in the Threshold Evaluation Reports prepared pursuant to TRPA Code of Ordinances, Chapter 16, *Regional Plan and Environmental Threshold Review*.

TRPA relies upon the project's accompanying environmental documentation, Staff's professional analysis, and prior plan level documentation, including findings and EISs, to reach the fundamental conclusions regarding the project's consistency with the Regional Plan and thresholds. A project that is consistent with all aspects of the Regional Plan and that does not adversely affect any threshold is, by definition, consistent with compliance measures, indicators and targets. In order to increase its analytical transparency, TRPA has prepared worksheets related specifically to the 4.4.2 considerations, which set forth the 222 compliance and supplemental compliance measures, the 178 indicators and additional factors, and interim and final targets. Effects of the proposed project (here the amendments) on these items, if any, are identified and to the extent possible described. TRPA cannot identify some target dates, status and trend for some threshold indicators because of a lack of available information. TRPA may still determine whether the project will affect the 4.4.2 considerations (and ultimately consistency with the Regional Plan and impact on thresholds) based on the project's specific environmental impacts related to those threshold indicators.

Based on the IEC, the RPU EIS, the TCAP IEC, the RPU and RTP findings made by the TRPA Governing Board, and the Section 4.4.2 staff analysis, and using applicable measurement standards consistent with the available information, the amendments will not adversely affect applicable compliance and supplemental compliance measures, indicators, additional factors, and attainment of targets by the dates identified in the 2019 Threshold Evaluation. The TCAP incorporates and/or implements relevant compliance measures, and with the implementation of the measures with respect to development within the TCAP, the effects are not adverse, and with respect to some measures, are positive. (See Threshold Indicators and Compliance Measures Worksheets)

TRPA anticipates that implementation of the amendments will accelerate threshold gains by encouraging the redevelopment of an aging town center and as demonstrated below.

Section 4.4.2.B also requires TRPA to disclose the impact of the proposed project on

its cumulative accounting of units of use (e.g., residential allocations, commercial floor area). The TCAP Amendment does not affect the cumulative accounting of units of use as no additional residential, commercial, tourist, or recreation allocations are proposed or allocated as part of these amendments. For any specific development project proposed within the TCAP, accounting for units of use, resource utilization and threshold attainment will occur as a part of the review and approval process.

Similarly, Section 4.4.2.C requires TRPA to confirm whether the proposed project is within the remaining capacity for development (e.g., water supply, sewage, etc.) identified in the environmental documentation for the Regional Plan. The amendments do not affect the amount of the remaining capacities available, identified and discussed in the RPU EIS. The TCAP does not allocate capacity or authorize any particular development. To the extent the amendments enable the use of redevelopment incentives, those incentives are within the scope of the incentives analyzed by the RPU EIS.

TRPA therefore finds that the amendments are consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, Community Plans, Plan Area Statements, the TRPA Code or Ordinances, and other TRPA plans and programs.

2. Finding: The proposed ordinance and rule amendments will not cause the environmental threshold carrying capacities to be exceeded.

Rationale: As demonstrated in the completed IEC, no significant environmental effects were identified as a result of the proposed amendments, and the IEC did not find any thresholds that would be adversely affected or exceeded. As found above, the Area Plan, as amended, is consistent with and will help to implement the Regional Plan.

TRPA reviewed the proposed amendment in conformance with the 222 compliance measures and supplemental compliance measures, the over 178 indicators and additional factors that measure threshold progress and threshold target, and interim attainment dates. The amendments will not adversely affect applicable compliance measures, indicators, additional factors and supplemental compliance measures and target dates as identified in the 2019 Threshold Evaluation indicator summaries. TRPA anticipates that implementation of the TCAP will accelerate threshold gains as demonstrated below. Because the principal beneficial impacts of implementation of the TCAP depend upon the number and size of redevelopment projects, the specific extent and timing or rate of effects of the TCAP cannot be determined at this time. However, pursuant to Chapter 13 of the TRPA Code of Ordinances, TRPA will monitor all development projects within the TCAP through quarterly and annual reports. These reports will then be used to evaluate the status and trend of the threshold every four years.

The amendments do not affect the cumulative accounting of units of use as no additional residential, commercial, tourist or recreation allocations are proposed or allocated as part of this Regional Plan amendment. Any allocations used as a result of these amendments would be taken from available pools held by the City of South Lake Tahoe or TRPA, transferred, or converted through the transfer of development rights program (TRPA Code Chapter 51). Accounting for units of use, resource utilization and threshold attainment will occur as a part of the project review and approval process.

The amendments do not affect the amount of the remaining capacity available, as the remaining capacity for water supply, sewage collection and treatment, recreation and vehicle miles travelled have been identified and evaluated in the RPU EIS. No changes to the overall capacity are proposed in these amendments. TRPA therefore finds that the amendments will not cause the thresholds to be exceeded.

3. Finding: Wherever federal, state or local air and water quality standards applicable for the Region, the strictest standards shall be attained, maintained, or exceeded pursuant to Article V(d) of the Tahoe Regional Planning Compact.

Rationale: Based on the following: (1) TCAP Amendment IEC; (2) RPU EIS; (3) RTP EIR/EIS; and (4) 2019 Threshold Evaluation Report, adopted by the Governing Board, no applicable federal, state or local air and water quality standard will be exceeded by adoption of the amendments. The proposed amendments do not affect or change the Federal, State or local air and water quality standards applicable for the Region. Projects developed under the TCAP will meet the strictest applicable air quality standards and implement water quality improvements consistent with TRPA Best Management Practices (BMPs) requirements and the Lake Tahoe Total Maximum Daily Load (TMDL) and County’s Pollutant Load Reduction Plan (PLRP). Federal, State, and local air and water quality standards remain applicable for all parcels in the TCAP, thus ensuring environmental standards will be achieved or maintained pursuant to the Bi-State Compact.

4. Finding: The Regional Plan and all of its elements, as amended, achieves and maintains the thresholds.

Rationale: **I. Introduction**

In 1980, Congress amended the Compact to accelerate the pace of environmental progress in the Tahoe Region by tasking TRPA with adopting a regional plan and implementing regulations that protect the unique national treasure that is Lake Tahoe. First, Article V(b) required that TRPA, in collaboration with Tahoe’s other regulatory agencies, adopt “environmental threshold carrying capacities” (“thresholds” or “standards”) establishing goals for a wide array of environmental criteria, including water quality, air quality, and wildlife. Second, Article V(c) directed TRPA to adopt a “regional plan” that “achieves and maintains” the



thresholds, and to “continuously review and maintain” implementation of the plan.

The 1980 Compact inaugurated an era of establishing and enforcing rigorous controls on new development. In 1982, TRPA adopted the necessary thresholds for the Tahoe Region. These thresholds are a mix of both long- and short-term goals for the Tahoe Region. The Region was “in attainment” of a number of these thresholds shortly after the adoption of the Regional Plan and remains in attainment today. Other thresholds address more intractable problems; for example, TRPA established numeric water quality standards that, even under best-case conditions, could not be attained for decades. *See, e.g., League to Save Lake Tahoe v. Tahoe Reg’l Planning Agency*, 739 F. Supp. 2d 1260, 1265 (E.D. Cal. 2010).

The second phase in this process was establishing a regional plan that, when implemented through rules and regulations, would ultimately “achieve and maintain” the thresholds over time. In 1987, following years of negotiation and litigation, TRPA adopted its Regional Plan. The 1987 Regional Plan employed a three-pronged approach to achieve and maintain the adopted environmental thresholds. First, the plan established a ceiling on development in Tahoe and restricted the placement, timing, and extent of new development. Second, the plan sought to prevent new harm to the environment as well as repair the environmental damage caused by existing development, particularly for projects that pre-dated TRPA’s existence (i.e., correcting the “sins of the past”); to this end, the plan created incentives to redevelop urbanized sites under more protective regulations and to transfer development out of sensitive areas that would then be restored. Third, TRPA adopted a capital investment program that was largely but not exclusively publicly funded to achieve and maintain thresholds by improving infrastructure and repairing environmental damage. In 1997, TRPA replaced this program with its “Environmental Improvement Program” (“EIP”). In subsequent years, TRPA generated investments of well over \$1 billion in public and private money to restore ecosystems and improve infrastructure under the EIP. Recent litigation confirmed that the Regional Plan as established in 1987 and subsequently amended over time will achieve and maintain the adopted environmental thresholds. *Sierra Club v. Tahoe Reg’l Planning Agency*, 916 F.Supp.2d 1098 (E.D. Cal. 2013) [Homewood litigation].

### **Regional Plan Update Process**

Even though implementation of the 1987 Regional Plan would achieve and maintain the thresholds, in 2004 TRPA began public outreach and analysis of the latest science and monitoring results to identify priority areas in which the Regional Plan could be comprehensively strengthened to accelerate the rate of threshold attainment. TRPA’s policymakers realized that the challenges facing the Region differed from those confronting the agency when it adopted its original Regional Plan in 1987. Uncontrolled new growth that had been the primary threat decades earlier had been brought into check by the strict growth limitations in the 1987 Regional Plan. Today’s problems differed, resulting from the continuing deterioration and lack of upgrades to existing “legacy” development. In essence, to make the greatest environmental difference, the Tahoe Region needed to fix what

was already in place. In addition, TRPA realized some existing land-use controls could be improved to remove barriers to redevelopment that would address ongoing environmental degradation caused by sub-standard development constructed before TRPA had an adopted Regional Plan or even came into existence. Land use regulations and public and private investment remain essential to attaining the thresholds for Lake Tahoe.

Furthermore, TRPA recognized that the social and economic fabric of the Tahoe Region could not support the level of environmental investment needed. The economic foundation of gaming had fallen away, and the level of environmental investment needed could not be supported solely by an enclave of second homes for the wealthy. Businesses and the tourism sector were faltering. Affordable housing and year-round jobs were scarce. Local schools were closing, and unemployment was unusually high. In light of these realities, TRPA sponsored an ongoing outreach program to obtain input on how to advance TRPA's environmental goals. Between 2004 and 2010, TRPA conducted over 100 public meetings, workshops, and additional outreach. More than 5,000 people provided input regarding their "vision" for TRPA's updated Regional Plan. Based on this input, TRPA identified a number of priorities to be addressed by the updated Regional Plan, including:

1. Accelerating water quality restoration and other ecological benefits by supporting environmental redevelopment opportunities and EIP investments.
2. Changing land-use patterns by focusing development in compact, walkable communities with increased alternative transportation options.
3. Transitioning to more permitting by local governments to create "one-stop" and "one permit" for small to medium sized projects, where local government wanted to assume these duties.

On December 12, 2012, TRPA's nine-year effort culminated with the approval of the Regional Plan Update.

### **Regional Plan Update Amendments**

The Regional Plan Update ("RPU") uses multiple strategies targeting environmental improvements to accelerate achieving and maintaining threshold standards in the Region. First, the RPU maintains both regulatory and implementation programs that have proven effective in protecting Lake Tahoe's environment. TRPA's regional growth control regulatory system, strict environmental development standards, and inter-agency partnerships for capital investment and implementation (e.g., EIP) remain in place.

Second, the RPU promotes sensitive land restoration, redevelopment, and increases the availability of multi-modal transportation facilities. The implementation of the RPU will facilitate transferring existing development from outlying, environmentally-sensitive areas into existing urbanized community

centers. The RPU provides incentives so that private capital can be deployed to speed this transformation.

Third, the RPU authorizes the Area Plan process for communities and land management agencies in the Tahoe Region in order to eliminate duplicative and unpredictable land use regulations that deterred improvement projects. Area Plans, created pursuant to Chapter 13 of the TRPA Code of Ordinances, also allows TRPA and local, state, federal, and tribal governments to expand the types of projects for which local, state, federal, and tribal governments apply TRPA rules to proposed projects within the Tahoe Region. After approval of an Area Plan by TRPA, this process allows a single government entity to review, permit, and inspect projects in their jurisdiction. All project approvals delegated to other government entities may be appealed to the TRPA for final decision. In addition, the performance of any government receiving delegated authority will be monitored quarterly and audited annually to ensure proper application of TRPA rules and regulations.

As noted above, a variety of strategies in the Regional Plan will work together to accelerate needed environmental gains in the categories where threshold benefits are most needed – water quality, restoration of sensitive lands, scenic quality advances in developed roadway units, and efforts to continue maintenance and attainment of air quality standards. Area Plans that include “Centers” play a key role in the Regional Plan’s overall strategy by activating environmental redevelopment incentives (e.g., increases in density and height) that also provide the receiving capacity for transfers of units from sensitive lands. The next section of this finding establishes how the City of South Lake Tahoe’s TCAP fulfills the role anticipated by the RPU and RTP and the expected threshold gain resulting from its implementation.

## **II. TCAP Amendments and Threshold Gain**

The TCAP Amendments accelerate threshold gain including water quality restoration, scenic quality improvement, and other ecological benefits, by supporting environmental redevelopment opportunities and Environmental Improvement Program (EIP) investments. The amendments will help to accelerate environmental redevelopment within an existing town center by allowing increased density and height provisions that serve as an incentive for private investment in redevelopment projects. These redevelopment incentives are intended to increase the rate of redevelopment and will likewise increase the rate of threshold gain by accelerating the application of controls designed to enhance water quality, air quality, soil conservation, scenic quality and recreational improvements to projects that wouldn’t otherwise be redeveloped absent TCAP provisions.

The TCAP’s Development and Design Standards represent a significant step forward in enhancing the aesthetics of the built environment and will result in improvements to the scenic threshold as projects are approved and built. Redevelopment of existing Town Centers and the Regional Center is identified in

the Regional Plan as a high priority.

As described in more specific detail below, the amendments beneficially affects multiple threshold areas.

A. Water Quality

The 2019 Threshold Evaluation found that the trend in reduced lake clarity has been slowed. The continued improvement is a strong indication that the actions of partners in the Region are contributing to improved clarity and helping TRPA attain one of its signature goals.

An accelerated rate of redevelopment within the TCAP will result in accelerated water quality benefits. Each redevelopment project is required to comply with strict development standards including water quality Best Management Practices (“BMP”) and coverage mitigation requirements and will provide additional opportunities for implementing area wide water quality systems.

B. Air Quality

The 2019 Threshold Evaluation found that the majority of air quality standards are in attainment and observed change suggests that conditions are improving or stable. Actions implemented to improve air quality in the Lake Tahoe Region occur at the national, state, and regional scale. The U.S. Environmental Protection Agency and state agencies, such as the California Air Resources Board, have established vehicle tail-pipe emission standards and industrial air pollution standards. These actions have resulted in substantial reductions in the emissions of harmful pollutants at state-wide and national scales and likely have contributed to improvement in air quality at Lake Tahoe. At a regional scale, TRPA has established ordinances and policies to encourage alternative modes of transportation and to reduce vehicle idling by prohibiting the creation of new drive-through window establishments.

Facilitating projects within the approved Area Plans is an integral component in implementing regional air quality strategies and improvements at a community level. (TRPA Goals and Policies: Chapter 2, Land Use). Because the land use and transportation strategies identified in the TCAP lead to implementation of the Regional Plan, they directly contribute to achieving and maintaining the Air Quality threshold.

One of the main objectives of the TCAP is to encourage the redevelopment of the existing built environment and to provide access to recreational opportunities from walking and bike paths, as well as provide greater access to transit. Replacing older buildings with newer, more energy efficient buildings that take advantage of the City of South Lake Tahoe’s Green Building Program will also help to improve air quality and ensure the attainment of air quality standards.

TRPA’s 2020 *Regional Transportation Plan: Linking Tahoe (RTP)* includes an analysis of its conformity with the California State Implementation Plan to ensure that the

RTP remains consistent with State and local air quality planning work to achieve and/or maintain the national ambient air quality standards (NAAQS). The proposed amendment does not propose substantial changes to land use assumptions for mixed-use assigned to the amendment area and the TCAP would continue to promote higher density residential uses within one-quarter mile of transit, commercial, and public service uses, and therefore would not change the conformity determination by state regulators.

The TCAP boundaries include an existing Town Center and with existing transit routes and a multi-use shared path. This indicates that redevelopment is in the appropriate location to potentially generate the shorter trip lengths and reduce vehicle-miles traveled needed to meet the air quality goals of the Regional Plan and the City's General Plan.

#### C. Soil Conservation

The 2019 Threshold Evaluation found negligible change in the total impervious cover in the Region over the last five years and the majority of soil conservation standards in attainment. While the permitting process of partners has been effective in focusing development on less sensitive lands and encouraging removal of impervious cover from sensitive areas, there is still much work to be done. Plans for large scale SEZ restoration, recent improvements in the Development Rights program, and implementation of the Area Plans will continue to help achieve SEZ restoration goals.

Today, most if not all developed commercial and tourist properties exceed the 50 percent maximum land coverage allowed in the Area Plan. Several commercial properties within the subject area average 90% coverage. This indicates that future redevelopment would be required to implement excess land coverage mitigation. Furthermore, redevelopment permitting would require these properties to come into modern site design standards including landscaping, BMPs, setbacks, etc. These standards would likely result in the removal of existing land coverage for properties that are severely overcovered. Therefore, the amendments will help to accelerate threshold gain through soil conservation.

#### D. Scenic Quality

The 2019 Threshold Evaluation found that scenic gains were achieved in developed areas along roadways and scenic resources along the lake's shoreline, the areas most in need of additional scenic improvement. Overall, 93% of the evaluated scenic resource units met the threshold standard and no decline in scenic quality was documented in any indicator category.

The subject area is located within Urban Roadway Scenic Corridor Units #33, which is not in attainment, Scenic Shoreline Unit #31, which is in attainment.

Future redevelopment within the subject area is likely to result in a significant improvement to scenic quality from the roadway and will not be allowed to

degrade the shoreline scenic attainment. Redevelopment will be required to comply with the following TCAP Goals and Policies:

**Goal NCR-1 Scenic Resources**

To protect and enhance the visual connection between South Lake Tahoe and the Lake Tahoe Region’s scenic resources.

**Policy NCR-1.1**

Improve the visual quality of the built environment consistent with the general recommendations for site planning found in the TRPA Scenic Quality Improvement Program (SQIP) to attain threshold attainment for Scenic Roadway Units # 32, 33 and 45.

**Policy NCR-1.2**

Maintain Stream Environment Zone (SEZ) restoration sites and stormwater drainage basins as view corridors and scenic resources to relieve the strip commercial character along US 50 within the Tourist Core.

**Policy NCR-1.3**

Adopt siting and building design standards and guidelines to protect, improve, and enhance the scenic quality of the natural and built environment and take full advantage of scenic resources through site orientation, building setbacks, preservation of viewsheds, and height limits.

Furthermore, Section 7.2 and Appendix C of the Area Plan includes specific scenic resources implementation strategies to achieve the goals and policies above.

E. Vegetation

The 2019 Threshold Evaluation found that vegetation in the Region continues to recover from the impacts of legacy land use. The majority of vegetation standards that are currently not in attainment relate to common vegetation in the Region. This finding is consistent with those of past threshold evaluations. As the landscape naturally recovers from the impacts of historic logging, grazing, and ground disturbance activities over the course of this century, many of the standards are expected to be attained.

The proposed amendment area is developed and overcovered with minimal native vegetation. The proposed amendments would not alter or revise the regulations pertaining to native vegetation protection during construction. Consistent with existing conditions, vegetation surrounding the construction site of a future redevelopment project would be required to comply with Section 33.6, Vegetation Protection During Construction, of the TRPA Code of Ordinances. Protective requirements include installation of temporary construction fencing, standards for

tree removal and tree protection, standards for soil and vegetation protection, and revegetation of disturbed areas.

Amending the land uses would not result in tree or vegetation removal. Future projects on the parcels in the amendment area would be subject to project-level environmental review and removal of any native, live, dead or dying trees would be required to be consistent with Chapter 61, Vegetation and Forest Health, of the TRPA Code of Ordinances. The area is not within TRPA's Conservation or Recreation land use classifications.

#### F. Recreation

The 2019 Threshold Evaluation found that land acquisition programs and the Lake Tahoe Environmental Improvement Program have contributed to improved access and visitor and resident satisfaction with the quality and spectrum of recreation opportunities. Partner agencies have improved existing recreation facilities and created new ones, including providing additional access to Lake Tahoe, hiking trailheads, and bicycle trails. Today's emerging concerns are transportation access to recreation sites and maintaining quality recreation experiences as demand grows, concerns that may require the Region to revisit policies and goals for the recreation threshold standards.

The City of South Lake Tahoe contains numerous recreational opportunities within its boundaries and in the immediate vicinity (i.e. Bonanza Park, Camp Richardson, Pope Beach, Baldwin Beach, Kiva Beach, Taylor Creek Day Use Area, Regan Beach, Ski Run Marina and Beach, Lakeside Marina, Heavenly Resort California base, Van Sickle Bi-State Park, Bijou Golf course, and other hiking and mountain bicycle trails).

The TCAP includes goals and policies regarding maintaining, improving and expanding recreation facilities and providing enhanced access through the construction of sidewalks and bike paths and improving public transit.

The approval of any project proposing the creation of additional recreational capacity would be subject to subsequent project-level environmental review and permitting and, if applicable, would be subject to the Persons At One Time (PAOT) system of recreation allocations administered by TRPA as described in Section 50.9 (Regulation of Additional Recreation Facilities) of the TRPA Code of Ordinances. No additional PAOTs are proposed by the amendment, nor are any changes to recreational land uses or policies.

#### G. Fisheries

While the 2019 Threshold Evaluation found standards for fisheries to generally be in attainment, the standards focus on physical habitat requirements that may not reflect the status of native fish populations. Recent population surveys in Lake Tahoe suggest significant declines in native fish species in parts of the nearshore. Declines are likely the result of impacts from the presence of aquatic invasive species in the lake. While efforts to prevent new invasive species from entering the

lake have been successful, mitigating the impact of previously introduced existing invasive species remains a high priority challenge. Invasive species control projects are guided by a science-based implementation plan. Ensuring native fish can persist in the Region and the restoration of the historic trophic structure to the lake will likely require partners to explore novel methods to control invasive species and abate the pressure they are placing on native species. Climate change driven shifts in the timing and form of precipitation in the Region pose a longer-term threat to native fish that may need to be monitored.

BMPs required for project development would improve water quality and thus could contribute to improved riparian and lake conditions in receiving water bodies. The TCAP Amendment will not alter the Resource Management and Protection Regulations, Chapters 60 through 68, of the TRPA Code of Ordinances. Chapter 63: Fish Resources includes the provisions to ensure the projection of fish habitat and provide for the enhancement of degraded habitat. Development within The TCAP could benefit the Fisheries Threshold through Goals and Policies aimed at the restoration of SEZs and implementation of BMPs.

#### H. Wildlife

The 2019 Threshold Evaluation found that twelve of the 16 wildlife standards are in attainment. Over 50 percent of the land area in the Tahoe Region is designated for protection of listed special status species. Populations of special interest species are either stable or increasing.

Future redevelopment projects in the amendment area would be subject to project-level environmental review and permitting at which time the proposals would be required to demonstrate compliance with all federal, state, and TRPA regulations pertaining to the protection of animal species. (Section 62.4 of the TRPA Code). At a project-level, potential effects on animal species would be determined based on the species' distribution and known occurrences relative to the project area and the presence of suitable habitat for the species in or near the project area. TRPA's existing policies and Code provisions address potential impacts to special-status species through site-specific environmental review, development and implementation of project-specific measures to minimize or avoid impacts through the design process, and compensatory or other mitigation for any adverse effects on special-status species as a condition of project approval (Sections 61.3.6 and 62.4 of the TRPA Code).

Implementation of the proposed amendments would not result in the reduction in the number of any unique, rare, or endangered species of animals, including waterfowl. Future redevelopment projects would be subject to subsequent project-level environmental review and permitting at which time they would be required to demonstrate compliance with all federal, state, and TRPA regulations in Chapter 62 and 63 (Wildlife Resources and Fish Resources, respectively) of the TRPA Code of Ordinances. While the boundary amendments allow for some different land uses or use densities and heights in the amendment area, they do not propose specific new development or amendments that threaten protection of listed species or



their habitat, and do not affect policies that protect biological resources.

#### I. Noise

The 2019 Threshold Evaluation found that Ambient noise levels in seven of nine land-use categories are in attainment with standards, but because of the proximity of existing development to roadways just two of seven transportation corridors are in attainment with ambient targets. Due to insufficient data, status determinations were not possible for nearly half of the single event noise standards. Limited noise monitoring resources were prioritized towards collecting more robust information to analyze ambient noise standards, which are more conducive to influential management actions than are single event sources. TRPA continues to update and evaluate its noise monitoring program to ensure standards are protective and realistically achievable.

As discussed in the IEC, the TCAP amendments would not alter noise policies and would reduce the existing maximum CNEL levels within the TCAP to meet the adopted TRPA CNEL threshold standards, and Regional Plan and General Plan noise policies would continue to be applied.

Noise increases associated with traffic under redevelopment buildout conditions would be similar to existing noise levels as traffic levels are relatively the same between existing and new allowed uses. Redevelopment projects would be required to implement project-specific noise reduction measures established in the Regional Plan EIS, General Plan EIR, and the TCAP. The amendments would not create a significant noise level increase. Implementation of the amendment to the CNEL limit would result in a beneficial impact. For these reasons, TCAP amendments would not contribute to an adverse cumulative increase in noise levels.

#### III. Conclusion

Based on the foregoing: the completion of the IEC; the previously certified RPU EIS, RTP IS/ND/IEC; and the findings made on December 12, 2012 for the RPU, TRPA finds the Regional Plan and all of its elements, as amended by the project achieves and maintains the thresholds. As described above in more detail, the amendments actively promotes threshold achievement and maintenance by, *inter alia*, (1) incentivizing environmentally beneficial redevelopment, (2) requiring the installation of Best Management Practices improvements for all projects in the Area Plan, (3) requiring conformance with the Development and Design Standards that will result in improvements to scenic quality and water quality, (4) facilitating multi-use development in proximity to alternative modes of transportation in order to reduce vehicle miles traveled (VMT); and (5) incorporating projects identified in the City's Pollutant Load Reduction Plan (PLRP) to guarantee the assigned reductions necessary to meet water quality objectives. In addition, as found in Chapter 4 Findings 1 through 3 and the Chapter 13 Findings, no element of the amendments interferes with the efficacy of any of the other elements of the Regional Plan. Thus, the Regional Plan, as amended by the project, will continue to achieve and maintain

the thresholds.

Chapter 13 Findings: The following findings must be made prior to adopting amendments to the TCAP:

1. Finding: The proposed Area Plan Amendment is consistent with and furthers the goals and policies of the Regional Plan.

Rationale: Regional Plan Land Use Policy 4.6 encourages the development of area plans that supersede existing plan area statements and community plans or other TRPA regulations in order to be responsive to the unique needs and opportunities of communities. The proposed TCAP amendments were found to be consistent with the goals and policies of the Regional Plan, as described in the Area Plan Conformance Checklist (Attachment E to the staff summary), and as described in Chapter 4, Finding #1, above. The amendments provide the density and height necessary to facilitate redevelopment in the overcovered, aging town center and further the attainment of environmental thresholds.

The amended area will be subject to the TCAP General Review Standards, the Load Reduction Plans, and Additional Review Standards for Area Plans with Town Centers or Regional Centers.

The finding of no significant effect based on the initial environmental checklist can be found within Attachment B of this packet.

Attachment E

Area Plan Conformity Checklist

Attachment E

## Tahoe Regional Planning Agency Area Plan Finding of Conformity Checklist

### AREA PLAN INFORMATION

Area Plan Name: Tourist Core Area Plan Amendment (Tahoe Wellness Center)  
Lead Agency: City of South Lake Tahoe  
Submitted to TRPA: June 14, 2021  
TRPA File No: N/A

### CONFORMITY REVIEW

Review Stage: Final Review  
Conformity Review Date: November 30, 2021  
TRPA Reviewer: Jennifer Self

### HEARING DATES

Lead Agency Approval: November 16, 2021  
APC: January 18, 2022  
Governing Board: January 26, 2022  
Appeal Deadline: N/A  
MOU Approval Deadline: N/A

### CHARACTERISTICS

Geographic Area and Description: Tourist Center Gateway District, Special Area #1  
Land Use Classifications: Mixed Use

Area Plan Amendment Summary: The proposed amendments affect Appendix C, Table 1: Permitted Uses by Land Use District and Table 2: List of Primary Uses and Use Definitions of the Tourist Core Area Plan as follows:

- Allow small scale manufacturing, industrial services, and wholesale and distribution land uses within the Tourist Center Gateway (TSC-G) District, Special Area #1.

- Add a provision that the subject land uses would only be allowed in connection with a retail commercial use where it will enhance the visitor experience and is limited in size to 30% of the associated retail space.
- Amend the land use definition of industrial services to better reflect the goals and intent of the TCAP.
- Add a land use definition for wholesale and distribution consistent with the goals of the TCAP.

## Conformity Checklist

		TRPA Code Section	Conformity		
			YES	NO	N/A
<b>A. Contents of Area Plans</b>					
1	<a href="#">General</a>	13.5.1	●		
2	<a href="#">Relationship to Other Code Sections</a>	13.5.2	●		
<b>B. Development and Community Design Standards</b>					
<i>Building Height</i>					
1	<a href="#">Outside of Centers</a>	13.5.3			●
2	<a href="#">Within Town Centers</a>	13.5.3			●
3	<a href="#">Within the Regional Center</a>	13.5.3			●
4	<a href="#">Within the High-Density Tourist District</a>	13.5.3			●
<i>Density</i>					
5	<a href="#">Single-Family Dwellings</a>	13.5.3			●
6	<a href="#">Multiple-Family Dwellings outside of Centers</a>	13.5.3			●
7	<a href="#">Multiple-Family Dwellings within Centers</a>	13.5.3			●
8	<a href="#">Tourist Accommodations</a>	13.5.3			●
<i>Land Coverage</i>					
9	<a href="#">Land Coverage</a>	13.5.3			●
10	<a href="#">Alternative Comprehensive Coverage Management</a>	13.5.3.B.1			●
<i>Site Design</i>					
11	<a href="#">Site Design Standards</a>	13.5.3	●		
<i>Complete Streets</i>					
12	<a href="#">Complete Streets</a>	13.5.3			●
<b>C. Alternative Development Standards and Guidelines Authorized in an Area Plan</b>					
1	<a href="#">Alternative Comprehensive Coverage Management System</a>	13.5.3.B.1			●
2	<a href="#">Alternative Parking Strategies</a>	13.5.3.B.2			●
3	<a href="#">Areawide Water Quality Treatments and Funding Mechanisms</a>	13.5.3.B.3			●
4	<a href="#">Alternative Transfer Ratios for Development Rights</a>	13.5.3.B.4			●

		TRPA Code Section	Conformity		
			YES	NO	N/A
<b>D. Development Standards and Guidelines Encouraged in Area Plans</b>					
1	<a href="#">Urban Bear Strategy</a>	13.5.3.C.1			●
2	<a href="#">Urban Forestry</a>	13.5.3.C.2			●
<b>E. Development on Resort Recreation Parcels</b>					
1	<a href="#">Development on Resort Recreation Parcels</a>	13.5.3.D			●
<b>F. Greenhouse Gas Reduction</b>					
1	<a href="#">Greenhouse Gas Reduction Strategy</a>	13.5.3.E			●
<b>G. Community Design Standards</b>					
1	<a href="#">Development in All Areas</a>	13.5.3.F.1.a			●
2	<a href="#">Development in Regional Center or Town Centers</a>	13.5.3.F.1.b			●
3	<a href="#">Building Heights</a>	13.5.3.F.2			●
4	<a href="#">Building Design</a>	13.5.3.F.3			●
5	<a href="#">Landscaping</a>	13.5.3.F.4			●
6	<a href="#">Lighting</a>	13.5.3.F.5			●
7	<a href="#">Signing – Alternative Standards</a>	13.5.3.F.6			●
8	<a href="#">Signing – General Policies</a>	13.5.3.F.6			●
<b>H. Modification to Town Center Boundaries</b>					
1	<a href="#">Modification to Town Center Boundaries</a>	13.5.3.G			●
<b>I. Conformity Review Procedures for Area Plans</b>					
1	<a href="#">Initiation of Area Planning Process by Lead Agency</a>	13.6.1	●		
2	<a href="#">Initial Approval of Area Plan by Lead Agency</a>	13.6.2	●		
3	<a href="#">Review by Advisory Planning Commission</a>	13.6.3	●		
4	<a href="#">Approval of Area Plan by TRPA</a>	13.6.4	●		
<b>J. Findings for Conformance with the Regional Plan</b>					
<i>General Review Standards for All Area Plans</i>					
1	<a href="#">Zoning Designations</a>	13.6.5.A.1	●		
2	<a href="#">Regional Plan Policies</a>	13.6.5.A.2	●		

		TRPA Code Section	Conformity		
			YES	NO	N/A
3	<a href="#">Regional Plan Land Use Map</a>	13.6.5.A.3	●		
4	<a href="#">Environmental Improvement Projects</a>	13.6.5.A.4			●
5	<a href="#">Redevelopment</a>	13.6.5.A.5	●		
6	<a href="#">Established Residential Areas</a>	13.6.5.A.6			●
7	<a href="#">Stream Environment Zones</a>	13.6.5.A.7			●
8	<a href="#">Alternative Transportation Facilities and Implementation</a>	13.6.5.A.8			●
<i>Load Reduction Plans</i>					
9	<a href="#">Load Reduction Plans</a>	13.6.5.B			●
<i>Additional Review Standards for Town Centers and the Regional Center</i>					
10	<a href="#">Building and Site Design Standards</a>	13.6.5.C.1			●
11	<a href="#">Alternative Transportation</a>	13.6.5.C.2			●
12	<a href="#">Promoting Pedestrian Activity</a>	13.6.5.C.3			●
13	<a href="#">Redevelopment Capacity</a>	13.6.5.C.4			●
14	<a href="#">Coverage Reduction and Stormwater Management</a>	13.6.5.C.5			●
15	<a href="#">Threshold Gain</a>	13.6.5.C.6	●		
<i>Additional Review Standards for the High-Density Tourist District</i>					
16	<a href="#">Building and Site Design</a>	13.6.5.D.1			●
17	<a href="#">Alternative Transportation</a>	13.6.5.D.2			●
18	<a href="#">Threshold Gains</a>	13.6.5.D.3			●
<b>K. Area Plan Amendments</b>					
1	<a href="#">Conformity Review for Amendments to an Area Plan</a>	13.6.6	●		
2	<a href="#">Conformity Review for Amendments Made by TRPA to the Regional Plan that Affect an Area Plan – Notice</a>	13.6.7.A			●
3	<a href="#">Conformity Review for Amendments Made by TRPA to the Regional Plan that Affect an Area Plan – Timing</a>	13.6.7.B			●
<b>L. Administration</b>					
1	<a href="#">Effect of Finding of Conformance of Area Plan</a>	13.6.8	●		



		TRPA Code Section	Conformity		
			YES	NO	N/A
2	<a href="#">Procedures for Adoption of Memorandum of Understanding</a>	13.7			●
3	<a href="#">Monitoring, Certification, and Enforcement of an Area Plan</a>	13.8			●
4	<a href="#">Appeal Procedure</a>	13.9	●		

## Conformity Review Notes

### A. CONTENTS OF AREA PLANS

**1. General**  YES  NO  N/A

*Citation* 13.5.1

*Requirement* An Area Plan shall consist of applicable policies, maps, ordinances, and any other related materials identified by the lead agency, sufficient to demonstrate that these measures, together with TRPA ordinances that remain in effect, are consistent with and conform to TRPA’s Goals and Policies and all other elements of the Regional Plan. In addition to this Section 13.5, additional specific requirements for the content of Area Plans are in subsection 13.6.5.A. The Memorandum of Understanding (MOU) that is associated with an approved Area Plan is a separate, but related, approval and is not part of the Area Plan.

*Notes* The TCAP consists of goals, policies, actions, projects, maps, ordinances, and related materials that conform to the Regional Plan. The adopted land use and zoning maps are consistent with Regional Plan Map 1, *Conceptual Regional Land Use Map*. No modifications to boundaries are proposed.

The proposed amendments make changes to only land use development standards in Appendix C of the TCAP.

**2. Relationship to Other Sections of the Code**  YES  NO  N/A

*Citation* 13.5.2

*Requirement* This section is intended to authorize development and design standards in Area Plans that are different than otherwise required under this Code. In the event of a conflict between the requirements in this section and requirements in other parts of the Code, the requirements in this section shall apply for the purposes of developing Area Plans. Except as otherwise specified, Code provisions that apply to Plan Area Statements (Chapter 11), Community Plans (Chapter 12), and Specific and Master Plans (Chapter 14) may also be utilized in a Conforming Area Plan. If an Area Plan proposes to modify any provision that previously applied to Plan Area Statements, Community Plans, or Specific and Master Plans, the proposed revision shall be analyzed in accordance with Code Chapters 3 and 4.

*Notes* The Area Plan’s development standards are included as Appendix C to the TCAP. Under the proposed amendments only permissible land uses and land use definitions would be affected. No other design standard changes are proposed.

**B. DEVELOPMENT AND COMMUNITY DESIGN STANDARDS**

Area plans shall have development standards that are consistent with those in Table 13.5.3-1

**MAXIMUM BUILDING HEIGHT**

1. **Outside of Centers**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Building height standards shall be consistent with Code Section 37.4.

*Notes* Building heights are established in Appendix C of the TCAP. The proposed amendments make no changes to building height standards.

2. **Within Town Centers**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Building height is limited to a maximum of 4 stories and 56 feet.

*Notes* Building heights are established in Appendix C of the TCAP. The proposed amendments make no changes to building height standards.

3. **Within the Regional Center**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Building height is limited to a maximum of 6 stories and 95 feet.

*Notes* Building heights are established in Appendix C of the TCAP. The proposed amendments do not make and changes to building height standards or boundaries to a regional center.

4. **Within the High-Density Tourist District**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Building height is limited to a maximum of 197 feet.

*Notes* Building heights are established in Appendix C of the TCAP. The proposed amendments do not make any changes to building height standards or boundaries to a high-density tourist district.

**DENSITY**

5. **Single-Family Dwellings**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Single-family dwelling density shall be consistent with Code Section 31.3.

*Notes* The proposed amendments do not make any changes to single-family dwelling density.

6. **Multiple-Family Dwellings outside of Centers**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Multiple-family dwelling density outside of Centers shall be consistent with Code Section 31.3.

*Notes* The proposed amendments do not make any changes to multiple-family dwelling density.

7. **Multiple-Family Dwellings within Centers**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Multiple-family dwelling density within Centers shall be a maximum of 25 units per acre.

*Notes* The proposed amendments do not make any changes to multiple-family dwelling density.

8. **Tourist Accommodations**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Tourist accommodations (other than bed and breakfast) shall have a maximum density of 40 units per acre.

*Notes* The proposed amendments do not make any changes to tourist accommodation density.

**LAND COVERAGE**

9. **Land Coverage**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Land coverage standards shall be consistent with Section 30.4 of the TRPA Code.

*Notes* The proposed amendments do not make any changes to land coverage.

10. **Alternative Comprehensive Coverage Management System**  YES  NO  N/A

*See Section C.1 of this document.*

**SITE DESIGN**

- 11. Site Design Standards**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Area plans shall conform to Section 36.5 of the TRPA Code.

*Notes* The development standards in Appendix C of the TCAP are functionally equivalent to the standards set forth in Section 36.5 of the TRPA Code of Ordinances.

**COMPLETE STREETS**

- 12. Complete Streets**  YES  NO  N/A

*Citation* 13.5.3

*Requirement* Within Centers, plan for sidewalks, trails, and other pedestrian amenities providing safe and convenient non-motorized circulation within Centers, as applicable, and incorporation of the Regional Bike and Pedestrian Plan.

*Notes* The proposed amendments do not make any changes to complete street standards.

**C. ALTERNATIVE DEVELOPMENT STANDARDS AND GUIDELINES AUTHORIZED IN AREA PLANS**

- 1. Alternative Comprehensive Coverage Management System**  YES  NO  N/A

*Citation* 13.5.3.B.1

*Requirement* An Area Plan may propose a comprehensive coverage management system as an alternative to the parcel-level coverage requirements outlined in Sections 30.4.1 and 30.4.2, provided that the alternative system shall: 1) reduce the total coverage and not increase the cumulative base allowable coverage in the area covered by the comprehensive coverage management system; 2) reduce the total amount of coverage and not increase the cumulative base allowable coverage in Land Capability Districts 1 and 2; and 3) not increase the amount of coverage otherwise allowed within 300 feet of high water of Lake Tahoe (excluding those areas landward of Highways 28 and 89 in Kings Beach and Tahoe City Town Centers within that zone). For purposes of this provision, "total" coverage is the greater of existing or allowed coverage.

*Notes* The City of South Lake Tahoe has chosen not to develop an alternative comprehensive coverage management system. This is an optional component.

**2. Alternative Parking Strategies**

YES  NO  N/A

*Citation* 13.5.3.B.2

- Requirement* An Area Plan is encouraged to include shared or area-wide parking strategies to reduce land coverage and make more efficient use of land for parking and pedestrian uses. Shared parking strategies may consider and include the following:
- Reduction or relaxation of minimum parking standards;
  - Creation of maximum parking standards;
  - Shared parking;
  - In-lieu payment to meet parking requirements;
  - On-street parking;
  - Parking along major regional travel routes;
  - Creation of bicycle parking standards;
  - Free or discounted transit;
  - Deeply discounted transit passes for community residents; and
  - Paid parking management

*Notes*

The City of South Lake has chosen not to develop alternative parking strategies. This is an optional component. The existing Area Plan does include policies and standards that mirror some of the listed parking strategies.

**3. Areawide Water Quality Treatments and Funding Mechanisms**

YES  NO  N/A

*Citation* 13.5.3.B.3

- Requirement* An Area Plan may include water quality treatments and funding mechanisms in lieu of certain site-specific BMPs, subject to the following requirements:
- Area-wide BMPs shall be shown to achieve equal or greater effectiveness and efficiency at achieving water quality benefits to certain site-specific BMPs and must infiltrate the 20-year, one-hour storm;
  - Plans should be developed in coordination with TRPA and applicable state agencies, consistent with applicable TMDL requirements;
  - Area-wide BMP project areas shall be identified in Area Plans and shall address both installation and ongoing maintenance;
  - Strong consideration shall be given to areas connected to surface waters;
  - Area-wide BMP plans shall consider area-wide and parcel level BMP requirements as an integrated system;
  - Consideration shall be given to properties that have already installed and maintained parcel-level BMPs, and financing components or area-wide BMP plans shall reflect prior BMP installation in terms of the charges levied against projects that already complied with BMP requirements with systems that are in place and operational in accordance with applicable BMP standards.
  - Area-wide BMP Plans shall require that BMPs be installed concurrent with development activities. Prior to construction of area-wide treatment facilities, development projects shall either install parcel-level BMPs or construct area-wide improvements.

Notes

**4. Alternative Transfer Ratios for Development Rights**  YES  NO  N/A

*Citation* 13.5.3.B.4

*Requirement* Within a Stream Restoration Plan Area as depicted in Map 1 in the Regional Plan, an Area Plan may propose to establish alternative transfer ratios for development rights based on unique conditions in each jurisdiction, as long as the alternative transfer ratios are determined to generate equal or greater environment gain compared to the TRPA transfer ratios set forth in Chapter 51: Transfer of Development.

Notes

**D. DEVELOPMENT STANDARDS AND GUIDELINES ENCOURAGED IN AREA PLANS**

**1. Urban Bear Strategy**  YES  NO  N/A

*Citation* 13.5.3.C.1

*Requirement* In Area Plans, lead agencies are encouraged to develop and enforce urban bear strategies to address the use of bear-resistant solid waste facilities and related matters.

Notes

**2. Urban Forestry**  YES  NO  N/A

*Citation* 13.5.3.C.2

*Requirement* In Area Plans, lead agencies are encouraged to develop and enforce urban forestry strategies that seek to reestablish natural forest conditions in a manner that does not increase the risk of catastrophic wildfire.

Notes

**E. DEVELOPMENT ON RESORT RECREATION PARCELS**

**1. Development on Resort Recreation Parcels**  YES  NO  N/A

*Citation* 13.5.3.D

*Requirement* In addition to recreation uses, an Area Plan may allow the development and subdivision of tourist, commercial, and residential uses on the Resort Recreation District parcels depicted on Map 1 of the Regional Plan and subject to the following conditions:

- The parcels must become part of an approved Area Plan;

- Subdivisions shall be limited to “air space condominium” divisions with no lot and block subdivisions allowed;
- Development shall be transferred from outside the area designated as Resort Recreation; and
- Transfers shall result in the retirement of existing development.

Notes No changes are proposed to resort recreation parcels.

## F. GREENHOUSE GAS REDUCTION

### 1. Greenhouse Gas Reduction Strategy YES NO N/A

*Citation* 13.5.3.E

*Requirement* To be found in conformance with the Regional Plan, Area Plans shall include a strategy to reduce emissions of Greenhouse Gases from the operation or construction of buildings. The strategy shall include elements in addition to those included to satisfy other state requirements or requirements of this code. Additional elements included in the strategy may include but are not limited to the following:

- A local green building incentive program to reduce the energy consumption of new or remodeled buildings;
- A low interest loan or rebate program for alternative energy projects or energy efficiency retrofits;
- Modifications to the applicable building code or design standards to reduce energy consumption; or
- Capital improvements to reduce energy consumption or incorporate alternative energy production into public facilities.

Notes Buildings constructed within the TCAP are subject to the California Building Code which already includes some of the nation’s strictest standards to reduce energy use. No changes are proposed to a GHG strategy.

## G. COMMUNITY DESIGN STANDARDS

To be found in conformance with the Regional Plan, Area Plans shall require that all projects comply with the design standards in this subsection. Area Plans may also include additional or substitute requirements not listed below that promote threshold attainment.

### 1. Development in All Areas YES NO N/A

*Citation* 13.5.3.F.1.a

*Requirement* All new development shall consider, at minimum, the following site design standards:

- Existing natural features retained and incorporated into the site design;

- Building placement and design that are compatible with adjacent properties and designed in consideration of solar exposure, climate, noise, safety, fire protection, and privacy;
- Site planning that includes a drainage, infiltration, and grading plan meeting water quality standards, and
- Access, parking, and circulation that are logical, safe, and meet the requirements of the transportation element.

*Notes* Appendix C of the TCAP includes these site design standards. No changes are proposed to the standards above.

**2. Development in Regional Center or Town Centers**  YES  NO  N/A

*Citation* 13.5.3.F.1.b

*Requirement* In addition to the standards above, development in Town Centers or the Regional Center shall address the following design standards:

- Existing or planned pedestrian and bicycle facilities shall connect properties within Centers to transit stops and the Regional Bicycle and Pedestrian network.
- Area Plans shall encourage the protection of views of Lake Tahoe.
- Building height and density should be varied with some buildings smaller and less dense than others.
- Site and building designs within Centers shall promote pedestrian activity and provide enhanced design features along public roadways. Enhanced design features to be considered include increased setbacks, stepped heights, increased building articulation, and/or higher quality building materials along public roadways.
- Area Plans shall include strategies for protecting undisturbed sensitive lands and, where feasible, establish park or open space corridors connecting undisturbed sensitive areas within Centers to undisturbed areas outside of Centers.

*Notes* TCAP establishes these standards in Appendix C. No changes are proposed to these standards.

**3. Building Heights**  YES  NO  N/A

*Citation* 13.5.3.F.2

- Requirement*
- Area Plans may allow building heights up to the maximum limits in Table 13.5.3-1 of the Code of Ordinances
  - Building height limits shall be established to ensure that buildings do not project above the forest canopy, ridge lines, or otherwise detract from the viewshed.
  - Area Plans that allow buildings over two stories in height shall, where feasible, include provisions for transitional height limits or other buffer areas adjacent to areas not allowing buildings over two stories in height.



Notes Building height is set forth in Appendix C of the TCAP and is consistent with these standards. No changes are proposed to building height.

**4. Building Design**  YES  NO  N/A

*Citation* 13.5.3.F.3

*Requirement* Standards shall be adopted to ensure attractive and compatible development. The following shall be considered:

- Buffer requirements should be established for noise, snow removal, aesthetic, and environmental purposes.
- The scale of structures should be compatible with existing and planned land uses in the area.
- Viewsheds should be considered in all new construction. Emphasis should be placed on lake views from major transportation corridors.
- Area Plans shall include design standards for building design and form. Within Centers, building design and form standards shall promote pedestrian activity.

Notes Building design is set forth in Appendix C of the TCAP and is consistent with these standards. No changes are proposed to these standards.

**5. Landscaping**  YES  NO  N/A

*Citation* 13.5.3.F.4

*Requirement* The following should be considered with respect to this design component of a project:

- Native vegetation should be utilized whenever possible, consistent with Fire Defensible Space Requirements.
- Vegetation should be used to screen parking, alleviate long strips of parking space, and accommodate stormwater runoff where feasible.
- Vegetation should be used to give privacy, reduce glare and heat, deflect wind, muffle noise, prevent erosion, and soften the line of architecture where feasible.

Notes No changes are proposed to these standards.

**6. Lighting**  YES  NO  N/A

*Citation* 13.5.3.F.5

*Requirement* Lighting increases the operational efficiency of a site. In determining the lighting for a project, the following should be required:

- Exterior lighting should be minimized to protect dark sky views, yet adequate to provide for public safety, and should be consistent with the architectural design.
- Exterior lighting should utilize cutoff shields that extend below the lighting element to minimize light pollution and stray light.
- Overall levels should be compatible with the neighborhood light level. Emphasis should be placed on a few, well-placed, low-intensity lights.

- Lights should not blink, flash, or change intensity except for temporary public safety signs.

*Notes* The City exterior lighting standards apply in the TCAP. The exterior lighting standards include provisions to allow for adequate level of lighting while protecting the night time sky. No change is proposed as part of these amendments.

**7. Signing – Alternative Standards**  YES  NO  N/A

*Citation* 13.5.3.F.6

*Requirement* Area Plans may include alternative sign standards. For Area Plans to be found in conformance with the Regional Plan, the Area Plan shall demonstrate that the sign standards will minimize and mitigate significant scenic impacts and move toward attainment or achieve the adopted scenic thresholds for the Lake Tahoe region.

*Notes* The city’s substitute signage standards are used within the TCAP. No change is proposed as part of these amendments.

**8. Signing – General Policies**  YES  NO  N/A

*Citation* 13.5.3.F.6

*Requirement* In the absence of a Conforming Area Plan that addresses sign standards, the following policies apply, along with implementing ordinances:

- Off-premise signs should generally be prohibited; way-finding and directional signage may be considered where scenic impacts are minimized and mitigated.
- Signs should be incorporated into building design;
- When possible, signs should be consolidated into clusters to avoid clutter.
- Signage should be attached to buildings when possible; and
- Standards for number, size, height, lighting, square footage, and similar characteristics for on-premise signs shall be formulated and shall be consistent with the land uses permitted in each district.

*Notes* The city’s substitute signage standards are used within the TCAP. No change is proposed as part of these amendments.

**H. MODIFICATION TO TOWN CENTER BOUNDARIES**

**1. Modification to Town Center Boundaries**  YES  NO  N/A

*Citation* 13.5.3.G

*Requirement* When Area Plans propose modifications to the boundaries of a Center, the modification shall comply with the following:

- Boundaries of Centers shall be drawn to include only properties that are developed, unless undeveloped parcels proposed for inclusion have either at least three sides of their boundary adjacent to developed parcels (for four-

sided parcels), or 75 percent of their boundary adjacent to developed parcels (for non-four-sided parcels). For purposes of this requirement, a parcel shall be considered developed if it includes any of the following: 30 percent or more of allowed coverage already existing on site or an approved but unbuilt project that proposes to meet this coverage standard.

- Properties included in a Center shall be less than ¼ mile from existing Commercial and Public Service uses.
- Properties included in a Center shall encourage and facilitate the use of existing or planned transit stops and transit systems.

Notes The amendments do not include any modifications to the Town Center boundaries.

## I. CONFORMITY REVIEW PROCEDURES FOR AREA PLANS

### 1. Initiation of Area Planning Process by Lead Agency YES NO N/A

*Citation* 13.6.1

*Requirement* The development of an Area Plan shall be initiated by a designated lead agency. The lead agency may be TRPA or a local, state, federal, or tribal government. There may be only one lead agency for each Area Plan.

Notes The City of South Lake Tahoe served as lead agency for these amendments.

### 2. Initial Approval of Area Plan by Lead Agency YES NO N/A

*Citation* 13.6.2

*Requirement* If the lead agency is not TRPA, then the Area Plan shall be approved by the lead agency prior to TRPA's review of the Area Plan for conformance with the Regional Plan under this section. In reviewing and approving an Area Plan, the lead agency shall follow its own review procedures for plan amendments. At a minimum, Area Plans shall be prepared in coordination with local residents, stakeholders, public agencies with jurisdictional authority within the proposed Area Plan boundaries, and TRPA staff.

If the lead agency is TRPA, the Area Plan shall require conformity approval under this section by TRPA only. No approval by any other government, such as a local government, shall be required.

Notes The City of South Lake Tahoe involved the public at large and interested stakeholders pursuant to state law and the California Environmental Quality Act (CEQA). Additionally, City staff worked with TRPA staff on the amendment package and environmental review.

### 3. Review by Advisory Planning Commission YES NO N/A

*Citation* 13.6.3

*Requirement* The TRPA Advisory Planning Commission shall review the proposed Area Plan and make recommendations to the TRPA Governing Board. The commission shall

obtain and consider the recommendations and comments of the local government(s) and other responsible public agencies, as applicable. jurisdictional authority within the proposed Area Plan boundaries, and TRPA staff.

*Notes* The Area Plan is scheduled for review by the Advisory Planning Commission on January 18, 2022.

**4. Approval of Area Plan by TRPA**  YES  NO  N/A

*Citation* 13.6.4

*Requirement* For Area Plans initiated and approved by a lead agency other than TRPA, the Area Plan shall be submitted to and reviewed by the TRPA Governing Board at a public hearing. Public comment shall be limited to issues raised by the public before the Advisory Planning Commission and issues raised by the Governing Board. The TRPA Governing Board shall make a finding that the Area Plan, including all zoning and development Codes that are part of the Area Plan, is consistent with and furthers the goals and policies of the Regional Plan. This finding shall be referred to as a finding of conformance and shall be subject to the same voting requirements as approval of a Regional Plan amendment.

*Notes* The Area Plan will be scheduled for review by the Governing Board on January 26, 2022 after review by the Regional Plan Implementation Committee and the Advisory Planning Commission. The Governing Board will need to find the Area Plan in conformance with the Regional Plan before it takes effect.

**J. FINDINGS OF CONFORMANCE WITH THE REGIONAL PLAN**

In making the general finding of conformance, the TRPA Governing Board shall make the general findings applicable to all amendments to the Regional Plan and Code set forth in Sections 4.5 and 4.6, and also the following specific review standards:

**GENERAL REVIEW STANDARDS FOR ALL AREA PLANS**

**1. Zoning Designations**  YES  NO  N/A

*Citation* 13.6.5.A.1

*Requirement* The submitted Area Plan shall identify zoning designations, allowed land uses, and development standards throughout the plan area.

*Notes* Appendix C of the TCAP identifies zoning designation, allowed land uses, and development standards for the area plan.

**2. Regional Plan Policies**  YES  NO  N/A

*Citation* 13.6.5.A.2

*Requirement* The submitted Area Plan shall be consistent with all applicable Regional Plan policies, including, but not limited to, the regional growth management system, development allocations, and coverage requirements.

*Notes* The Area Plan contains goals and policies that are in alignment with Regional Plan policies. No changes to policies, the regional growth management system, development allocations, or coverage requirements are proposed as part of these amendments.

**3. Regional Plan Land Use Map**  YES  NO  N/A

*Citation* 13.6.5.A.3

*Requirement* The submitted Area Plan shall either be consistent with the Regional Land Use Map or recommend and adopt amendments to the Regional Land Use Map as part of an integrated plan to comply with Regional Plan policies and provide threshold gain.

*Notes* The proposed zones are consistent with the Mixed-Use regional land use.

**4. Environmental Improvement Projects**  YES  NO  N/A

*Citation* 13.6.5.A.4

*Requirement* The submitted Area Plan shall recognize and support planned, new, or enhanced Environmental Improvement Projects. Area Plans may also recommend enhancements to planned, new, or enhanced Environmental Improvement Projects as part of an integrated plan to comply with Regional Plan Policies and provide threshold gain.

*Notes* The Area Plan recognizes and incorporates the Environmental Improvement Program (EIP). Planned environmental improvement projects are included in the plan. No changes are proposed as part of the amendments.

**5. Redevelopment**  YES  NO  N/A

*Citation* 13.6.5.A.

*Requirement* The submitted Area Plan shall promote environmentally beneficial redevelopment and revitalization within town centers, regional centers and the High Density Tourist District.

*Notes* The Area Plan promotes redevelopment within Town Centers by incorporating the incentives established in the 2012 Regional Plan Update. The Town Center is eligible for increased density, coverage, and height as a result of area plan adoption. This promotes compact development and promotes the Regional Plan's land use and transportation strategies. The amendments do not affect the area plan's redevelopment strategy.

**6. Established Residential Areas**  YES  NO  N/A

*Citation* 13.6.5.A.6

*Requirement* The submitted Area Plan shall preserve the character of established residential areas outside of town centers, regional centers and the High Density Tourist District, while seeking opportunities for environmental improvements within residential areas.

*Notes* No changes to residential areas are proposed as part of these amendments.

**7. Stream Environment Zones**  YES  NO  N/A

*Citation* 13.6.5.A.7

*Requirement* The submitted Area Plan shall protect and direct development away from Stream Environment Zones and other sensitive areas, while seeking opportunities for environmental improvements within sensitive areas. Development may be allowed in disturbed Stream Environment zones within town centers, regional centers and the High-Density Tourist District only if allowed development reduces coverage and enhances natural systems within the Stream Environment Zone.

*Notes* No changes are proposed under the amendments.

**8. Alternative Transportation Facilities and Implementation**  YES  NO  N/A

*Citation* 13.6.5.A.8

*Requirement* The submitted Area Plan shall identify facilities and implementation measures to enhance pedestrian, bicycling and transit opportunities along with other opportunities to reduce automobile dependency.

*Notes* No changes are proposed as part of the amendments.

**LOAD REDUCTION PLANS**

**9. Load Reduction Plans**  YES  NO  N/A

*Citation* 13.6.5.B

*Requirement* TRPA shall utilize the load reduction plans for all registered catchments or TRPA default standards when there are no registered catchments, in the conformance review of Area Plans.

*Notes* No changes are proposed as part of the amendments.

**ADDITIONAL REVIEW STANDARDS FOR TOWN CENTERS AND THE REGIONAL CENTER**

**10. Building and Site Design Standards**  YES  NO  N/A

*Citation* 13.6.5.C.1

*Requirement* The submitted Area Plan shall include building and site design standards that reflect the unique character of each area, respond to local design issues and consider ridgeline and viewshed protection.

*Notes* No changes to building and site design standards are proposed as part of these amendments.

**11. Alternative Transportation**  YES  NO  N/A

*Citation* 13.6.5.C.2

*Requirement* The submitted Area Plan shall promote walking, bicycling, transit use and shared parking in town centers and regional centers, which at a minimum shall include continuous sidewalks or other pedestrian paths and bicycle facilities along both sides of all highways within town centers and regional centers, and to other major activity centers.

*Notes* No changes to alternative transportation are proposed as part of these amendments.

**12. Promoting Pedestrian Activity**  YES  NO  N/A

*Citation* 13.6.5.C.3

*Requirement* The submitted Area Plan shall use standards within town centers and regional centers addressing the form of development and requiring that projects promote pedestrian activity and transit use.

*Notes* The Design Standards promote pedestrian activity through site design, building design, and transportation facility standards and guidelines. The permissible uses for these areas also promote an active, pedestrian-friendly environment. No changes to pedestrian infrastructure are proposed as part of these amendments.

**13. Redevelopment Capacity**  YES  NO  N/A

*Citation* 13.6.5.C.4

*Requirement* The submitted Area Plan shall ensure adequate capacity for redevelopment and transfers of development rights into town centers and regional centers.

*Notes* The TCAP as adopted incorporates the height, density and coverage standards allowed in the Regional Plan to ensure adequate capacity for redevelopment and transfers of developments. No changes for redevelopment capacity are proposed as part of these amendments.

**14. Coverage Reduction and Stormwater Management**  YES  NO  N/A

*Citation* 13.6.5.C.5

*Requirement* The submitted Area Plan shall identify an integrated community strategy for coverage reduction and enhanced stormwater management.

*Notes* No changes are proposed as part of these amendments.

**15. Threshold Gain**  YES  NO  N/A

*Citation* 13.6.5.C.6

*Requirement* The submitted Area Plan shall demonstrate that all development activity within Town Centers and the Regional Center will provide for or not interfere with Threshold gain, including but not limited to measurable improvements in water quality.

*Notes* See previous responses. All development is required to adhere to the standards of the TCAP which are designed to promote threshold gains including but not limited to scenic, community design, air quality, soils and water quality. No changes to the area plan's threshold gain strategies are proposed under these amendments.

**ADDITIONAL REVIEW STANDARDS FOR THE HIGH-DENSITY TOURIST DISTRICT**

**16. Building and Site Design**  YES  NO  N/A

*Citation* 13.6.5.D.1

*Requirement* The submitted Area Plan shall include building and site design standards that substantially enhance the appearance of existing buildings in the High Density Tourist District.

*Notes* No changes are proposed as part of these amendments.

**17. Alternative Transportation**  YES  NO  N/A

*Citation* 13.6.5.D.2

*Requirement* The submitted Area Plan shall provide pedestrian, bicycle and transit facilities connecting the High-Density Tourist District with other regional attractions.

*Notes* No changes are proposed as part of these amendments.

**18. Threshold Gain**  YES  NO  N/A

*Citation* 13.6.5.D.3

*Requirement* The submitted Area Plan shall demonstrate that all development activity within the High-Density Tourist District will provide or not interfere with Threshold gain, including but not limited to measurable improvements in water quality. If



necessary to achieve Threshold gain, off-site improvements may be additionally required.

Notes No changes are proposed as part of these amendments.

## K. AREA PLAN AMENDMENTS

### 1. Conformity Review for Amendments to an Area Plan YES NO N/A

*Citation* 13.6.6

*Requirement* Following approval of an Area Plan, any subsequent amendment to a plan or ordinance contained within the approved Area Plan shall be reviewed by the Advisory Planning Commission and Governing Board for conformity with the requirements of the Regional Plan. Public comment before the Governing Board shall be limited to consideration of issues raised before the Advisory Planning Commission and issues raised by the Governing Board. The Governing Board shall make the same findings as required for the conformity finding of the initial Area Plan, as provided in subsection 13.6.5; however, the scope of the APC and Governing Board’s review shall be limited to determining the conformity of the specific amendment only. If the Governing Board finds that the amendment to the Area Plan does not conform to the Regional Plan, including after any changes made in response to TRPA comments, the amendment shall not become part of the approved Area Plan.

Notes The amendment to this area plan is of a narrow focus and has been reviewed by staff for conformity with the Regional Plan. The Governing Board’s review will be limited to determining the conformity of the specific amendment.

### 2. Conformity Review for Amendments Made by TRPA to the Regional Plan that Affect an Area Plan - Notice YES NO N/A

*Citation* 13.6.7.A

*Requirement* TRPA shall provide lead agencies with reasonable notice of pending amendments that may affect Area Plans. TRPA also shall provide lead agencies with notice of Area Plan topics that may require amendment following adopted Regional Plan amendments pursuant to this section.

Notes The proposed amendments were initiated by the City of South Lake Tahoe.

### 3. Conformity Review for Amendments Made by TRPA to the Regional Plan that Affect an Area Plan - Timing YES NO N/A

*Citation* 13.6.7.B

*Requirement* If TRPA approves an amendment to the Regional Plan that would also require amendment of an Area Plan to maintain conformity, the lead agency shall be given one year to amend the Area Plan to demonstrate conformity with the TRPA amendment. The Governing Board shall make the same findings as required for

the conformity finding of the initial Area Plan, as provided in subsection 13.6.5; however, the scope of the Governing Board’s review shall be limited to determining the conformity of only those amendments made by the lead agency to conform to the TRPA amendment. If the Governing Board finds that the other government fails to demonstrate conformity with the TRPA amendment following the one-year deadline, then the Board shall identify the policies and/or zoning provisions in the Area Plan that are inconsistent and assume lead agency authority to amend those policies and provisions.

Notes The proposed amendments were initiated by the City of South Lake Tahoe.

**L. ADMINISTRATION**

**1. Effect of Finding of Conformance of Area Plan**  YES  NO  N/A

*Citation* 13.6.8

*Requirement* By finding that an Area Plan conforms with the Regional Plan pursuant to the requirements of this chapter and upon adoption of an MOU pursuant to Section 13.7, the Area Plan shall serve as the standards and procedures for implementation of the Regional Plan. The standards and procedures within each Area Plan shall be considered and approved individually and shall not set precedent for other Area Plans.

Notes The Governing Board found the area plan to be in conformance with the Regional Plan on November 11, 2013. These amendments will be reviewed by the Governing Board prior to going into effect. The anticipated date of review by the Governing Board is January 26, 2022.

**2. Procedures for Adoption of Memorandum of Understanding**  YES  NO  N/A

*Citation* 13.7

*Requirement* An Area Plan shall be consistent with the Procedures for Adoption of a Memorandum of Understanding.

Notes A memorandum of understanding delegating permitting authority is already in place. No change is necessary.

**3. Monitoring, Certification, and Enforcement of an Area Plan**  YES  NO  N/A

*Citation* 13.8

*Requirement* An Area Plan shall include notification, monitoring, annual review, and recertification procedures consistent with Code Section 13.8.

Notes TRPA has conducted routine monitoring, annual review, and recertification of the TCAP.

**4. Appeal Procedure**

YES  NO  N/A

*Citation* 13.9

*Requirement* The Area Plan shall include an appeal procedure consistent with Code Section 13.9.

*Notes*

Final decisions made by the City in accordance with the TCAP/MOU may be appealed to TRPA in accordance with Section 13. 9 of TRPA Code. No change is proposed as part of these amendments.

Attachment F

TRPA Adopting Ordinance 2022-\_\_

TAHOE REGIONAL PLANNING AGENCY  
ORDINANCE 2022-\_\_

AN AMENDMENT TO ORDINANCE NO. 2020-06 TO ADOPT  
TOURIST CORE AREA PLAN AMENDMENTS

The Governing Board of the Tahoe Regional Planning Agency (TRPA) does ordain as follows:

Section 1.00 Findings

- 1.10 It is desirable to amend TRPA Ordinance 2020-06 by amending the Tourist Core Area Plan to further implement the Regional Plan pursuant to Article VI (a) and other applicable provisions of the Tahoe Regional Planning Compact.
- 1.20 The Tourist Core Area Plan amendments were the subject of an Initial Environmental Checklist (IEC), which was processed in accordance with Chapter 3: *Environmental Documentation* of the TRPA Code of Ordinances and Article VI of the Rules of Procedure. The Tourist Core Area Plan amendments have been determined not to have a significant effect on the environment and are therefore exempt from the requirement of an Environmental Impact Statement (EIS) pursuant to Article VII of the Compact.
- 1.30 The Advisory Planning Commission (APC) and the Governing Board have each conducted a noticed public hearing on the proposed Tourist Core Area Plan amendments. The APC has recommended Governing Board adoption of the necessary findings and adopting ordinance. At these hearings, oral testimony and documentary evidence were received and considered.
- 1.40 The Governing Board finds that the Tourist Core Area Plan amendments adopted hereby will continue to implement the Regional Plan, as amended, in a manner that achieves and maintains the adopted environmental threshold carrying capacities as required by Article V(c) of the Compact.
- 1.50 Prior to the adoption of these amendments, the Governing Board made the findings required by TRPA Code of Ordinances Section 4.5, and Article V(g) of the Compact.
- 1.60 Each of the foregoing findings is supported by substantial evidence in the record.

Section 2.00 TRPA Code of Ordinances Amendments

Ordinance 2020-06, as previously amended, is hereby amended by amending the Tourist Core Area Plan as set forth in Exhibit 1.

Section 3.00    Interpretation and Severability

The provisions of this ordinance amending the TRPA Code of Ordinances adopted hereby shall be liberally construed to affect their purposes. If any section, clause, provision or portion thereof is declared unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance and the amendments to the Regional Plan Package shall not be affected thereby. For this purpose, the provisions of this ordinance and the amendments to the Regional Plan Package are hereby declared respectively severable.

Section 4.00    Effective Date

The provisions of this ordinance amending the Tourist Core Area Plan shall become effective on adoption.

PASSED AND ADOPTED by the Tahoe Regional Planning Agency Governing Board at a regular meeting held on \_\_\_\_\_, 2022, by the following vote:

Ayes:

Nays:

Abstentions:

Absent:

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Mark Bruce, Chair  
Tahoe Regional Planning Agency,  
Governing Board

Exhibit 1 to Attachment F

Proposed Amendments to the Tourist Core Area Plan, Appendix C

# EXHIBIT 1

Amendment is red and underlined. Language that would be deleted is blue and is struck through. No other changes to the TCAP are proposed.

Table 1: PERMITTED USES BY ZONING DISTRICT								
Permitted Uses Key: "A" – Allowed Use "S" – Special Use "T" – Temporary Use "TRPA" – TRPA Review Required "." – Use Not Permitted	TSC-C	TSC-MU	TSC-MUC	TSC-NMX	TSC-G	TSC-G Special Area 1	REC	OS
<b>RESIDENTIAL</b>								
Domestic Animal Raising	-	-	-	-	-	-	S	-
Employee Housing	S	S	A	S	S	S	A	-
Multiple Family Dwelling	A	A	A	A	A	A	-	-
Multi-Person Dwelling	S	S	S	S	S	S	-	-
Single Family Dwelling (includes condominiums)	A <sup>B</sup>	A	A	A	A	A	S <sup>1</sup>	-
<b>TOURIST ACCOMMODATION</b>								
Bed & Breakfast Facilities	-	A	A <sup>9</sup>	S	A	A	-	-
Hotel, Motel, Other Transient Dwelling Units	A	A	A <sup>9</sup>	S	A	A	-	-
Time Sharing	A	A	A <sup>9</sup>	S	S	A	-	-
<b>RETAIL COMMERCIAL</b>								
General Retail and Personal Services	A	A	A <sup>9</sup>	S	A	A	-	-
Building Material & Hardware	S <sup>6</sup>	-	-	-	-	S	-	-
Nursery	-	-	A <sup>9</sup>	-	-	S	-	-
Outdoor Retail Sales	A	-	S <sup>9</sup>	-	-	S	-	-
Eating & Drinking Places	A	S	A <sup>9</sup>	S	A	A	-	-
Service Stations <sup>11</sup>	S	S	-	-	S	S	-	-
<b>ENTERTAINMENT COMMERCIAL</b>								
Amusement & Recreation	S	S	-	-	-	A	-	-
Privately Owned Assembly and Entertainment	S	S	-	-	-	S	S	-
Outdoor Amusements	-	S	S	-	S	S	S	-
<b>SERVICE COMMERCIAL</b>								
Business Support Services	A <sup>7</sup>	S	S <sup>9</sup>	-	S	A	-	-
Health Care Services	A <sup>2,5</sup>	-	A <sup>9</sup>	-	A	A	-	-
Professional Offices	A <sup>3,4</sup>	A	A <sup>9</sup>	A	A	A	-	-
Schools – Business & Vocational	S	-	S <sup>9</sup>	-	S	A	-	-
<b>LIGHT INDUSTRIAL COMMERCIAL</b>								
Small Scale Manufacturing	S	S	S <sup>9</sup>	S	-	<span style="color: red;">S<sup>12</sup></span>	-	-



**Table 1: PERMITTED USES BY ZONING DISTRICT**

Permitted Uses Key: "A" – Allowed Use "S" – Special Use "T" – Temporary Use "TRPA" – TRPA Review Required "- " – Use Not Permitted	TSC-C	TSC-MU	TSC-MUC	TSC-NMX	TSC-G	TSC-G Special Area 1	REC	OS
<u>Industrial Services</u> <sup>11</sup>	-	-	-	-	-	S <sup>12</sup>	-	-
<b>WHOLESALE/STORAGE COMMERCIAL</b>								
Vehicle Storage & Parking <sup>11</sup>	S	S	S <sup>9</sup>	S	S	S	-	-
<u>Wholesale and Distribution</u>						S <sup>12</sup>		
<b>GENERAL PUBLIC SERVICE</b>								
Religious Assembly	-	S	S <sup>9</sup>	-	S	A	-	-
Cultural Facilities	S	S	S <sup>9</sup>	-	S	A	-	-
Daycare Centers/Preschool	A	A	A <sup>10</sup>	A	A	A	-	-
Government Offices	-	-	A <sup>9</sup>	-	-	S	-	-
Local Assembly & Entertainment	S	S	-	-	-	S	-	-
Local Public Health and Safety Facilities <sup>11</sup>	A	A	A	A	A	A	A	A
Public Owned Assembly & Entertainment	S	S	-	-	-	-	S	-
Public Utility Centers <sup>11</sup>	-	S	-	-	-	-	-	-
Social Service Organizations	-	-	A <sup>9</sup>	-	A	A	-	-
<b>LINEAR PUBLIC FACILITIES</b>								
Pipelines & Power Transmission	S	S	S	S	S	S	S	S
Transit Stations & Terminals	S	S	S	S	S	S	S	S
Transportation Routes	S	S	S	S	S	S	S	S
Transmission & Receiving Facilities	S	S	S	S	S	S	S	S
<b>RECREATION</b>								
Cross Country Ski Courses	-	-	-	-	-	-	S	-
Day Use Areas	A	A	A	A	A	A	A	A
Group Facilities	-	-	-	-	-	-	S	-
Outdoor Recreation Concessions	-	-	-	-	S	S	-	-
Participant Sport Facilities	S	-	-	-	-	-	-	-
Riding and Hiking Trails	-	-	-	-	-	-	S	-
Rural Sports	-	-	-	-	-	-	S	-
Snowmobile Courses	-	-	-	-	-	-	S	-
Visitor Information Centers	S	S	-	-	S	A	-	-
<b>RESOURCE MANAGEMENT</b>								

**Table 1: PERMITTED USES BY ZONING DISTRICT**

Permitted Uses Key: "A" – Allowed Use "S" – Special Use "T" – Temporary Use "TRPA" – TRPA Review Required "-" – Use Not Permitted	TSC-C	TSC-MU	TSC-MUC	TSC-NMX	TSC-G	TSC-G Special Area 1	REC	OS
Forest and Timber Resource Management	A	A	A	A	A	A	A	A
Vegetation Resource Management	A	A	A	A	A	A	A	A
Water Quality Improvements and Watershed Management	A	A	A	A	A	A	A	A
Wildlife and Fisheries Resource Management	A	A	A	A	A	A	A	A
Range Management	-	-	-	-	-	-	A	-
<b>OPEN SPACE</b>								
Allowed in all areas of the Region	A	A	A	A	A	A	A	A
<b>SHOREZONE (Tolerance Districts 1 and 4)</b>								
Water Oriented Outdoor Recreation Concession					TRPA-A	TRPA-A		
Beach Recreation					TRPA-A	TRPA-A		
Water Borne Transit					TRPA-S	TRPA-S		
Boat Launching Facilities					TRPA-S	TRPA-S		
Tour Boat Operations					TRPA-S	TRPA-S		
Safety and Navigation Devices (Shorezone District 4)					TRPA-A	TRPA-A		
Marinas					TRPA-S	TRPA-S		
Buoys					TRPA-A	TRPA-A		
Piers					TRPA-S	TRPA-S		
Fences					TRPA-S	TRPA-S		
Boat Ramps					TRPA-S	TRPA-S		
Floating Docks and Platforms					TRPA-S	TRPA-S		
Shoreline Protective Devices					TRPA-S	TRPA-S		

**Table 1: PERMITTED USES BY ZONING DISTRICT**

Permitted Uses Key: "A" – Allowed Use "S" – Special Use "T" – Temporary Use "TRPA" – TRPA Review Required "-" – Use Not Permitted	TSC-C	TSC-MU	TSC-MUC	TSC-NMX	TSC-G	TSC-G Special Area 1	REC	OS
Water Intake Lines					TRPA-A	TRPA-A		

Note: In the Regional Center all residential projects equal to or exceeding 100,000 square feet of new floor area or non-residential projects equal to or exceeding 80,000 square feet of new floor area require TRPA review and approval. In the Town Center all residential projects equal to or exceeding 50,000 square feet of new floor area or non-residential projects equal to or exceeding 40,000 square feet of new floor area require TRPA review and approval.

1. Caretaker Residence Only
2. All Health Care Services are allowed except emergency outpatient or urgent care facilities which shall only be considered along Heavenly Village Way, formerly Park Avenue.
3. Allow Realty Offices within the district and limit financial services to ATMs.
4. Allow consideration for placement of Realty Offices within the district, and only when operated in conjunction with approved Park Avenue Redevelopment fractional ownership tourist accommodation projects. Such use shall occupy no more than five percent (5%) of the commercial floor area with any project area within the district.
5. All Health Care Services uses permissible throughout special district; provided that any Health Care Services uses proposed to front on either side of US Highway 50 and/or the intersections of Heavenly Village Way (formerly Park Avenue) and Stateline Avenue are limited to second floor or higher. See TRPA Ordinance 2009-05 Exhibit 2 for specific limitation locations.
6. Outdoor storage and display is prohibited.
7. Shall not front on US Highway 50.
8. Condominiums only.
9. Use not permitted in Special Area #1, which comprises of APNs 028-081-02, 028-081-04 & 028-081-15.
10. Daycare center allowed as an accessory use.
11. Land use category is identified in TRPA Code Section 60.3 as a "possible contaminating activity," triggering special requirements pursuant to TRPA Code Section 60.4 if located within a Source Water Protection Zone.
12. Use only allowed in connection with a retail commercial use where it will enhance the visitor experience and is limited in size to 30% of the associated retail space.

**Table 2: LIST OF PRIMARY USES AND USE DEFINITIONS**

USE	DEFINITIONS
LIGHT INDUSTRIAL COMMERCIAL	

**Table 2: LIST OF PRIMARY USES AND USE DEFINITIONS**

USE	DEFINITIONS
Industrial Services	<p><del>Establishments providing light industrial services to an associated retail commercial primary use while providing educational and/or demonstration opportunities to the public. Services establishments providing other businesses with services, including maintenance, repair, service, testing, publishing, and rental. This includes establishments such as: welding repair, armature rewinding, and heavy equipment repair, vehicle repair, (except vehicle repair, see "Auto Repair and Service"); research and development laboratories, including testing facilities, soils and materials testing laboratories; equipment rental businesses that are entirely within buildings (for equipment rental yards, see "Sales Lots"), including leasing tools, machinery and other business items except vehicles; and other business services of a "heavy service" nature. Outside storage or display is included as part of the use.</del></p>
Small Scale Manufacturing	<p>Establishments primary engaging in retail sales and secondarily as a fine art or craftsman demonstration workshop of light industrial nature such as sculptor, potter, weaver, carver, jeweler, or other similar art that requires artistic skill . Outside storage or display would require approval of a Special use Permit.</p>
<b>WHOLESALE/STORAGE COMMERCIAL</b>	
Vehicle Storage & Parking	<p>Service establishments primarily engaged in the business of storing operative cars, buses, or other motor vehicles. The use includes both day use and long-term public and commercial garages, parking lots, and structures. Outside storage or display is included as part of the use. The use does not include wrecking yards (see "Recycling and Scrap").</p>
<u>Wholesale and Distribution</u>	<p><u>Retail commercial establishments engaged in, as a secondary use, the storage of merchandise and distribution of products for sale.</u></p>



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STAFF REPORT

Date: February 16, 2022  
To: TRPA Governing Board  
From: Lake Tahoe Community College Staff  
Subject: LTCC Briefing on Campus Master Site Plan and Future Projects

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Summary and Staff Recommendation:

LTCC staff will provide a briefing of the Campus Master Site Plan and potential projects that may be presented to the TRPA Governing Board for permit consideration in the future. This item is for informational purposes and no action is required.

Background:

Lake Tahoe Community College has served the Tahoe Basin since 1975 as an educator, employer, and landowner. LTCC property covers 147 acres centralized in South Lake Tahoe. Construction of the current campus began in 1986. In 2014, LTCC passed the Measure F General Obligation bond which provides funding for modernization of current facilities and construction of specified new facilities.

The Lake Tahoe Community College 2020-2030 Campus Master Site Plan (CMSP) was approved by the LTCC Board of Trustees on March 24, 2020. The LTCC 2020-2030 CMSP is an update to the 2011 Campus Master Site Plan which was the basis for passage of the 2014 Measure F bond. The plan has been updated periodically to reflect completed projects as well as the most current planning and site design layout.

LTCC staff will present the TRPA Governing Board with an overview of current and future projects on campus. Focus of the presentation will be on LTCC's alignment with TRPA's Vision and Mission and how LTCC acts as a partner in implementing the Regional Plan.

- LTCC History and Role in the Tahoe Basin
- LTCC Campus Master Site Plan
- Protecting the Natural Environment
- Planning and Building for Alternative Transportation
- Projects and Programs in Public Safety, Fire Protection, and Forestry
- Addressing the Housing Crisis

Contact Information:

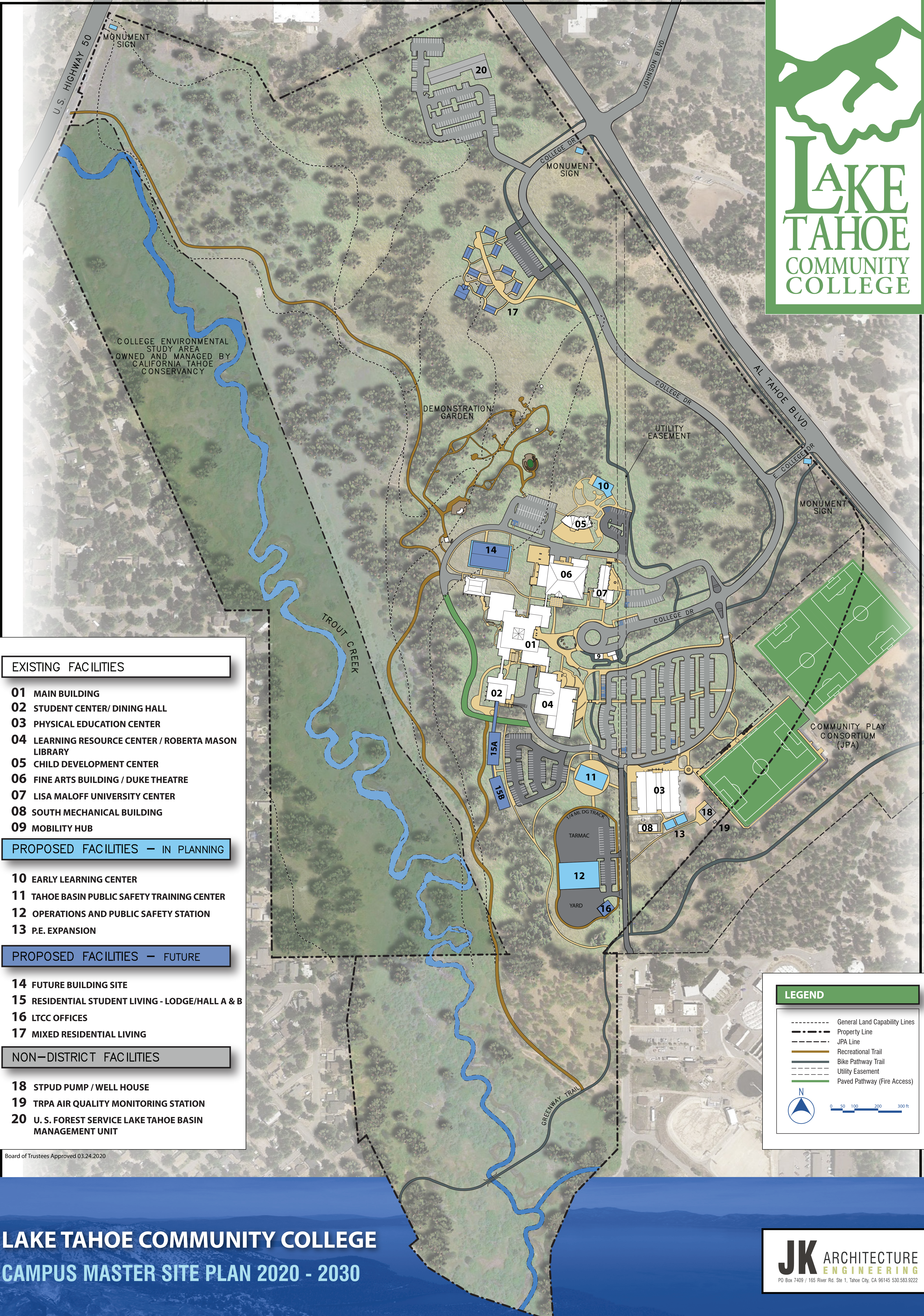
For questions regarding this agenda item, please contact Brandy McMahon, Local Government Coordinator Current Planning Division, (775) 589-5274 or [bmcmahon@trpa.gov](mailto:bmcmahon@trpa.gov); Jeff DeFranco, Superintendent/President, (530) 541-4660, ext. 210 or [defranco@ltcc.edu](mailto:defranco@ltcc.edu); or Al Frangione, Director of Facilities and Capital Construction, (530) 541-4660, ext. 322 or [afrangione@ltcc.edu](mailto:afrangione@ltcc.edu).

Attachment:

- A. LTCC Campus Master Site Plan

Attachment A

LTCC Campus Master Site Plan



**EXISTING FACILITIES**

- 01** MAIN BUILDING
- 02** STUDENT CENTER / DINING HALL
- 03** PHYSICAL EDUCATION CENTER
- 04** LEARNING RESOURCE CENTER / ROBERTA MASON LIBRARY
- 05** CHILD DEVELOPMENT CENTER
- 06** FINE ARTS BUILDING / DUKE THEATRE
- 07** LISA MALOFF UNIVERSITY CENTER
- 08** SOUTH MECHANICAL BUILDING
- 09** MOBILITY HUB

**PROPOSED FACILITIES — IN PLANNING**

- 10** EARLY LEARNING CENTER
- 11** TAHOE BASIN PUBLIC SAFETY TRAINING CENTER
- 12** OPERATIONS AND PUBLIC SAFETY STATION
- 13** P.E. EXPANSION

**PROPOSED FACILITIES — FUTURE**

- 14** FUTURE BUILDING SITE
- 15** RESIDENTIAL STUDENT LIVING - LODGE/HALL A & B
- 16** LTCC OFFICES
- 17** MIXED RESIDENTIAL LIVING

**NON-DISTRICT FACILITIES**

- 18** STPUD PUMP / WELL HOUSE
- 19** TRPA AIR QUALITY MONITORING STATION
- 20** U. S. FOREST SERVICE LAKE TAHOE BASIN MANAGEMENT UNIT

**LEGEND**

- General Land Capability Lines
- Property Line
- JPA Line
- Recreational Trail
- Bike Pathway Trail
- Utility Easement
- Paved Pathway (Fire Access)

N

0 50 100 200 300 ft

Board of Trustees Approved 03.24.2020

**LAKE TAHOE COMMUNITY COLLEGE  
CAMPUS MASTER SITE PLAN 2020 - 2030**





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## STAFF REPORT

Date: February 16, 2022

To: TRPA Governing Board

From: TRPA Staff

Subject: Update on Measuring What Matters: The Thresholds and Monitoring Update Strategic Initiative

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### Summary and Staff Recommendation:

Staff will provide an update on Measuring What Matters: The Thresholds and Monitoring Update Strategic Initiative, and the work to leverage the partnership's significant investments in science and planning that will guide the update of threshold standards in the first six categories; air quality, fisheries, soil conservation, vegetation preservation, water quality, and wildlife.

This item is for informational purposes and no action is required.

### Background:

Following the 2015 Threshold Evaluation, the TRPA Governing Board identified the review and updating of the threshold standards and performance measures as a strategic initiative for the agency. The goals of the initiative are:

- A representative, relevant, and scientifically rigorous set of threshold standards.
- An informative, cost-efficient, and feasible monitoring and evaluation framework to support adaptive management towards threshold standard attainment.
- A robust and repeatable process for review of threshold standards in the future.

Since the initiative began, significant progress has been made on the clean-up of dated standards and the design of a revised structure for new standards. The first substantive revision -- to the air quality nitrogen emission standard converting it to a new Transportation and Sustainable Communities goal -- took a number of years. In order to better keep up with the changing challenges of the Basin, our goal is to accelerate the pace of other substantive threshold modifications and we look to you to help support this goal.

While TRPA and partners have been working on the strategic initiative to update threshold standards, the Environmental Improvement Program (EIP) partnership has been working to refine the plans, priorities, and science that underpins the actions the partnership implements to achieve the thresholds and improve the Region's resiliency. That work complements the revised threshold standards work on system structure and provides the groundwork for updating a broad swath of the threshold standards. At the December 2021 Tahoe Interagency Executive Steering Committee (TIE) meeting, the partnership endorsed making the threshold standard update a central component of its 2022 workplan, and at the

February meeting it reviewed the proposal for updating the standards (Attachment A). The proposal reflects a survey the current EIP goals and plans and new categories of threshold standards oriented to current and anticipated future challenges. The proposal sets the stage for the next phase of the partnership's work and charts the course for creating a more resilient Tahoe. The following sections of this staff report (Proposal Framework, Proposal Content, and Proposal Process) outline that course.

The threshold standards establish goals for environmental quality and express the desired outcomes for the Tahoe Region. The standards shape the goals and policies of the Lake Tahoe Regional Plan. The first set of threshold standards were adopted in 1982. To help reach these goals, a collaborative partnership of over 80 entities implements projects as part of the Environmental Improvement Program. The EIP has been the organizing program for the basin's restoration priorities for the last twenty-five years and guides millions of dollars of public and private investment in the basin.

After the Bi-State Compact was amended in 1980, TRPA and partners were afforded 18 months to develop the first set of threshold standards. Multi-agency teams worked diligently to meet the timeline and adopted standards that reflected the issues at that time. The region had just emerged from a post Olympics development boom, during which it was widely believed that development was causing environmental degradation and threatening Tahoe. The findings and declarations of the Compact summarized the sentiment of the time succinctly, *"Increasing urbanization is threatening the ecological values of the region and threatening the public opportunities for use of the public lands."* It was the threat from unconstrained development that was front of mind when the original thresholds were developed. The nearly 150 threshold standards adopted in 1982 articulate goals that can be broadly grouped into two categories, 1) the desire to protect something that might be lost to development, and 2) the desire to restore something that was damaged by development.

The 1982 threshold standards guided the development of the 1987 Regional Plan which included specific development caps and controls. The Regional Plan complemented action by many partners to control development through land acquisitions, permitting and enforcement, and advocacy for further environmental protections. While these actions alleviated much of the pressure, it soon became clear that more proactive capital improvement projects would be necessary to reach the desired outcomes set in 1982.

Ten years later after the 1987 Regional Plan was adopted, the Environmental Improvement Program (EIP) was born. The program is rooted in the collective desire to accelerate attainment of the threshold standards through cooperative action. Twenty-five years later, EIP partners have invested over \$2.6 billion to complete more than 700 lake-saving projects. These investments are critical to building systemic resiliency in the Tahoe Basin and preparing for new threats posed by climate change, population growth, and visitation. While our projects and programs have grown to address these emerging threats, we have not been as diligent in reviewing our threshold standards to ensure they continue to reflect what we are trying to accomplish.

The initial threshold standards set the course for the Region forty years ago but were never intended to be immutable. The multi-disciplinary team that authored the 1981 threshold study report suggested the standards should be reassessed at least every five years and wrote: "environmental thresholds are not static standards that once in place remain forever."

Over fifty years ago lawmakers wrote: “The waters of Lake Tahoe and other resources of the region are threatened with deterioration or degeneration, which endangers the natural beauty and economic productivity of the region.” The sentiment is as true today as it was fifty years ago. The Region is still threatened, but the threats have changed. Challenges such as climate change, catastrophic wildfire, traffic congestion, lack of affordable housing, population growth and redistribution, invasive species, and biodiversity loss, have replaced “deficiencies of environmental control” related to development as the primary dynamics.

As the EIP partnership has matured and adapted over time to address the needs of today, partners have centered much of their focus around building resilience in the Tahoe region. Resilience refers to the capacity of systems to cope with and adapt to stressors and disturbance while retaining the functions and benefits that people value. The interdependence and interconnectedness of the natural and social systems of our Region and beyond inform what we do and how we work. Creating healthy functioning environmental and social systems increases their ability to withstand the threats of today and tomorrow. The new thresholds should reflect our desired outcomes for social and ecological resilience: resilient forests, resilient lake ecosystems, and resilient communities.

#### Proposal Framework:

The proposal recommendations are rooted in our ongoing engagement with the Tahoe Science Advisory Council to review and update the threshold standards and how we measure and report progress towards those goals. Following two years of work with the Council, in April 2019 TRPA adopted a new adaptive management structure for managing information related to the threshold standards. Subsequently, the TIE endorsed the use of a complementary structure for EIP performance measures. The structure clearly defines three types of metrics and what role they play in our system.

#### Metric Types

Input Performance Measures (PMs) are the resources and quantity of work done. They are the basic measures of resources used, actions taken, and funds expended. Input PMs are important because they enable managers to meet grant reporting requirements, and track funds expended and project activity. For example, the number of Projects Implemented, Dollars Spent, and Miles of Street Sweeping are input PMs.

Output Performance Measures are the benefits or value arising from work done. They are the core performance reporting metrics. They provide the right combination of implementer control, attribution to actions, and relevance to desired outcomes to justify their reporting and incentivize effective actions. These metrics represent the multi-benefit value produced through the actions/strategies of project implementers. For example, fine sediment load reduction and volume of urban stormwater reduced are output PMs.

#### Threshold Standards

Threshold standards articulate the goals of the Tahoe partnership. They are used to:

- (1) Describe desired social and ecological conditions.
- (2) Articulate shared statutory goals and how progress toward meeting those goals should be measured; and
- (3) Inspire focused action to drive progress towards meeting shared goals.

Threshold standards are the quantifiable goals that are publicly valued and accepted as the end-result of programs. They are the long-term indicators of success. They provide a numeric perspective on quantifiable environmental and social values. They are often slow in responding to actions taken, challenging to attribute to individual management actions, and relatively expensive to measure. For example, (annual average) secchi depth is a threshold standard.

The adaptive management system structure that is the foundation of the proposed framework draws heavily from best practices and integrates four elements: (1) conceptual models – that ground threshold standards in the scientific understanding of ecosystem function, (2) results chains – that link management actions to desired outcomes, (3) management actions – that are the implementation strategies rooted in results chains to promote attaining and maintaining clearly articulated, specific and measurable goals (threshold standards), and (4) monitoring, evaluation, and learning – which provide the structure for incorporating new information into the conceptual models, results chains, and implementation strategies (i.e., design of policies, programs, and other means to accelerate threshold attainment). As adopted, the adaptive management structure provides specific criteria that new or revised thresholds standards must meet. The minimum criteria ensure that threshold standards embody three qualities:

Specific - The standard establishes a specific numeric target, and benchmark/baseline values are documented where necessary.

Measurable – The standard has clearly defined indicator(s) that link to the standard, and there are practical ways to measure progress towards attainment objectively and accurately.

Outcome-based – Standards establish a desired condition for an environmental or socioeconomic end state. Standards do not establish a means to achieve the desired outcome.

#### Proposal Content

Using the above structure as guide, the attached proposal is an outline around which threshold standards will be developed. The outline incorporates standards that are currently found in six categories: air quality, fisheries, soil conservation, vegetation preservation, water quality, and wildlife. Past feedback from partners suggested that the current structure of the threshold standards felt too restrictive and reflected a siloed world view that was not reflective of systems-based approaches used for management in the Region today. The proposal includes a reorganization of the forty-year-old category structure to better reflect the integrated systems that are the focus of management. In addition to the revised structure, the proposal includes “tagging” of potential standards as included in multiple systems. For example, standards for aquatic invasive species were placed in the “Watersheds and Water Quality” system but also include a “tag” for “Biodiversity” because control and removal of aquatic invasive species not only improves water quality, but also supports recovery and resilience of native species. The standards outlined leverage the significant time and investments the partnership has made in specific focus areas and the proposal draws heavily from EIP planning documents and EIP program activity over the last ten years as well as looking ahead to needs for the future.

The proposal is based on the significant body of work listed below.

#### Standard Structure

- EIP Blueprint for Climate Resilience (Lake Tahoe EIP, 2020).

- Guidance on Technical Clean Up of Existing Threshold Standards (TSAC, 2018a).
- Natural Resource Evaluation Systems: Assessment of Best Practices for the Tahoe Regional Planning Agency (TSAC, 2017).
- Structuring Data to Facilitate Management of Threshold Standards (TSAC, 2018b).
- Summary Science Report on Lake Tahoe Clarity and Associated Conditions, 2021 (TSAC, 2021).
- A Proposed Watershed Protection Program Evaluation Approach - An approach for funders, regulators, and permittees to design, evaluate and report watershed protection programs (EI, 2020).
- Tahoe Climate Adaptation Primer (California Tahoe Conservancy, 2021).
- Peer Review of the Tahoe Regional Planning Agency's 2015 Threshold Evaluation Report (Hall et al., 2016).

#### Watersheds and Water Quality

- Final Lake Tahoe Total Maximum Daily Load Report (Lahontan and NDEP, 2010).
- Lake Tahoe Seasonal and Long-Term Clarity Trend Analysis (TSAC, 2020a).
- Report on the Status of the Lake Tahoe Clarity Model (TSAC, 2020b).
- Lake Tahoe Aquatic Plant Monitoring Program: 2018 Lake Tahoe Nearshore Aquatic Plant Status Report (MTS, 2020).
- Lake Tahoe Aquatic Plant Monitoring Program: Aquatic Plant Monitoring and Evaluation Plan (MTS, 2019).
- Lake Tahoe Region Aquatic Invasive Species Management Plan (TRPA, 2014).
- Lake Tahoe Region AIS Action Agenda, 2021–2030 (DeBruyckere, 2019).
- Restructure of the Water Quality Threshold Standards (TRPA, 2020a).
- Lake Tahoe Basin Stream Environment Zone (SEZ) Baseline Condition Assessment (TRPA, 2020b).
- SEZ Basin-wide Monitoring and Assessment Plan (TRPA and NCE, 2021).
- Threshold Standards and Regional Plan (TRPA, 2019).

#### Forest Health

- Lake Tahoe West Collaborative Landscape Resilience Assessment (Gross et al., 2017).
- Lake Tahoe West Collaborative Landscape Resilience Assessment Landscape Restoration Strategy (LTW, 2019).
- Lake Tahoe West Science Summary of Findings Report (LTW Science Team, 2020).
- Fire Adapted Communities: The Next Step in Wildfire Preparedness (TFFT, 2017).
- Lake Tahoe Basin Forest Action Plan: Protecting Communities Restoring Landscapes (California Tahoe Conservancy, 2019).

#### Biodiversity

- Lake Tahoe Region AIS Action Agenda, 2021–2030 (DeBruyckere, 2019).
- Lake Tahoe West Collaborative Landscape Resilience Assessment (Gross et al., 2017).

- Lake Tahoe West Collaborative Landscape Resilience Assessment Landscape Restoration Strategy (LTW, 2019).
- Lake Tahoe West Science Summary of Findings Report (LTW Science Team, 2020).
- Threshold Standards and Regional Plan (TRPA, 2019).
- Updated Goals and Objectives for the Conservation of Lahontan Cutthroat Trout (LCTMOG and LCTCC, 2019).
- Conservation strategy for Tahoe yellow cress (*Rorippa subumbellata*) (Stanton and TYCAMWG, 2015).

#### Air Quality

- Threshold Standards and Regional Plan (TRPA, 2019).

#### Proposal Process

The proposal identifies focal points for development of threshold standards for review by stakeholders. Initial review should focus on the completeness of the proposal in capturing the focus of management today. The proposal details the areas that will be the focus of standard development. Following feedback from stakeholders and discussion with relevant working groups, the proposal will be refined by April 2022. The revised proposal will be used to develop threshold standards. Standard development will work through the relevant EIP working groups, partners, and stakeholders. The process will include and an expanded engagement with the Tahoe Science Advisory Council, and a reconvening of the Threshold Update Initiative Stakeholders Working Group. As the standard development progresses, staff will provide updates of progress on a quarterly basis between April and December of 2022. Beginning in January 2023 we plan to bring the new standards forward through TRPA's formal adoption process.

#### Contact Information:

For questions regarding this item, please contact Dan Segan, Principal Natural Resource Analyst, at (775) 589-5233, [dsegan@trpa.gov](mailto:dsegan@trpa.gov).

#### Attachment:

- A. Outline for threshold standard development

Attachment A

Outline for threshold standard development

## Attachment A: Outline for threshold standard development

The proposed outline below groups threshold standards into four cross-cutting categories. To show that the proposed thresholds cross multiple categories as part of a system, icons or “tags” are used as indicators. The tags are as follows:

### **Watersheds and Water Quality**

Goal: Maintain and improve lake clarity and water quality. Enhance ecosystem health and promote resilience. Prevent the introduction of new aquatic invasive species and reduce the abundance and distribution of known aquatic invasive species. Abate harmful ecological, economic, social, and public health impacts resulting from aquatic invasive species. Attain all applicable state water quality standards.

### **Forest Health**

Goal: Protect communities from damaging wildfire, restore ecosystem health and resilience, improve and enhance wildlife habitat.

### **Biodiversity**
















Goal: Maintain and restore native species populations and habitat, including threatened, endangered, and sensitive species.

### **Air Quality**













Goal: Preserve and improve air quality and regional and subregional visibility. Attain all applicable state and federal air quality standards.








## Watersheds and Water Quality

THRESHOLD STANDARDS	SYSTEM TAGS
1) DEEP LAKE CLARITY – TAHOE TMDL TARGET FOR LAKE CLARITY	 
2) NEARSHORE ALGAE – TARGET FOR ALL NEARSHORE ALGAE (METAPHYTON/PERIPHYTON)	 
3) NO NEW AIS – RETAIN CURRENT STANDARD	 
4) AIS CONTROL GOAL – TARGET FOR REDUCTION IN THE ABUNDANCE AND DISTRIBUTION OF AIS FROM AIS ACTION PLAN	  
5) TRIBUTARY HEALTH – SEZ CONDITION INDEX / BIOASSESSMENT SCORE	  
6) MEADOW AND STREAM RESTORATION – USE SEZ CONDITION INDEX TO ESTABLISH A NEW RESTORATION GOAL FOR THE REGION	  







## Forest Health

THRESHOLD STANDARDS	SYSTEM TAGS
1) COMPOSITION AND AGE – PROMOTE A RESILIENT MIX OF SERAL STAGES IN THE FOREST.	 
2) STAND DENSITY – STAND DENSITY TARGETS FOR GENERAL FOREST AREA TO BE IN RESILIENT CONDITION.	  
3) STAND STRUCTURE – LANDSCAPE RESILIENCE AS MEASURED BY HORIZONTAL HETEROGENEITY.	 
4) WILDLAND URBAN INTERFACE WILDFIRE PROTECTION – PREDICTED FLAME LENGTHS ARE UNDER 90TH PERCENTILE FIRE WEATHER CONDITIONS ARE LESS THAN FOUR FEET HIGH ACROSS 90% OF THE WILDLAND-URBAN INTERFACE DEFENSE ZONE. THE AREAS WITH PREDICTED FLAME LENGTHS OVER FOUR FEET ARE GENERALLY-WELL DISTRIBUTED, DO NOT EXCEED ONE ACRE PER PATCH, AND ARE NOT WITHIN 100 FEET OF STRUCTURES OR INFRASTRUCTURE.	  
5) LANDSCAPE FIRE DYNAMICS STANDARD – LIMIT HIGH SEVERITY PATCH SIZE TO NO MORE THAN 40 ACRES.	 

## **Biodiversity**

<b>THRESHOLD STANDARDS</b>	<b>SYSTEM TAGS</b>
1) INDEX OF BIRD DIVERSITY – SURROGATE OF ECOSYSTEM HEALTH, INCORPORATES POPULATION TRENDS OF A SUITE OF REPRESENTATIVE SPECIES	
2) PLANT (OR OTHER SPECIES) BIODIVERSITY INDEX – SURROGATE OF ECOSYSTEM HEALTH, INCORPORATES POPULATION TRENDS OF A SUITE OF REPRESENTATIVE SPECIES	
3) LAHONTAN CUTTHROAT TROUT – ALIGN WITH VISION OF RECOVERY ENDORSED BY THE LAHONTAN CUTTHROAT TROUT MANAGEMENT OVERSIGHT GROUP.	
4) TAHOE YELLOW CRESS – ALIGN TAHOE YELLOW CRESS GOAL WITH CONSERVATION STRATEGY.	
5) DEEPWATER COMMUNITIES – PROTECTION OF DEEPWATER ENDEMIC PLANTS/INVERTEBRATES OF LAKE TAHOE.	

## **Air Quality**

<b>THRESHOLD STANDARDS</b>	<b>SYSTEM TAGS</b>
1) CARBON DIOXIDE - 8 HR AVERAGE – RETAIN CURRENT STANDARD	
2) OZONE – 1 HR STANDARD – RETAIN CURRENT STANDARD	
3) REGIONAL VISIBILITY – 50% STANDARD – RETAIN CURRENT STANDARD	
4) REGIONAL VISIBILITY – 90% STANDARD – RETAIN CURRENT STANDARD	
5) SUBREGIONAL VISIBILITY – 50% STANDARD – RETAIN CURRENT STANDARD	
6) SUBREGIONAL VISIBILITY – 90% STANDARD – RETAIN CURRENT STANDARD	

Bi-State Compact Definition - *“Environmental threshold carrying capacity” means an environmental standard necessary to maintain a significant scenic, recreational, educational, scientific or natural value of the region or to maintain public health and safety within the region. Such standards shall include but not be limited to standards for air quality, water quality, soil conservation, vegetation preservation and noise.”*



## STAFF REPORT

Date: February 16, 2022  
To: TRPA Governing Board  
From: TRPA Staff  
Subject: 2021 Annual Report

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### Summary and Staff Recommendation:

Staff presents the attached summary report of TRPA's strategic focus and accomplishments throughout 2021. This item is for informational purposes and no action is required.

### Background:

TRPA carries out strategic initiatives that the Governing Board has identified as work program priorities for the agency. These initiatives align directly with objectives in the agency's Strategic Plan and work toward accomplishing the agency's mission as directed by the Bi-State Tahoe Regional Planning Compact.

The attached annual report outlines accomplishments and progress made in 2021, an especially trying year for the Tahoe Region due to the pandemic, the Tamarack and Caldor fires, evacuations, and severe weather events. The report also highlights areas of special focus for agency teams going forward.

Following the annual report is a report on Regional Plan Performance Measures, which includes an analysis of development right transfer activity under the Development Rights Strategic Initiative.

### Contact Information:

For questions regarding this agenda item, please contact Joanne Marchetta, at (775) 589-5226 or [jmarchetta@trpa.gov](mailto:jmarchetta@trpa.gov).

### Attachments:

- A. 2021 Annual Report
- B. 2021 Regional Plan Performance Measures

Attachment A  
2021 Annual Report

# 2021 ANNUAL REPORT

The Year Lake Tahoe Was Spared



**TRPA GOVERNING BOARD**

**Mark Bruce, Chair**

Governor of Nevada Appointee

**Cindy Gustafson, Vice Chair**

Placer County Supervisor

**Shelly Aldean**

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California Senate Rules Committee  
Appointee



Photo: CAL FIRE

Cover Photo: Sarah Underhill

## To the TRPA Governing Board and Lake Tahoe Community,

This TRPA Annual Report reflects back on a year that tested the resilience of the Lake Tahoe Region like no other. On top of 18 months of COVID pandemic disruptions, the Caldor Fire in August and September inflicted new loss and destruction across more than 221,000 acres of forest in and around Tahoe at an astonishing rate. Our neighbors just out of the basin to the west lost 1,000 homes and businesses, and much cherished forestland is forever changed.

In fact, fires burned all around us in 2021—68,000 acres at the Tamarack Fire near Markleeville, and nearly 1 million acres at the Dixie Fire to our north. Yet Lake Tahoe communities, remarkably, were spared. More than 30,000 residents safely evacuated from South Lake Tahoe and neighboring communities and not a single home or life was lost.

The fires affected us all on both personal and professional levels. We watched and hoped that TRPA's historic role in the formation and work of the Tahoe Fire and Fuels Team, plus the basin partnership's years of preparation, would pay off. We wondered if the collaborative forest health policy improvements and forest fuel reduction projects we have stood behind for years would have the desired effect.

Thanks to the resolve of many heroic firefighters and a fortuitous change in wind direction, the answer was a resounding yes.

The unwavering commitment of more than 21 Tahoe Fire and Fuels Team partners to hazardous fuel reduction and community wildfire protection helped save our communities and stem the destruction of a major wildfire.

For fifteen years, TRPA has stood on the same steadfast commitment to building and strengthening partnerships in everything we do.

In bringing forward affordable housing solutions, methods to reduce the threat of aquatic invasive species, adaptations to climate change, and new public-private partnerships in sustainable recreation and tourism, TRPA and our partners are confronting Lake Tahoe's most intractable challenges by working together. As TRPA continues making progress on the Strategic Initiatives set by our Governing Board, I welcome you to join us in this collaborative work. Thank you for doing your part to improve Lake Tahoe's future for all.

Sincerely,



Joanne S. Marchetta  
Executive Director  
Tahoe Regional Planning  
Agency



**TAHOE  
REGIONAL  
PLANNING  
AGENCY**

# TRPA STRATEGIC INITIATIVES

Set by the Governing Board, these strategic initiatives reflect the agency's commitment to protect Lake Tahoe's environment while improving regional transportation, increasing diverse housing options, and facilitating community revitalization.

**Building Resiliency: Climate Change and Sustainability** ● Increase the long-term resilience of the natural and built environments by reducing greenhouse gas emissions and combining natural resource protection with healthy communities.

**Keeping Tahoe Moving: Transportation and Sustainable Recreation** ● Implement the Regional Transportation Plan to improve transportation systems for residents and commuters, and meet visitor recreation needs while protecting the environment.

**Tahoe Living: Housing and Community Revitalization** ● Implement strategies that result in affordable housing options, environmental redevelopment, and walkable, bikeable communities.

## **Restoration Blueprint: Environmental Improvement Program**

**Implementation** ● Lead the restoration of Lake Tahoe's environment and revitalization of its communities through collaboration and public/private investments.

## **Measuring What Matters: Thresholds and Monitoring Update** ●

Streamline and improve the threshold standards and monitoring programs TRPA uses to measure progress in conserving and restoring Lake Tahoe's environment.

**Digital First: Innovation** ● Help property owners navigate the permit process with transparency and predictability across agencies.



## Initiative Highlight – Building Resiliency: Climate Change and Sustainability

Orienting the Tahoe Basin to climate resilience means adapting all of Tahoe’s systems. In response, every TRPA initiative includes strategies to strengthen the sustainability and resilience of Tahoe’s environment, communities, and economy. Working across teams and with partners, emphasis on systemic change in Tahoe’s transportation and visitation management, forest health, community revitalization, and threshold measures of success are the first actions needed to further reduce greenhouse gas emissions and help meet the climate change goals of California, Nevada, and local governments.

### Key 2021 Accomplishments

- Updated the regional greenhouse gas emissions inventory. The report spotlights the potential for reducing regional emissions by removing buildings located in sensitive stream environment zones.
- Supported development of climate adaptation action plans and programs, including the California Tahoe Conservancy’s Lake Tahoe Climate Portfolio and the bi-state Climate Resilience Action Plan.
- Advanced forest management policy changes to increase the pace and scale of forest health treatments needed to reduce the catastrophic loss of forest land in wildfire.
- Furthered transportation and sustainable recreation programs with grant writing, project management, and weekly recreation and tourism coordination to address new visitor management challenges.

### Future Focus

- Support new transportation revenue generation initiatives for transit and parking improvements along high-use recreation corridors.
- Ensure the continuation of basin-wide investments in electric vehicle infrastructure.
- Accelerate climate adaptation with updates to climate action plans, the Environmental Improvement Program, environmental threshold standards, and the Code of Ordinances.

### PROJECT SPOTLIGHT

#### Electric Boat Charging Station

Homewood High and Dry Marina installed the first on-the-water electric boat charging station at Lake Tahoe. The alternative fuel source combines cutting-edge technology with environmental stewardship to welcome electric watersport recreation to the basin.



Photo: Ingenuity Electric

## Initiative Highlight – Keeping Tahoe Moving: Transportation and Sustainable Recreation

**R**ecreation demand at Lake Tahoe is growing. To meet it, Tahoe partners are creating interconnected transportation options for travel without a personal automobile. Tahoe’s sustainable transportation future includes climate resilience, greenhouse gas emission reduction, an improved recreation experience, equitable transit, and the prosperity of the region. TRPA and partners will achieve that sustainable future with strategic investments in capital projects, transit, multi-use paths, and parking management to meet visitor, resident, and commuter demand while protecting the Tahoe Basin’s unique natural resources.

### Key 2021 Accomplishments

#### 2020 Regional Transportation Plan and Initiatives:

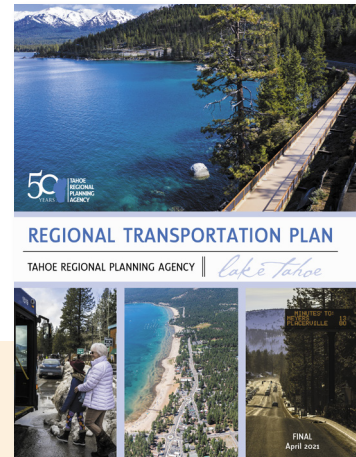
- Adopted the region’s first new environmental threshold category. With the Transportation & Sustainable Communities threshold goals and indicators, TRPA and partners will align transportation and land use projects and plans with actions that reduce vehicle miles traveled in the basin.
- Awarded \$11 million through the Linking Tahoe Regional Grant Program. The seven award-winning projects will reduce congestion, expand regional trails, support sustainable recreation and tourism, and enhance climate resiliency.
- Facilitated alignment on revenue options through the Bi-State Consultation on Transportation Working Group.

#### Sustainable Recreation and Tourism:

- Organized a new 30-member collaborative partnership on recreation and tourism issues. Convened the first Tahoe Sustainable Recreation and Tourism workshop that established a path forward for land managers and visitors authorities to achieve a shared vision for the future of tourism.
- Supported partners’ launch of summer ambassador programs at recreation areas to expand stewardship, encourage responsible behavior, and monitor impacts.

### Future Focus

- Create partnerships to accomplish transportation improvements in Tahoe’s busiest recreation corridors.
- Secure new revenue sources with state and local partners to close the gap in transportation funding in the basin.
- Establish a Future of Tourism action plan with sustainable recreation management strategies to address growing visitor and recreation pressures.



### PROJECT SPOTLIGHT

#### Regional Transportation Plan Adoption

The TRPA Governing Board unanimously adopted a new Regional Transportation Plan in 2021. The plan emphasizes improvements to transit, technology, trails, and equity of access to further reduce greenhouse gas emissions and reliance on the automobile. A special focus on corridor improvements to manage visitor demand will help solve traffic congestion, parking, and overcrowding issues in Tahoe’s busiest recreation corridors.

## Initiative Highlight – Tahoe Living: Housing and Community Revitalization

**T**he Tahoe Living initiative identifies local and regional actions that increase the availability of affordable and achievable housing for residents. The initiative supports the Regional Plan, Sustainable Communities Strategy, and California Regional Housing Needs Assessment.

### Key 2021 Accomplishments

- Approved the 249-unit Sugar Pine Village deed-restricted, mixed-rate affordable housing project in South Lake Tahoe on 10 acres of state-owned land. The collaborative approach will be a model for future housing projects.
- Authorized permitting of accessory dwelling units (ADUs) for workers on thousands of single-family parcels in the Tahoe Region. Money-saving incentives are available for deed-restricted ADUs in walkable areas.
- Included new incentives for housing and transit-oriented development in the updated Placer County and South Lake Tahoe Area Plans and the new Washoe County Area Plan.

### Future Focus

- Implement Tahoe Living working group recommendations that support the production and reservation of affordable and achievable housing options.
- Develop policy changes regarding height, density, and land coverage that further encourage deed-restricted housing options.
- Support regional, affordable, and achievable housing projects.

### PROJECT SPOTLIGHT

#### Silver Dollar Workforce Housing

The project is the first to take advantage of the achievable housing bonus unit program approved by TRPA in 2021. The 20-unit deed restricted housing project in the City of South Lake Tahoe will be constructed as several separate buildings located on a 2-acre site and will have common area recreation facilities, guest parking, landscaping, and water quality best management practices. The site is within a 5-minute walk to transit. Construction is anticipated to start in the summer of 2022.



Photo: Sudhausen Design & Drafting

# TEAM HIGHLIGHTS



## LONG RANGE & TRANSPORTATION PLANNING

The Long Range and Transportation Planning Division keeps the Lake Tahoe Regional Plan and Regional Transportation Plan up-to-date and ensures that programs and projects are achieving and maintaining environmental thresholds. The team builds, maintains, and convenes multi-sector partnerships for coordinated implementation of plans and projects across all levels of government and the private sector.

### Key 2021 Accomplishments

- Approved the Washoe County Tahoe Area Plan, the sixth area plan approved by the Governing Board since the 2012 Regional Plan Update. The plan incorporates incentives for redevelopment in town centers. 89 percent of town center areas are now under a locally-managed area plan.
- Approved a mobility mitigation fee that replaces the dated air quality fee. The new program will implement the Transportation & Sustainable Communities threshold standard and help offset in-basin vehicle trips.

### Future Focus

- Address regional recreation challenges through development of a sustainable recreation and tourism strategy.
- Complete a Regional Trails Plan that incorporates natural trails into the Active Transportation Plan.
- Support local government area plans to accelerate environmental restoration and community revitalization.



Photo: Drone Promotions

## CURRENT PLANNING

The Current Planning Division works with private property owners and partner agencies to review project applications that further environmental improvement and economic investments in Lake Tahoe communities. Customer service and timely review of projects are top priorities for this division to facilitate efficient project implementation by the public and private sectors.

### Key 2021 Accomplishments

- Continued to advance the Digital First strategic initiative goal of all-digital permit applications for efficiency. 81 percent of applications were submitted electronically, up from 58 percent in 2020.
- Met standards for the timely review of 93 percent of project permit applications. Permit applications increased 30 percent to a record 1,156 application submittals.
- Helped private property owners achieve defensible space through 1,412 tree-cutting permits (for 6,744 individual trees). 94 percent of tree-cutting permits were submitted online.
- Registered 88 percent of all moorings and buoys that existed before the updated Shoreline Plan, completing the first phase of mooring registrations. Initiated Phase II mooring permits with the release of approximately 200 additional moorings.
- Further implemented the unanimously approved 2018 Shoreline Plan with release of 12 additional pier allocations following the 12 released in 2019 (15 multi-parcel and nine single-parcel piers).

### Future Focus

- Improve customer service while ensuring Regional Plan compliance.
- Assist fire and rescue partners in applying for new public safety pier allocations under the Shoreline Plan.
- Redesign the agency's lobby area to support the customer appointment system.



Photo: Drone Promotions

## Code Compliance and Enforcement

Permitting and compliance staff ensure all projects meet TRPA Code of Ordinances and environmental standards. Primary responsibilities include code enforcement, inspection of permitted projects, monitoring of memorandum of understanding (MOU) partners, and inspection and enforcement of best management practices to reduce stormwater pollution.

### Key 2021 Accomplishments

- Completed 840 inspections within one week of request. Many of these inspections were done virtually during the pandemic providing a safe environment for both the public and staff.
- Completed 180 pre-grade inspections within three days of request. Performed 210 final inspections.
- Completed 100 audits of projects reviewed and approved by local government MOU partners. Local governments met requirements a high percentage of the time, and corrective measures are monitored for completion.
- Invested more than 1,100 hours on the lake educating the public on boating rules such as the carbureted two-stroke engine ban, noise ordinances, and the 600-foot no-wake zone. The watercraft education team removed 30 vessels from unauthorized moorings and ordered 580 corrective actions related to no-wake zone and other violations.

### Future Focus

- Implement an automated winterization notification for all open construction projects to improve communication with contractors.
- Strengthen partnerships with marinas and boat rental operators to improve safety and no-wake zone compliance among boat and personal watercraft renters.
- Continue shoreline monitoring and bolster compliance on buoys, no-wake zones, and noise levels.
- Improve long-term project monitoring, inspection technology, project security procedures, and MOU training.

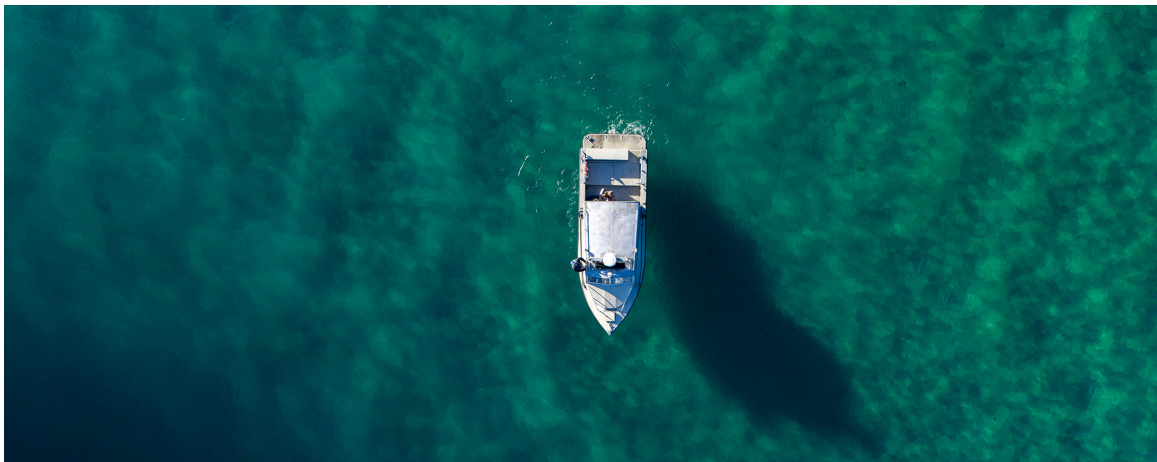


Photo: Drone Promotions

## ENVIRONMENTAL IMPROVEMENT

The Lake Tahoe Environmental Improvement Program (EIP) celebrated 25 years working collaboratively to achieve the environmental goals of the Tahoe Region in 2021. The notable accomplishments of EIP partners are led and supported by TRPA's Environmental Improvement Division. Local, state, and federal agencies, private entities, scientists, and the Washoe Tribe of Nevada and California work with TRPA in an unparalleled partnership delivering projects to restore forests and streams, manage stormwater, and prevent and control aquatic invasive species, among other programs.



### Key 2021 Accomplishments

- Led the multi-disciplinary TRPA Caldor Fire Recovery Team to engage on post-fire environmental rehabilitation, monitoring, permitting, and communications.
- Collaboratively developed a basin-wide priority list of EIP projects for federal funding resulting in approximately \$16 million in new appropriations for projects under the Lake Tahoe Restoration Act.
- Led the annual update of EIP online reporting through LakeTahoeInfo.org resulting in updated project information, performance measures, and funding expenditures on over 300 EIP projects.
- Awarded more than \$1 million in mitigation funds to local jurisdictions and land banks for restoration projects, new maintenance equipment, water quality improvement projects, and sensitive land acquisition.

### Future Focus

- Continue to strengthen the collaborative EIP partnership by working with all sectors to align priorities, develop multi-jurisdictional projects, develop funding strategies, and increase the pace and scale of restoration basin wide.
- Streamline EIP project permitting processes to "Cut the Green Tape" in support of a similar California policy to implement environmentally beneficial projects more quickly and cost-effectively.
- Drive accountability by updating EIP performance measures and regional threshold standards.



Photo: TRPA

## Stormwater Management

**R**educing polluted stormwater runoff from urban areas and roads is the foundation of the EIP’s water quality focus area. Local jurisdictions continue to exceed targets set by the Lake Tahoe Total Maximum Daily Load (TMDL) to reduce nitrogen, phosphorus, and fine sediment pollution. While TRPA improves parcel-scale BMP compliance each year, the program works with partners at a watershed scale to address stormwater runoff such as implementing neighborhood area-wide strategies and innovative green infrastructure.

### Key 2021 Accomplishments

- Supported local jurisdictions after the Caldor Fire by mapping areas at risk from debris flows. Conducted outreach to private property owners and distributed sandbags to burned properties in preparation for an unprecedented rain event in October.
- Issued 241 parcel-scale BMP certificates: 216 for single-family residential parcels, nine for multi-family residential parcels, and 16 for commercial parcels. Re-issued 58 BMP certificates verifying BMP maintenance and effectiveness.
- Completed an assessment and an online public survey in English and Spanish for the Ski Run “Mountain to Marina” area-wide green infrastructure project.

### Future Focus

- Identify new opportunities for area-wide stormwater treatment and green infrastructure.
- Continue basin-wide progress in achieving TMDL reductions by supporting local jurisdictions and reviewing plans and permit applications for BMPs.
- Provide water quality technical assistance to property owners complying with TRPA’s incentive programs including coverage exemptions and mooring registrations.

### PROJECT SPOTLIGHT

#### Heavenly’s Boulder Base Parking Lot

Heavenly contributed over \$800,000 in private matching funds to the EIP for this erosion control project to pave and improve stormwater infrastructure on a 240,000-square-foot parking lot. By rehabilitating a dirt parking area, the project reduced a major source of fine sediment to Lake Tahoe.





## Forest and Vegetation Management

In August 2021, the Caldor Fire swept up the west slope of the Sierra Nevada and into the Lake Tahoe watershed, burning nearly 10,000 acres in the basin alone. While the fire's devastation outside the Tahoe Basin was massive, changing weather, a skilled firefighting team, decades of forest fuel reduction and defensible space work, and a little luck combined to save Lake Tahoe and its communities from catastrophe. As a founding member of the Tahoe Fire and Fuels Team (TFFT), TRPA helps implement the Lake Tahoe Forest Action Plan and is committed to increasing the pace and scale of forest treatments.

### Key 2021 Accomplishments

- Coordinated with TFFT partners to deliver a multi-jurisdictional grant application resulting in an award of more than \$45 million from the Southern Nevada Public Land Management Act to complete high-priority forest health projects.
- Completed a forest management policy change to allow use of mechanized equipment over frozen ground to facilitate forest fuels reduction.
- Advanced a pivotal recommendation of the Bi-State Fire Commission. Partnered with the University of Idaho and the USDA Forest Service Pacific Southwest Research Station to complete the environmental analysis to allow mechanized equipment on slopes up to 50 percent, a regulation change that will result in more fuels reduction work on thousands of acres.

### Future Focus

- Prioritize post-Caldor Fire restoration and recovery projects with the Tahoe Fire and Fuels Team.
- Complete science-based policy changes to support implementation of forest health priorities.
- Investigate the use of innovative technologies for biomass utilization within the basin.

### PROJECT SPOTLIGHT

#### Caldor Fire Response

TRPA formed its own cross-division team to coordinate the recovery of roadway and water quality infrastructure. In addition to engaging the multi-agency response teams, TRPA also supported immediate science and monitoring and assisted private property owners post-fire.



Photo: CAL FIRE

## Aquatic Resources

Lake Tahoe faces a serious threat from the introduction and spread of aquatic invasive species (AIS). TRPA leads the multi-sector AIS partnership at Lake Tahoe, and its accomplishments are the result of the collective contribution of many organizations and individuals. Control programs are working to manage invasive species already established, and the watercraft inspection program is keeping new aquatic invasives out of the Tahoe Region.

### Key 2021 Accomplishments

- Set strategy for control of aquatic invasive weeds with completion of a robust environmental analysis for the Tahoe Keys Aquatic Invasive Weeds Control Methods Test.
- Increased invasive species funding through legislative advocacy that resulted in \$17 million for the Lake Tahoe AIS program in the federal Infrastructure Investment and Jobs Act.
- Prevented new AIS introductions by overseeing more than 15,000 unique vessel launches, including 7,438 inspections at regional inspection stations. Over 50 percent of inspected boats required decontamination.
- Intercepted 132 boats with invasive species, 28 of which had invasive mussels on board—a 40 percent increase from 2020.
- Installed bubble curtains with partners at three marinas to prevent the movement of invasive weed fragments.

### Future Focus

- Implement the Tahoe Keys Control Methods Test project, which the TRPA Governing Board approved in January 2022.
- Monitor and manage the 17-acre Taylor Tallac Creek invasive weed control project.
- Investigate emerging technologies and innovative solutions for the prevention, control, and monitoring of AIS.
- Develop multi-sector funding strategies to implement priorities of the AIS Control Action Agenda.
- Develop and permit permanent regional invasive species inspection stations.

### PROJECT SPOTLIGHT

#### Invasive Species Removal at Taylor Tallac Creek Marsh

TRPA began implementation of Tahoe's largest AIS control project to date and the first to occur in a marsh wetland. The 17-acre invasive weed removal project in the Taylor Tallac Creek Marsh used rubber mats to suffocate invasive weeds. The project should be completed by 2024 in partnership with the USDA Forest Service and the Tahoe Fund.



Photo: Tahoe Fund

## RESEARCH AND ANALYSIS

**T**RPA continuously tracks the progress and effectiveness of the region's environmental programs by monitoring hundreds of environmental threshold standards, performance measures, and management actions. The Research and Analysis Division collaborates with the science community and provides the best possible information for policy decisions, operations, and accountability.

### Key 2021 Accomplishments

- Released the 2019 Threshold Evaluation, the first evaluation presented primarily as an online, interactive dashboard, marking a major milestone for TRPA's Digital First strategic initiative.
- Supported the Caldor Fire Recovery Team with GIS spatial data and analysis of the fire to show fire closures, bulldozer lines, soil burn severity, and other associated impacts.
- Provided access for over 40,500 users to LakeTahoeInfo.org, the TRPA shared-access platform for regional data, analysis, and reporting.
- Responded to 603 unique requests from property owners, real estate agents, and local governments for permitting information.
- Converted an additional 1,532 paper project files to digital for easier access by the public and staff. Nearly 15,000 paper permit files have been digitized since 2013.
- Aided Shoreline Plan implementation by releasing a new version of the Tahoe Boating App. The app features improved content for the boating public in support of TRPA's recreation threshold and other agency programs.

### Future Focus

- Make systemic updates to the agency's permitting software and document management applications for permit process efficiencies and better customer service.
- Eliminate the agency's paper records. This multi-year project digitizes old paper permits and records and creates permanent electronic records for agency and public use.

### 2021 Field Monitoring

- Managed noise monitoring for 10 plan area locations, three transportation corridors, and three shoreline sites.
- Monitored bike and pedestrian activity at 24 sites using automated counters.
- Worked with agency partners to complete basin-wide osprey surveys.
- Maintained air quality and visibility monitoring stations.



## EXTERNAL AFFAIRS

**T**RPA supports a culture committed to public education, outreach, and community engagement to implement the Lake Tahoe Regional Plan. External Affairs leads initiatives in collaboration with many agency and nonprofit partners.

### Key 2021 Accomplishments

#### Public Outreach

- Completed the year-long project to replace the aging agency website with the launch of the modern and user-friendly [trpa.gov](http://trpa.gov).
- Published three issues of the national award-winning newspaper Tahoe In Depth, including a special Caldor Fire issue. The newspaper, mailed to every property owner in the basin, shares valuable information about Lake Tahoe's environment and communities.
- Convened sustainable recreation and tourism partners for consistent regional communication about outdoor recreation issues and COVID pandemic response.
- Promoted stewardship among Tahoe Basin residents and visitors through the Take Care Tahoe partnership and an associated regional billboard campaign, social media tactics, and message coordination among partners.

#### Environmental Education

- Received a Bronze Spike Award from the Sierra Nevada Chapter of the Public Relations Society of America for the Tahoe

Commemorative Coin program, which celebrated TRPA's 50th anniversary and raised \$100,000 in environmental education funds.

- Presented at the Take Care Cape Cod Summit about Take Care Tahoe lessons learned, future stewardship initiatives, and the power of collaboration.

#### Legislative Affairs

- Continued TRPA's leadership role in Tahoe's summits by assisting U.S. Senator Alex Padilla (D, Calif.) and partners in hosting the 25th annual Lake Tahoe Summit in Kings Beach, CA and broadcast online. Bilingual event posters and a virtual exhibit showcased the 25-year history of the summit.
- Presented the first-ever Dianne Feinstein Lake Tahoe Award at the Summit. The inaugural award given to U.S. Senator Dianne Feinstein (D, Calif.) recognized her years of tireless support for Lake Tahoe.
- Testified at numerous Nevada Legislative hearings during the 2021 session to support critical policy and Environmental Improvement Program initiatives including



Take Care Tahoe billboard with a wildfire awareness message.

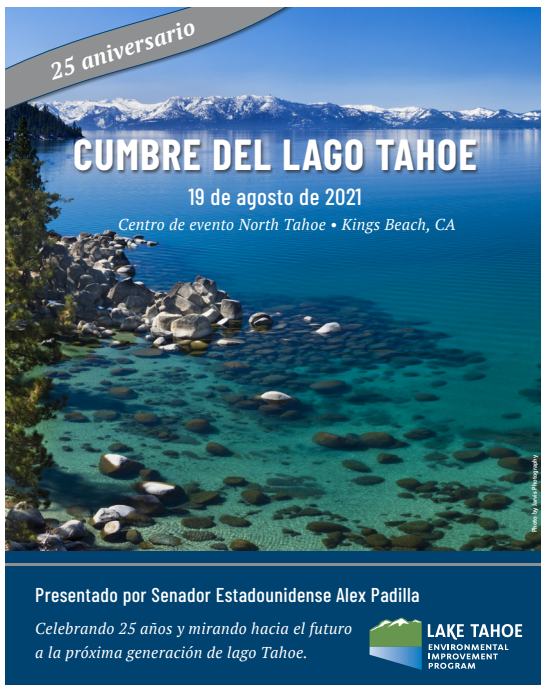
transportation, East Shore corridor plan implementation, and the Tahoe Science Advisory Council.

**Future Focus**

- Grow TRPA’s role as a leader in collaborative outreach locally, regionally, nationally, and globally to inspire sustainable actions and help achieve conservation and stewardship goals at Lake Tahoe.
- Continue to host bi-weekly sustainable recreation and tourism coordination group calls to ensure messages from land managers and visitors authorities are consistent and widely shared and work toward improving stewardship behaviors.
- Support the Tahoe Keys partnership with public awareness and education of the Control Methods Test Project.



The cover of the Fall 2021 Caldor Fire special issue of Tahoe In Depth.



2021 Lake Tahoe Summit spanish poster (top left), Julie Regan and Steve Teshara presenting the Dianne Feinstein award (top right), and keynote speaker U.S. Secretary of Interior Deb Haaland (bottom right).

## HUMAN RESOURCES AND FINANCE

The highest quality standards in human resources and organizational development, along with best practices in financial management, keep TRPA operating as a high-performing team.

Funding for TRPA’s core functions comes from a variety of sources, including the states of California and Nevada, fees for services, and competitive grants. TRPA is organized to reflect the three core functions it performs: planning, implementation, and research and analysis in a “Plan, Do, Check” adaptive management and continuous improvement framework. TRPA presently has 64 full-time equivalent positions.

### Key 2021 Accomplishments

#### Human Resources

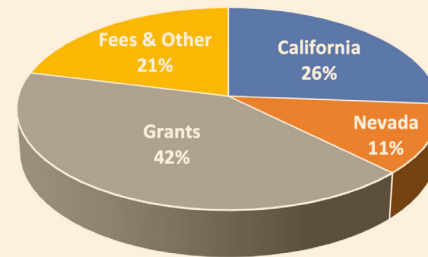
- Supported the agency and staff in shifts between pandemic hybrid work and stay-at-home work as COVID variants resurged.
- Supported the work of the Diversity, Equity, and Inclusion Team in reviewing recruiting processes and holding virtual trainings.
- Successfully recruited for several open positions in a highly competitive marketplace.

#### Facilities and Finance

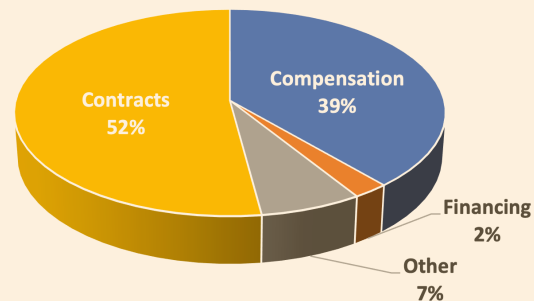
- Began planning and implementing deferred maintenance on the TRPA building, utilizing proceeds from refinancing the agency’s long-term debt. Projects include a redesigned front lobby to modernize and improve visitor access and customer service.
- Maintained a balanced budget through a transparent process with regular reports to the Governing Board and annual reports to Nevada and California legislatures.
- Supported internal teams with grant and contract management. TRPA manages \$7.9M in grant revenue and over \$10M in contracts.

### 2021-22 TRPA BUDGET: \$19.4M

#### Revenues



#### Expenses



### Future Focus

- Improve the diversity and inclusiveness of the workplace by ensuring TRPA’s hiring and recruitment practices are exemplary.
- Protect the health and well-being of staff with support and services.
- Permit and begin construction of deferred maintenance activities including the front lobby redesign, roof replacement, and other upgrades.
- Maintain the highest financial standards and cultivate resources to support the environmental restoration of Lake Tahoe.





# VISION

a lake environment that is sustainable,  
healthy, and safe for the community  
and future generations.

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**TAHOE  
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February 2022



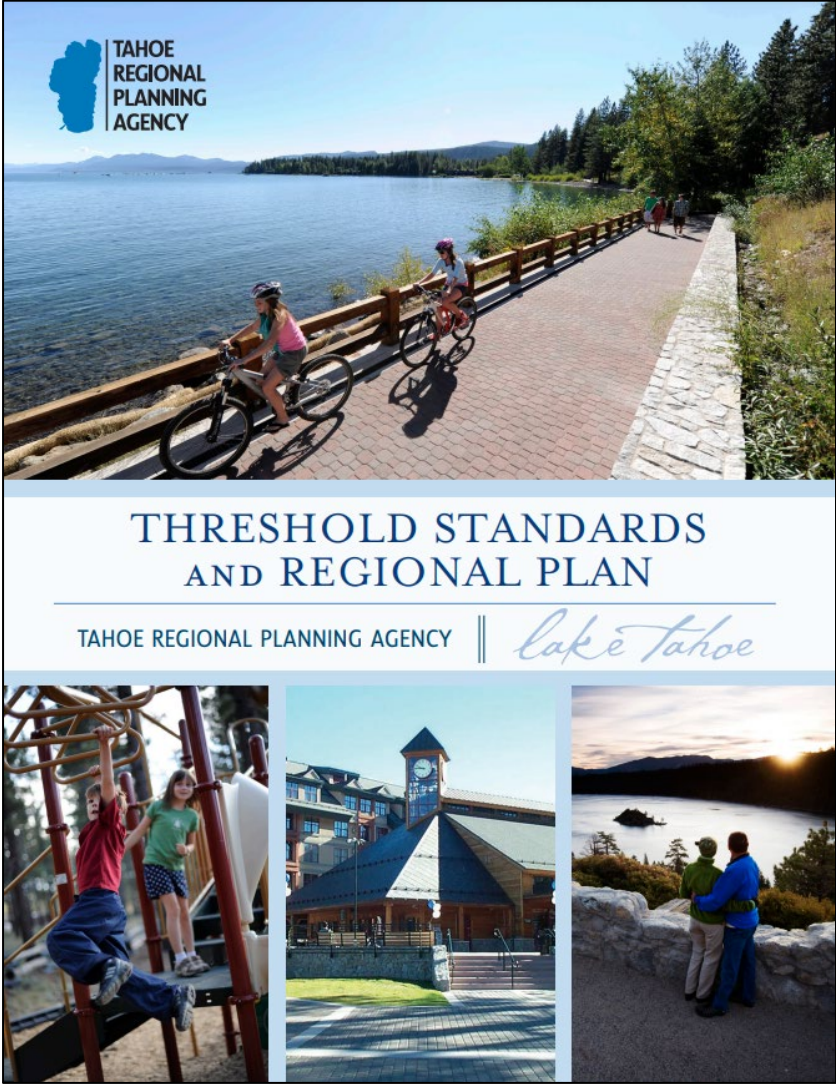
Attachment B

2021 Regional Plan Performance Measures

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# 2021 REGIONAL PLAN PERFORMANCE MEASURE REPORT

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Prepared by:



February 2022

## INTRODUCTION

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In May 2013, the Tahoe Regional Planning Agency's (TRPA) Governing Board approved 14 Regional Plan Performance Measures and associated sub-categories. Each performance measure has a level-1 and level-2 benchmark, or target, to be reported both annually and on a multi-year timeframe.

The approved measures relate directly to the intended implementation actions resulting from the 2012 Regional Plan amendments which incentivize compact environmental redevelopment in pursuit of threshold attainment as directed in the Bi-State Compact. Many level-2 measures are long-term land use or environmental goals and may take years or even decades to show measurable progress. In those instances, ongoing activities expected to lead to performance results are described. Also, the Governing Board established short-term level-1 benchmarks to indicate interim progress, and where information is available, progress is reported.

This report also includes a summary of the net changes in development in the Lake Tahoe Region for the past two years (Tables 14, 15, and 16), a requirement of the 2018 development right program changes.

The entire suite of TRPA performance measures is under review as part of TRPA's performance management and threshold update initiative. This review of performance measures will enable TRPA to refine the measures evaluated in this report.

## IMPLEMENTING THE REGIONAL PLAN

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The TRPA Regional Plan is the blueprint for attaining and maintaining the threshold standards and securing the Tahoe Region's sustainable future. The Regional Plan guides community development and redevelopment, enhancing ecosystem functions, creating a more effective transportation network, and revitalizing the region's economy. It pairs ecosystem restoration

with redevelopment activities to promote mixed-use town centers where people can live, work, and thrive.

Since the adoption of the 2012 Regional Plan amendments, TRPA and its partners have been executing these policies and programs. A signature element of the Regional Plan, six “area plans” have been adopted to integrate the Regional Plan policies into local jurisdiction plans and permits. Area plans now cover more than 34 percent of the land area of the Tahoe Region, including 89 percent of town centers. As a result, property owners and developers are making significant investments in these areas, resulting in economic growth and environmentally beneficial redevelopment.

Over the past nine years, the Tahoe Region has seen a period of renewal and environmental restoration, as hundreds of millions of dollars have been invested in constructing and renovating hotels, commercial, and residential properties. As a result, by 2021, property values in the Tahoe Region have grown by 41 percent since 2012, with improvement values increasing by 43 percent. As evidence that the Regional Plan is effective, improvement values in town centers located within the adopted area plans have grown by 44 percent compared to 40 percent in the rest of the region. More than 400 new residential dwellings were constructed during the past eight years, and 156 previously existing residential units were transferred, many from sensitive and remote areas, to be constructed in more environmentally beneficial receiving areas. Development right conversions have resulted in 119 additional residential units throughout the region, while the number of tourist accommodation units and commercial floor area have been reduced. All new and redeveloped properties include erosion control measures to benefit the lake’s water quality.

These private investments are paired with more than \$860 million in public investment for more than 400 projects implemented through the Lake Tahoe Environmental Improvement Program. Projects have included water quality improvements on the major highways in the region, large-scale erosion control projects, stream restorations, public access and recreation improvements, and bicycle and pedestrian trails.

## **EXECUTIVE SUMMARY OF PERFORMANCE MEASURE STATUS**

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A brief summary of the status of the 14 Regional Plan Performance Measures follows.

## REGIONAL LAND USE PATTERNS

1. Distribution of development for land-use types: In 2021, the distribution of commercial floor area, property improvement values, and residential units met the benchmarks to increase the percentage of development in town centers and reduce the percentage in remote areas. The sub-categories for tourist accommodation units in town centers and improvement values in remote areas were close to the targets.
2. Annual average number of units transferred to town centers from sensitive and remote land: the benchmarks for transferring tourist accommodation units, existing residential units, and potential residential units from stream environment zones and remote areas were met; the benchmark for transferring potential residential units from other sensitive areas was met. All other transfer benchmarks were not met. Twenty-six environmentally beneficial transfers were approved in 2021. Not apparent in these outcomes are significant sums of previously existing development rights that have been removed from sensitive sites and are banked, awaiting transfer. Banked development rights (Table 6) are readily available sources of transferable rights to support beneficial redevelopment if projects can be matched to them.
3. Retirement rate for existing non-residential units of use: The benchmark to remove commercial and tourist units from sensitive lands has not been met. Nonetheless, since 2012, 160 tourist units and almost 30,500 square feet of commercial floor area have been removed from stream environment zones. Rather than being retired, these units were subsequently banked and are available for future transfer. Dedicated funding or grants directed to offset the acquisition and retirement cost for these non-residential units, would likely increase the number of units permanently retired through these programs.
4. Housing availability for residents and workers: TRPA's "Tahoe Living", Housing and Community Revitalization Initiative, the California Tahoe Conservancy, and non-profits, including the Mountain Housing Council and South Shore Housing Tahoe Partnership are implementing strategies that incentivize affordable housing for locals. As a result of these initiatives, 276 multi-residential units were assigned to projects in 2021 and more than 250 additional affordable and workforce-oriented units are currently in the planning, design, and approval processes.

## TRAVEL BEHAVIOR

5. Percentage of all trips using non-automobile modes of travel (transit, bicycle, pedestrian): The winter 2020 non-auto share of 21.8 percent exceeded both the level-1 and level-2 benchmarks. The combined four-year average of non-auto share including summer 2018 and winter 2020 values also exceeded both the level-1 and level-2 benchmarks.

6. Automobile vehicle miles traveled per capita (excluding through trips): in 2021, TRPA adopted a new Per Capita Vehicle Miles Traveled (VMT) Standard and Transportation and Sustainable Communities threshold category to reduce reliance on the automobile, reduce greenhouse gas emissions, and promote mobility. The threshold reporting framework and first progress report on this standard will be released in the second quarter of 2022, and this regional plan performance measure will be updated to align with the new measure for future reports.
7. Construction of pedestrian and bicycle improvements: An annual average of 4.0 miles of pedestrian and bicycle improvements have been constructed between 2013 and 2021, close to the level-1 benchmark of 4.15 miles constructed per year, but below the level-2 benchmark of nine miles constructed per year.

## ENVIRONMENTAL RESTORATION

8. Coverage removal from Stream Environment Zones and other sensitive lands (privately funded): Since 2013, private property owners have transferred more than 0.2 acres of land coverage from stream environment zones, meeting the level-1 and level-2 benchmarks. The benchmarks for other sensitive lands were not met. In addition, TRPA identified nearly eight acres of previously existing land coverage removed from stream environment zones and another 3.7 acres removed from other sensitive lands since 2012.
9. Issuance of Best Management Practices (BMP) Certificates in conjunction with property improvements and area-wide BMP installations: In 2021, TRPA issued 241 BMP certificates in conjunction with property improvements and area-wide BMP installations. This total met the level-1 benchmark but was below the level-2 benchmark to increase the annual average rate of BMP certification in conjunction with property improvements by 25 percent. However, since 2013, TRPA has issued nearly 4,500 BMP certificates, and 48 percent of these have been issued in conjunction with property improvements and area-wide BMP installations. In recent years, TRPA has seen an increase in property owners installing BMPs on residential parcels in response to TRPA's special coverage exemptions and mooring registration and permitting conditions.
10. Total Maximum Daily Load (TMDL) performance benchmarks: The Lake Tahoe TMDL Program 2021 Performance Report found that local governments and highway departments at Lake Tahoe collectively met and exceeded their 2020 water year pollutant load reduction targets. Pollutant controls reduced fine sediment particulate load by 523,000 lbs./year, total phosphorus by 1,550 lbs./year percent, and total nitrogen loads by over 4,400 lbs./year.
11. Scenic improvement rate on urban roadways: A scenic evaluation was performed as a part of the 2019 Threshold Evaluation Report monitoring. Scenic ratings for these units were

either stable or improved from the ratings in the 2015 Threshold Evaluation Report; three urban roadway scenic units increased from the 2015 evaluation and no units decreased. Despite these increases, the annual average increases were not sufficient to meet the benchmarks.

#### EFFECTIVE REGIONAL PLAN IMPLEMENTATION

12. Prepare and maintain area plans in conformance with the 2012 Regional Plan: The Governing Board has approved five local area plans as of 2021, meeting benchmarks. The six Area Plans cover approximately 72 thousand acres, or 34 percent of the land area of the Tahoe Region and 89 percent of Town Centers.
13. Complete mitigation measures identified in the Regional Plan Update Environmental Impact Statement (EIS): The 2012 Regional Plan Update environmental impact statement called for mitigation measures covering four topic areas. All the Regional Plan Update mitigation measures have been completed and adopted by the TRPA Governing Board.

#### ECONOMIC VITALITY

14. Rate of redevelopment: TRPA approved 115 redevelopment permits in 2021, including 110 residential permits, and 5 commercial/tourist accommodation permits. The 2013 to 2021 average of 130 redevelopment projects exceeded the level-1 and level-2 benchmarks.

# DISCUSSION & PERFORMANCE MEASURE STATUS

Detailed discussion and analysis of the status of all Regional Plan performance measures is set out below. The included summaries for each set of measure outline the adopted level-1 and level-2 targets as well as the 2021 status for each indicator. A discussion and analysis of the results follows for each. A detailed synopsis of the results is included in Table 13.

## BACKGROUND

In May 2013, the TRPA Governing Board adopted performance measures to track the effectiveness of the 2012 amendments to the Regional Plan. This report covers activities for the calendar year 2021 and cumulatively since the Board’s adoption of the measures.

## PERFORMANCE MEASURE #1

### Modify the distribution of development after 2012 compared to the distribution in 2012

This performance measure tracks the anticipated increase in the percentage of development within town centers, and the accompanying decrease in the percentage of auto-dependent development (defined as development located more than one-quarter mile from town centers and not at a ski area with transit service). Progress is tracked by measuring the distribution of residential units, tourist accommodation units, commercial floor area, and taxable market valuation of property/structural improvements.

Performance Measure #1: Summary	2021 Level-1 Benchmark	2021 Level-2 Benchmark
Increase the percent of commercial floor area located within centers to more than 63.13% (level-1) and 63.23% (level-2)	Met	Met
Decrease the percent of commercial floor area in remote areas to less than 26.32% (level-1) and 26.22% (level-2)	Met	Met
Increase the percent of residential units located within centers to more than 3.84% (level-1) and 4.24% (level-2)	Met	Met
Decrease the percent of residential units in remote areas to less than 67.66% (level-1) and 67.26% (level-2)	Met	Met
Increase the percent of tourist accommodation units located within centers to more than 83.37% (level-1) and 83.47% (level-2)	Close to Target	Close to Target
Decrease the percent of tourist accommodation units in remote areas to less than 10.44% (level-1) and 10.34% (level-2)	Not Met	Not Met



Increase the value of property improvements within centers to more than 10.94% (level-1) and 11.14% (level-2)	Met	Close to Target
Decrease the value of property improvements in remote areas to less than 71.38% (level-1) and 71.18% (level-2)	Close to Target	Close to Target

\* Close to target indicates that the performance measure is within 5% of the benchmark.

Table 1 outlines the changes in the distribution of commercial floor area, residential units and tourist accommodation units compared to the baseline. The regional distribution of development has changed as a result of the redevelopment and revitalization activity throughout the Region and the transfer incentives to promote the relocation of existing development to centers. In 2021, the distribution of commercial floor area, property improvement values and residential units met the level-1 and level-2 benchmarks to increase the percentages located in centers and to decrease the percentage in remote areas.

The distribution of tourist accommodation units was close to the target for town centers, but higher in remote areas because numerous tourist units previously located in centers have been removed and banked in anticipation of transfers or conversions to future projects, such as the Tahoe City Lodge, which is in a town center. In addition, the Edgewood Lodge redevelopment project constructed 154 tourist accommodation units—including 144 transferred from dated motels previously located in town centers. The South Stateline resort is located outside the town center boundary. While these tourist accommodation unit transfers are generating beneficial environmental redevelopment with threshold gains, they cannot be counted toward the benchmark. As a result, the benchmarks to reduce the share of tourist units in remote areas were not met.

<b>Table 1: Distribution of development measured as percentage of units and commercial floor area</b>			
<b>Land Use</b>	<b>Baseline</b>	<b>2021</b>	<b>Net Change Since Baseline</b>
<b>Commercial Floor Area</b>			
Town Centers	63.13%	64.75%	+1.62%
Neutral areas within ¼-mile of a Town Center	10.55%	9.47%	-1.08%
Remote Areas	26.32%	25.77%	-0.55%
<b>Residential Units</b>			
Town Centers	3.84%	4.69%	+0.85%
Neutral areas within ¼-mile of a Town Center	28.50%	28.51%	+0.01%
Remote Areas	67.66%	66.80%	-0.86%
<b>Tourist Accommodation Units</b>			
Town Centers	83.37%	82.64%	-0.73%
Neutral areas within ¼-mile of a Town Center	6.19%	3.85%	-2.34%
Remote Areas	10.44%	13.29%	+2.85%
<b>Source:</b> TRPA Permit Records, LakeTahoeInfo.org/Parcel Tracker and TRPA Geographic Information System (GIS) Analysis for Town Centers. Neutral areas are properties located within one-quarter mile of town centers and ski areas that have transit service (Homewood Ski Area and Heavenly Mountain Resort California Base). Remote areas include auto-dependent locations that are more than one-quarter mile from town centers.			

Overall total taxable value<sup>1</sup> of properties in the Lake Tahoe Region continues to rise, exceeding \$28.1 billion in 2021, an increase of 41 percent from 2012. As shown in Table 2, the taxable value of property improvements<sup>2</sup> in the Lake Tahoe Region have increased 43 percent since 2012, to \$15.1 billion in 2021. Improvement values in area plans have grown 45 percent since 2012. Taxable value of town centers located within the adopted area plans have grown by 46 percent. These increases in property improvement values suggest that the Regional Plan is among the factors encouraging redevelopment and investment in town centers.

<sup>1</sup> Total taxable values for properties are sourced from County Assessors data for the assessed value of land and any property improvements.

<sup>2</sup> Improvements may include buildings, landscaping, or other development on the property.

Table 2: Change in property improvement values between 2012 and 2021, by location				
Jurisdiction	Improvement Value Change 2012-2021			
	All Areas	Town Centers	Area Plans	Town Centers in Area Plans
Carson County	126%	n/a	n/a	n/a
City of South Lake Tahoe	44%	54%	56%	62%
Douglas County	43%	37%	49%	37%
El Dorado County (exc. CSLT)	45%	57%	65%	73%
Placer County	53%	47%	53%	47%
Washoe County	25%	16%	25%	16%
<b>Grand Total– Tahoe Region</b>	<b>43%</b>	<b>43%</b>	<b>44%</b>	<b>46%</b>

**Source:** County Assessor Records, TRPA Geographic Information System (GIS) Analysis for Town Center and Area Plans.

Table 3 reflects the changes to the distribution of taxable value of property improvements between town centers, neutral areas within one-quarter mile from a town center and remote areas. The value of improvements in town centers has increased; although the value of improvements in remote areas also increased (as declines were in area within 1/4-mile of center) as a percentage of overall value since 2012.

Table 3: Percentage of taxable property improvement value by location			
Location	Baseline*	2021	Net percentage change since baseline
Town Centers	10.94%	11.00%	+0.06%
Areas within ¼-mile of a Center	17.67%	17.47%	-0.20%
Remote Areas	71.38%	71.54%	+0.16%
<b>Total Market Value</b>	<b>100.00%</b>	<b>100.00%</b>	

**Source:** County Assessor Records for Taxable Property Improvement Values, TRPA Geographic Information System (GIS) Analysis for Town Center and Area Plans.

## PERFORMANCE MEASURE #2

**Increase the annual average number of units transferred to town centers from sensitive and remote land compared to the annual average prior to 2012.**

This measure complements the tracking of distribution of development in Performance Measure #1 by tracking the rate at which the transfer of units of use occurs from stream environment zones (SEZ), other sensitive areas, and remote lands to town centers. For this performance

measure, tourist accommodation units, commercial floor area, and residential units, and potential residential units are tracked and reported separately. This performance measure specifically tracks the transfer of development; not apparent in these outcomes are significant sums of previously existing development rights that have been removed from sensitive sites and are banked, awaiting transfer. Banked development rights (Table 6) are readily available sources of transferable rights to support beneficial redevelopment if projects can be matched to them. TRPA built a more transparent tracking of transferable rights, through the Lake Tahoe Info Parcel Tracker (<https://parcels.laketahoeinfo.org>) and an online marketplace (<http://tdr.trpa.org>) to connect project proponents with holders of banked development in order to spur progress toward meeting this performance measure.

The TRPA Governing Board unanimously approved changes to the development rights system in October 2018. The changes allow conversions (Table 7) between different types of development rights using environmentally neutral exchange rates. This will provide more flexibility and simplicity while also maintaining the overall cap on development potential in the Tahoe Region.

Performance Measure #2: Summary	2021 Level-1 & Level-2 Benchmarks
Transfer more than zero residential units to centers from SEZs	Met
Transfer more than 414.18 square feet of commercial floor area to centers from SEZs	Not Met
Transfer more than 0.36 tourist accommodation units to centers from SEZs	Met
Transfer more than zero potential residential units* to centers from SEZs	Met
Transfer more than zero residential units to centers from other sensitive lands	Not Met
Transfer more than 959.55 square feet of commercial floor area to centers from other sensitive lands	Not Met
Transfer more than zero tourist accommodation units to centers from other sensitive lands	Not Met
Transfer more than 0.18 potential residential units* to centers from other sensitive lands	Met
Transfer more than 0.09 residential units to centers from remote areas	Not Met
Transfer more than 470.18 square feet of commercial floor area to centers from remote areas	Not Met
Transfer more than zero tourist accommodation units to centers from remote areas	Met

Transfer more than 0.09 potential residential units* to centers from remote areas	Met
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\*Note: Potential Residential Units (PRU) were formerly called Residential Development Rights (RDR)

In 2021, the benchmarks for transferring existing residential units, potential residential units, and tourist accommodation units from stream environment zones were met. The benchmark for transferring potential residential units from other sensitive areas was also met. The benchmarks for transferring potential residential units and tourist accommodation units from remote areas were met. All other transfer benchmarks were not met.

Overall, 26 transfers of development occurred in 2021, and each resulted in environmentally beneficial improvements. Tables 4 and 5 below outline the cumulative benefits of the 264 transfers that TRPA approved between 2013 and 2021. More than 81,000 square feet of coverage, 83 residential units, and 109 tourist units have been removed and transferred from sensitive stream environment zones to less-sensitive areas. In addition, more than 119,000 square feet of coverage, almost 16,800 square feet of commercial floor area, 12 tourist accommodation units, and 36 residential units have been transferred from remote areas into town centers and the walkable areas near centers.

<b>Table 4: Cumulative changes by land sensitivity from TRPA approved transfers, 2013-2021</b>			
<b>Development Right</b>	<b>Stream Environment Zones</b>	<b>Other Sensitive Areas</b>	<b>Non-Sensitive Areas</b>
Coverage (sq. ft.)	- 81,428	+ 21,382	+ 60,046
Commercial Floor Area (CFA) (sq. Ft.)	0	-10,492	+10,492
Residential Units (ERU/PRU)	- 83	- 8	+ 91
Tourist Units (TAU)	- 109	0	+ 109

<b>Table 5: Cumulative changes by location from TRPA approved transfers, 2013-2021</b>			
<b>Development Right</b>	<b>Remote Areas</b>	<b>Areas within 1/4 mile of a Town Center</b>	<b>Town Centers</b>
Coverage (sq. ft.)	- 119,079	+ 22,500	+ 96,579
Commercial Floor Area (CFA) (sq. ft.)	0	- 16,791	+ 16,791
Residential Units (ERU/PRU)	- 36	+ 14	+ 22
Tourist Units (TAU)	- 12	0	+ 12

Additionally, TRPA analyzed banked development rights (Table 6) on both public and private parcels and identified more than 23,000 square feet of banked commercial floor area, 27 banked tourist accommodation units, 27 banked residential units, 92 banked potential residential units, and more than 478,800 square feet of existing coverage that has been removed from stream

environment zones and is currently banked and ready to be transferred. And, 55,850 square feet of banked commercial floor area, 48 tourist accommodation units, 80 residential units, 230 potential residential units, and 1.3 million square feet of banked coverage was identified as ready to be transferred from remote areas. These rights may lead to the redevelopment of town centers in the future, as the 2012 Regional Plan encourages and incentivizes the relocation of sensitive and remote development to these centers.

<b>Table 6. Estimated current inventory of banked development rights by location</b>				
	<b>Commercial Floor Area (sq. ft.)</b>	<b>Tourist Accommodation Units</b>	<b>Existing Residential Units/Potential Residential Units <sup>1</sup></b>	<b>Coverage <sup>2</sup> (sq. ft.)</b>
<b>All Banked Rights<sup>3</sup></b>	<b>233,247</b>	<b>998</b>	<b>251 / 303</b>	<b>2,084,442</b>
Banked in Stream Environment Zones	23,192	27	27 / 92	478,206
Banked in Remote Areas	55,852	48	80 / 230	1,331,594
<b>Notes:</b> 1. Banked rights as of December 31, 2021 2. Potential residential units were formerly called Residential Development Rights (RDR) 3. Coverage includes banked hard and soft coverage (potential coverage is not included) 4. The categories of Banked in Stream Environment Zones and Banked in Remote Areas are not mutually exclusive and this table it not intended to be combined into an aggregated total. Source: TRPA Permit Records and LakeTahoelInfo.org/Parcel Tracker				

Development right conversions provide property owners with flexibility while maintaining the overall cap on development potential in the Tahoe Basin. By allowing conversions between the different types of development rights using environmentally neutral exchange rates, TRPA hopes to encourage more redevelopment. The current conversion ratio is 600 CFA to 2 TAUs to 2 residential to 3 multi-family residential units.

The ability to convert between different types of development rights is relatively new. However, a clear trend that has emerged from the conversions to date: a shift from TAUs and CFA to residential development. As a result of the 34 approved conversations to date, 119 additional residential units have been created throughout the region, while the number of TAUs has been reduced by 41 units and CFA reduced by more than 26,000 square feet.

**Table 7. Summary of development rights conversions 2013-2021**

	Commercial Floor Area (sq. ft.)	Tourist Accommodation Units	Residential Units
<b>Net Change from Conversions</b>	- 26,453	- 41	+ 119
<i>Note:</i> Includes conversions processed under the pilot programs approved in 2012 and 2016 and all conversions processed since the TRPA GB adoption of the conversion and exchange program in 2018.			

**PERFORMANCE MEASURE #3**

**Accelerate the removal rate for existing non-residential units of use on sensitive lands**

Historically, the Tahoe Region has relocated existing non-residential development but has not retired any non-residential units of use. The 2012 Regional Plan Update added policy language encouraging a publicly funded acquisition program targeted at acquiring and retiring excess existing non-residential development on sensitive lands. This performance measure tracks this program’s effectiveness at removing existing commercial floor area and tourist accommodation units from sensitive lands.

Performance Measure #3: Summary	2021 Level-1 Benchmark	2021 Level-2 Benchmark
Remove existing tourist units of use from sensitive lands (Develop and fund a program to acquire and retire tourist units of use within 4 years – level 1) (acquire 10 TAUs – level 2)	Partially Met	Partially Met
Remove existing commercial floor area from sensitive lands (Develop and fund a program to acquire CFA within 4 years – level 1) (acquire 5,000 sf of CFA – level 2)	Partially Met	Partially Met

The benchmark to establish a program to remove commercial and tourist units from sensitive lands has not been met. Funded acquisition programs or similar strategies are needed for a significant number of units to be retired to meet this benchmark. TRPA made changes to the development rights program in October 2018 to reaffirm the role of land banks in achieving the goals of the development rights transfer system. In addition, TRPA will allow local governments and philanthropic non-profit organizations to form banks under a memorandum of understanding with TRPA in order to acquire, hold, disperse, retire or transfer development rights. These actions were designed to increase the effectiveness of the development rights removal/restoration, banking and transfer systems by accelerating the removal and relocation of development rights from sensitive and remote areas.

The California Tahoe Conservancy (Conservancy) developed the Tahoe Livable Communities Program (<https://tahoe.ca.gov/programs/tahoe-livable-communities/>) to seek opportunities to acquire and restore properties and retire the associated non-residential development rights. However, the Conservancy has not yet retired any non-residential units of use. Instead, these units have been deposited into the Conservancy’s asset land bank for future consideration.

Additionally, incremental progress can be made in other ways. Since the adoption of the 2012 Regional Plan, private property owners have removed 160 tourist accommodation units from stream environment zones, and 109 of these units were transferred to non-sensitive land, including 12 units that we moved into a non-sensitive parcel in a town center. Additionally, more than 30,500 square feet of commercial floor area has been removed and banked from stream environment zones since 2012. These development rights were subsequently banked and are available for transfer, rather than permanently retired, though it is likely that these units will be transferred into less sensitive areas and town centers due to the Regional Plan incentives for the relocation of sensitive development.

#### PERFORMANCE MEASURE #4

##### Improve housing availability for residents and workers

The 2012 Regional Plan Update Environmental Impact Statement (EIS) documented that housing in the Tahoe Region has become less affordable and quality housing is prohibitively expensive for essential workers, including teachers and police officers. This measure evaluates the utilization of multi-residential bonus units for affordable and workforce housing.

Performance Measure #4: Summary	2021 Level-1 Benchmark	2021 Level-2 Benchmark
Average annual rate of multi-residential bonus unit utilization 20.23 units per year (level-1) and 21.24 units per year (level-2)	Met	Met

In the Tahoe Region, 276 multi-residential bonus units were assigned in 2021 for low-, moderate-income, or achievable housing, meeting the performance measure benchmark.

The units were assigned in the following income categories:

- 248 Affordable units
- 3 Moderate units
- 25 Achievable units



TRPA’s Tahoe Living Housing and Community Revitalization Initiative (<https://www.trpa.gov/permitting/housing>) and the housing and sustainability initiatives of local governments, the California Tahoe Conservancy, and non-profits, including the Mountain Housing Council and Tahoe Prosperity Center are implementing strategies that incentivize affordable housing for locals. As a result of these initiatives, more than 300 units are currently in the construction, planning, design, and approval processes.

In January 2021, the TRPA Governing Board approved the Sugar Pine Village project in the City of South Lake Tahoe. This 248-unit affordable multi-family housing project helps implement the workforce housing goals of the 2012 Regional Plan-mixed-use and residential development in close proximity to transit and pedestrian-friendly centers, supporting a vibrant, sustainable community, and those required by the State of California, providing affordable multi-family housing units, a resident-serving “Community Building” and community-serving “Public Service Building,” which will include a childcare facility and non-profit office space.

Another project approved in 2021 was the first multi-family project to utilize “achievable” bonus units. This is a 20-unit project of duplexes and triplexes located on Silver Dollar Avenue in the City of South Lake Tahoe. The project is located directly adjacent to the City’s bicycle trail network and a 2-minute walk from the main transit line along U.S. Highway 50. Other anticipated projects include three moderate-income homes that will be located on land owned by the Saint Joseph Community Land Trust in South Lake Tahoe. These three units, which are taking advantage of the Bonus Unit pool, were permitted in 2021 and will add to the Basin’s very limited deed-restricted ownership housing stock once construction is complete. The City of South Lake Tahoe transferred these parcels to the Land Trust to facilitate the project. Finally, a 70-unit achievable housing project near the Y in the City of South Lake Tahoe, and a 150-unit affordable housing project in Placer County near Dollar Point are in the early permitting and design stages.

**PERFORMANCE MEASURE #5**

**Increase percentage of all trips using non-automobile modes of travel (transit, bicycle, pedestrian).**

Non-auto mode share travel captures the percentage of people bicycling, walking, and using transit or other non-auto travel modes indicating the degree to which land-use patterns, policy, and funding decisions at Lake Tahoe influence travel behavior of residents and visitors. Non-auto

mode share at Tahoe is measured by intercept surveys at commercial and recreation sites in winter and summer.

<b>Performance Measure #5: Summary</b>	<b>2021 Level-1 Benchmark</b>	<b>2021 Level-2 Benchmark</b>
Percentage of trips by auto/truck/motorcycle/other motorized vehicles below 80.93% (level-1) and below 80.68% (level-2)	Met	Met

Since 2006, TRPA has conducted basin-wide travel surveys every two years in order to better understand basic travel characteristics of both residents and visitors. The 2018 Summer Travel Survey was conducted in August 2018 and the 2020 Winter Survey was conducted in March 2020. The next survey will be conducted in Summer 2022.

The data collected, which includes information such as mode share, origin-destinations, and trip purpose, is used for a variety of purposes at TRPA including regional performance metrics, project planning, and travel demand modelling.

<b>Table 8: 2018 summer and 2020 winter percentage of trips by travel mode</b>					
	<b>2018 Summer Percentage of Trips</b>	<b>2020 Winter Percentage of Trips</b>	<b>Average 2018/2020</b>	<b>Average Mode Level-1 Benchmark</b>	<b>Average Mode Level-2 Benchmark</b>
Auto, Truck, Motorcycle, Van	74.6%	78.2%	76.6%	80.93%	80.68%
Walk	14.1%	10.1%	11.9%	10.75%	n/a
Bike	7.3%	1.7%	4.2%	4.20%	n/a
Transit	2.2%	3.3%	2.8%	4.13%	n/a
Other*	1.8%	6.7%	2.4%	n/a	n/a
<b>Total Non-Auto Mode Share</b>	<b>25.4%</b>	<b>21.8%</b>	<b>23.4%</b>	<b>19.07%</b>	<b>19.32%</b>
Note: Other includes miscellaneous non-auto modes, such as skateboards, scooters, and skiing. Percentages may not add due to rounding.					
Source: Tahoe Regional Planning Agency, 2018 Summer Travel Survey, October 2018 and 2020 Winter Travel Survey, March 2020					

The winter 2020 non-auto share of 21.8 percent exceeded both the level-1 and level-2 benchmarks. The combined annual average non-auto share including summer 2018 and winter 2020 values of 23.4 percent exceeded both the level-1 and level-2 benchmarks.

## PERFORMANCE MEASURE #6

### Decrease in automobile vehicle miles travelled per capita (excluding through-trips).

Vehicle miles traveled (VMT) per capita is a measure of the efficiency of the transportation system and the degree to which the land use pattern affects personal motor vehicle travel. VMT per capita is measured through an activity-based computer model, which is updated with empirical data including traffic counts, population, and parcel-based land-use data. VMT per capita is analyzed for the Regional Transportation Plan update every four years.

In 2021 TRPA adopted a Transportation and Sustainable Communities Threshold category. The goal of the threshold is to reduce dependence on the automobile, support GHG emission reduction, and increase mobility. Progress towards attainment of this threshold is measured using a VMT per capita standard (TSC1) that establishes a goal to “Reduce Annual Daily Average VMT Per Capita by 6.8% from 12.48, the 2018 baseline, to 11.63 in 2045.”

As part of the adaptive management framework for standard, TRPA adopted a new goal in the Regional Plan (DP-5) and six policies to promote threshold attainment. That adaptive management framework includes the creation of an independent advisory body, charged with summarizing progress towards attainment of the standard and providing guidance to the Governing Board on what is working to reduce VMT/capita and how best to accelerate attainment of TSC1.

Regional Plan policy (DP-5.2) requires that the advisory body transmit the first progress report to the Governing board in the second quarter of 2022. After transmission of the report, TRPA will align the performance measures of the Regional Plan, with the revised threshold reporting framework of TSC1.

Performance Measure #6: Summary	2021 Level-1 Benchmark	2021 Level-2 Benchmark
Decrease per-capita VMT below baseline average of 33.7 miles per day (level-1) and 33.4 miles per day (level-2)	Not Evaluated	Not Evaluated

\* Close to target indicates that the performance measure is within 5% of the benchmark.

## PERFORMANCE MEASURE #7

### Accelerate pedestrian and bicycle improvements

This measure is related to Regional Plan policies regarding sidewalks, trails, and public investment levels. The 2012 Regional Plan Update included coverage exemptions and other amendments

intended to decrease costs for construction of these facilities and increase the number of improvements. The data used to calculate the average annual miles of pedestrian and bicycle facilities constructed was obtained from the Lake Tahoe Region Bicycle and Pedestrian Plan and the Environmental Improvement Program Project Tracker.

Performance Measure #7: Summary	2021 Level-1 Benchmark	2021 Level-2 Benchmark
Construction of pedestrian and bicycle improvements: 4.15 miles per year (level-1) and 9 miles per year (level-2)	Close to Target	Not Met

In 2021, due to disruptions from COVID-19, the only improvement constructed was the California Tahoe Conservancy / El Dorado County, Dennis T. Machida Memorial Greenway (previously known as the South Tahoe Greenway Shared Use Trail). This project constructed one additional mile of improvements in 2021, closing an important gap in the bicycle network to form a north/south connection from the Sierra Tract to Glenwood Way in the heart of South Lake Tahoe, and completing the core of the non-motorized transportation network in the South Shore.

Tahoe implementing agencies have constructed nearly 36 miles of bicycle and pedestrian routes since 2012, for a combined post-2012 annual average of 4.0 miles per year. This is 96 percent (considered *close to target*) of the level-1 benchmark of 4.15 miles per year. The level-2 benchmark of nine miles of pedestrian and bicycle facilities constructed per year was not met.

## PERFORMANCE MEASURE #8

**Accelerate privately funded coverage removal from stream environment zones and other sensitive lands.**

This measure relates to policy amendments in the 2012 Regional Plan that seek to facilitate environmental improvements through redevelopment and private investment. The effectiveness of key amendments related to transfer incentives for coverage is tracked through coverage removal from stream environment zones, coverage removal from other sensitive lands, and collection of excess coverage mitigation fees.

The data to determine the average annual removal was obtained from coverage transfer records using the same methods as in Performance Measure #2; however, data transfers initiated as a result of public acquisitions were removed from the analysis.

<b>Performance Measure #8: Summary</b>	<b>2021 Level-1 Benchmark</b>	<b>2021 Level-2 Benchmark</b>
Increase the amount of coverage removed and transferred from SEZs to more than 0.14 acres/year (level-1) and 0.17 acres/year (level-2)	Met	Met
Increase the coverage removed and transferred from other sensitive areas to more than 0.17 acres/year (level-1) and 0.2 acres/year (level-2)	Not Met	Not Met
Increase the collection of excess coverage mitigation fees: more than \$693,738/year (level-1) and \$728,425/year (level-2)	Met	Met

Privately funded coverage removal and transfer from stream environment zones and other sensitive lands continues to result in environmental restoration. However, this measure is dependent on project activity which requires transfers of land coverage and private investment decisions. Table 9 shows the post-2012 average coverage transferred from stream environment zones and sensitive areas compared to the baseline average calculated for the years 2002 through 2021.

<b>Table 9: Private coverage transfer by year</b>		
<b>Year</b>	<b>SEZ Transfer (acres)</b>	<b>Sensitive Transfer (acres)</b>
2021	0.06	0.03
2020	0.13	0.00
2019	0.06	0.00
2018	1.20	0.01
2017	0.19	0.09
2016	0.04	0.04
2015	0.12	0.03
2014	0.13	0.03
2013	0.00	0.08
<b>2013 to 2021 Average</b>	<b>0.21</b>	<b>0.03</b>
<b>Baseline average</b>	<b>0.14</b>	<b>0.17</b>
<b>Source:</b> TRPA Permit Records and LakeTahoelInfo.org/Parcel Tracker		

As referenced in Performance Measure #2, banked development rights were evaluated as a measure of future transfer potential. TRPA identified nine acres of previously existing land coverage removed from stream environment zones and another four acres removed from other sensitive lands since 2012. Most of this land coverage is currently banked and will likely be transferred in the future to non-sensitive areas and town centers because of 2012 Regional Plan policies that provide incentives to relocate development in these areas. In addition to these figures, more than 40,000 square feet of previously existing land coverage from stream

environment zones has been permanently retired by private property owners since 2012, as a condition of project approval.

For excess coverage mitigation fees (Table 10), the baseline is an annual average of \$693,738 collected per year. The post-2012 annual average of \$830,812 exceeds the level-1 benchmark to increase excess coverage mitigation fees collected above the pre-2012 average and the level-2 benchmark to further increase collections by five percent above the benchmark. Numerous projects in 2021 paid the entirety of their excess coverage mitigation fees to be eligible for coverage exemptions. These coverage exemptions exempt certain structures—including decks, sheds, or pervious driveway pavers—from the calculation of land coverage on high-capability, non-sensitive lands. To receive an exemption, the property must also have a certificate of completion for water quality Best Management Practices (BMPs).

<b>Table 10: Annual average excess coverage mitigation fees collected in 2013 -2021 compared to baseline</b>		
<b>Annual Year</b>	<b>Total Excess Coverage Mitigation Fees</b>	<b>Post-2012 Excess Coverage Mitigation Fees</b>
2002	\$941,189	
2003	\$618,351	
2004	\$677,895	
2005	\$332,921	
2006	\$837,451	
2007	\$404,932	
2008	\$1,932,739	
2009	\$291,533	
2010	\$287,305	
2011	\$613,066	
2012	-	
2013		\$335,632
2014		\$451,103
2015		\$996,804
2016		\$1,025,772
2017		\$874,386
2018		\$593,825
2019		\$679,483
2020		\$940,390
<b>2021</b>		<b>\$1,579,910</b>
<b>Baseline annual average</b>	<b>\$693,738</b>	
<b>Post 2012 annual average</b>		<b>\$830,812</b>
<b>Source:</b> TRPA Permit Records and TRPA Financial Records		
<b>Note:</b> These baseline figures have been restated to match the baseline originally adopted by the TRPA Governing Board in May 2013. Data for 2012 was not included in the baseline. Prior year reports included erroneous baseline information that has been corrected here. In addition, the data for 2013-2016 were also recalculated using updated methodology to ensure consistency and accuracy of the calculations.		

**PERFORMANCE MEASURE #9**

**Accelerate issuance of water quality BMP certificates in conjunction with property improvements.**

This performance measure tracks the private investment to mitigate the impacts of development through implementation of water quality BMPs associated with development permits. The measure seeks to evaluate the rate of issuance of certifications for the control of stormwater through permits issued by TRPA and MOU partners for property improvements (new construction, redevelopment, additions, remodels, etc.). The level-1 benchmark is an increase in the rate of certification from permitting, as a percentage of all remaining properties without certification, from the baseline of one percent. The level-2 benchmark calls for a 25 percent improvement upon the baseline average.

Performance Measure #9: Summary	2021 Level-1 Benchmark	2021 Level-2 Benchmark
Increase the rate of BMP Certificates issued in conjunction with property improvements: issue BMP certificates to 1% of outstanding properties through permitting (level-1) and 1.25% (level-2)	Met	Not Met

\* Close to target indicates that the performance measure is within 5% of the benchmark

In 2021, TPPA issued 241 BMP certificates as a result of permitted projects. Approximately 68 percent of the total certificates issued were as a result of permitted projects. Table 11 illustrates the certification rates for single-family residential, multi-family residential, and commercial properties by all methods. As described in the excess coverage mitigation section above, in recent years, TRPA has seen an increase in property owners installing their BMPs on residential parcels to be eligible for TRPA’s special coverage exemptions. These exemptions allow property owners to exempt certain structures, including decks, pervious driveways, and sheds, from land coverage calculations for properties located on high capability lands that have installed water quality BMPs. In addition, TRPA’s mooring registration and permitting program and the mooring lottery in 2022 require that properties are compliant with the requirements to install stormwater BMPs in order to apply or register moorings. In 2021, 25 of the properties that received BMP certificates during the year installed their BMPs to be able to register their moorings and another four properties were certified to be eligible for the mooring lottery.

**Table 11: BMP certification summary**

Performance Measure	2021	Average per Year (2013 to 2021)
Percent of total outstanding properties issued BMP certificates in conjunction with property improvements	0.7%	1.0%
Certification of single-family residential parcels all methods	216	356
Certification of multi-family residential parcels all methods	9	109
Certification of commercial parcels	16	35
Total number of certifications issued in area-wide BMPs	8	13
Completed area-wide BMP projects	1	1
Approved and funded area-wide BMP projects	0	1
<b>Source:</b> TahoeBMP.org BMP Database		

The post-2012 annual average percentage of uncertified parcels that receive BMP certificates through permitting was 1.0 percent, meeting the level-1 benchmark. The level-2 benchmark, a 25 percent increase in the annual average rate of BMP certificates issued in conjunction with property improvements, was not achieved.

## PERFORMANCE MEASURE #10

### Achieve Lake Tahoe Total Maximum Daily Load performance benchmarks.

This measure tracks the performance benchmarks set by the Lake Tahoe Total Maximum Daily Load (TMDL) program, which is a water quality program adopted and administered directly by the states of California and Nevada for Lake Tahoe. TRPA’s 2012 Regional Plan and land use regulations play a critical part in the overall implementation system relied on to achieve the TMDL and attain TRPA water quality threshold standards. The TMDL performance benchmarks are tracked by the Lahontan Regional Water Quality Control Board and the Nevada Division of Environmental Protection. For this performance measure, there is no level-2 benchmark.

Performance Measure #10: Summary	2021 Level-1 & Level 2 Benchmarks
Completion of required TMDL load reductions as established by State TMDL programs	Met



The Lake Tahoe TMDL Program 2021 Performance Report(<https://clarity.laketahoeinfo.org/FileResource/DisplayResourceAsEmbeddedPDF/27d0d0f5-21f9-40b3-a690-18669fd12437>) found that local governments and highway departments at Lake Tahoe collectively met and exceeded their 2020 water year pollutant load reduction targets.

The report states that every Urban Implementing Partner was awarded credits that exceeded its credit target in 2020. Collectively, partners have completed 45 active registrations and were awarded 2,611 credits in 2020, far exceeding the target of 2,279 credits. The credits represent a Fine Sediment Particle load reduction of roughly 523,000 pounds per year.

## PERFORMANCE MEASURE #11

### **Accelerate Scenic Threshold attainment on urban roadways.**

Scenic conditions in the Tahoe Region's less intensely developed areas generally meet adopted threshold standards. Scenic quality along roadways in developed areas is generally improving but remains out of attainment with the Threshold goals. The 2012 Regional Plan included amendments to accelerate redevelopment activity that is expected to also achieve scenic improvements in town centers. This performance measure analyzes the average annual improvement in developed areas, especially community centers.

Within the Tahoe Region, 14 of the scenic roadway units have portions that are within urban areas. The level-1 benchmark for this measure is to increase the scores in these units by the average rate of improvement between 2001 and 2011 (a 1.45-point improvement per year); the level-2 benchmark is to increase the average annual scenic improvement rate for urban roadway units by an additional 20 percent.

A scenic evaluation was for the 2019 Threshold Evaluation, see <https://thresholds.laketahoeinfo.org/ThresholdReportingCategory/Detail/RoadwayAndShorelineUnits>. Scenic ratings for all 14 scenic roadway units were either stable or improved from their ratings in the 2015 Threshold Evaluation Report. Three urban roadway scenic units, Tahoe Valley and Al Tahoe in the City of South Lake Tahoe, and Kings Beach in Placer County, increased from the 2015 evaluation. Despite these increases of three points, or 0.75 points per year, the annual average increases were not sufficient to meet the benchmarks.

Performance Measure #11: Summary	2021 Level-1 Benchmark	2021 Level-2 Benchmark
Accelerate scenic improvement on urban roadways by increasing annual scenic scores for urban roadway units by 1.45 points/year (level-1) and 1.74 points/year (level-2)	Not Met	Not Met

## PERFORMANCE MEASURE #12

### Prepare and maintain area plans in conformance with the 2012 Regional Plan.

Under the 2012 Regional Plan, area plans, once approved by local governments and found to be in conformance with the Regional Plan by TRPA, replace community plans and plan area statements. There are three indicators evaluated under this measure: the number of acres included in new area plans; the recertification rate for area plans; and the number of public meetings for each area plan under development.

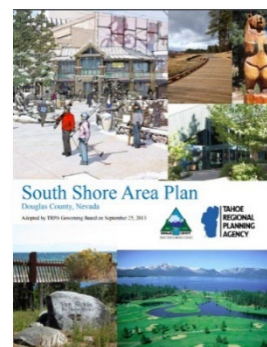
Performance Measure #12: Summary	2021 Level-1 and Level-2 Benchmarks
Include 20% of private land in new area plans (level-1 and -2)	Met
100% recertification rate for area plans (level-1 and -2)	Met
At least two public meetings for each area plan under development (level-1 and -2)	Met

To date, six area plans have been approved, covering more than 34 percent of the land area of the Lake Tahoe Region, including 89 percent of Centers (Town Centers, Regional Centers, and the highest density commercial district) in the Region. This exceeds the 20 percent benchmark.

### Douglas County, Nevada

#### South Shore Area Plan

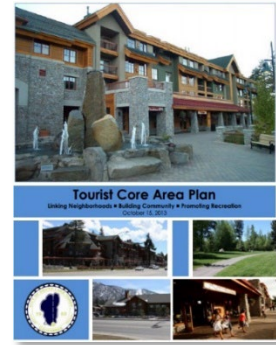
The South Shore Area Plan includes approximately 667 acres located along Highway 50, between Kahle Drive and the state line, in Douglas County, Nevada. The Governing Board adopted the Area Plan and an associated MOU in 2013.



### City of South Lake Tahoe, California

## Tourist Core Area Plan

The Tourist Core Area Plan includes approximately 300 acres located along Highway 50, between Ski Run Boulevard and the state line, in the City of South Lake Tahoe, California. The Governing Board adopted the Area Plan in 2013. The Governing Board approved Area Plan amendments to incentivize town center redevelopment and housing development in 2020. The Governing Board adopted a delegation MOU with the City in December 2014. The MOU covers areas both within and outside of Area Plans in the City of South Lake Tahoe. The MOU took effect in the third quarter of 2015. Tahoe Valley Area Plan



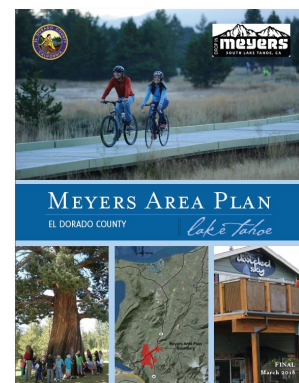
The Tahoe Valley Area Plan includes 337 acres near the intersection of Highways 50 and 89 (“Y” area) in the City of South Lake Tahoe, California. The Governing Board adopted the Area Plan in July 2015. In 2020, the Governing Board approved updates to the Area Plan to facilitate the development of the Sugar Pine Village affordable housing project, as well as future affordable housing projects. The City delegation MOU that took effect in 2015 includes the Tahoe Valley Area Plan.



## **El Dorado County, California**

### Meyers Area Plan

The Meyers Area Plan includes approximately 669 acres in the Meyers community in El Dorado, California. The Governing Board adopted the Area Plan in February 2018. A delegation MOU that covers the Meyers Area Plan and future Area Plans, as well as the rest of El Dorado County in the Tahoe Region, was adopted by the Governing Board in November 2018. The MOU includes three phases of permit delegation. The MOU (Phase I & II) went into effect in January 2020.



## Placer County, California

### Placer County Tahoe Basin Area Plan

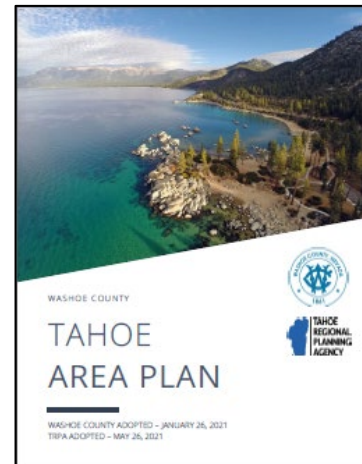
The Placer County Tahoe Basin Area Plan includes all property under the jurisdiction of TRPA in Placer County, California, more than 46,000 acres. The Governing Board adopted the Area Plan in February 2017. In 2021, the Governing Board approved updates to the Area Plan to better align the Area Plan with the County's housing goals and TRPA Regional Plan updates. The Governing Board approved an MOU in October 2017. The MOU includes three phases of permit delegation. The MOU (Phase I & II) went into effect in May 2018.



## Washoe County, Nevada

### Washoe County Tahoe Area Plan

The Washoe County Tahoe Area Plan includes all property within the Tahoe Basin portion of Washoe County, Nevada, nearly 20,000 acres. The Governing Board approved the Area Plan in May of 2021. The plan guides growth by recognizing critical conservation areas, establishing existing and future land use and transportation patterns, and identifying current and future public service and facility needs. This is the most recently adopted Area Plan in the Tahoe Basin.



Based on an annual audit of the adopted area plans and implementation of delegated permitting authority, the TRPA Governing Board reviewed and recertified all existing area plans and associated MOUs on December 15, 2021, meeting the benchmark of 100 percent area plan recertifications.

Table 12 summarizes the number of public meetings that occurred in 2021 related to the development and update of area plans. Public meetings were held by TRPA and local jurisdictions in 2021 for amendments to the City of South Lake Tahoe's Tourist Core Area Plan and Tahoe Valley Area Plan, amendments to the Placer County Tahoe Basin Area Plan, and the draft Washoe County Area Plan.

Table 12: Number of public meetings and workshops held in 2021 in support of the development and update of area plans	
Area Plan	Number of Public Meetings/Workshops
Washoe County Area Plan	4 <sup>1</sup>
Placer County Tahoe Basin Area Plan Amendment	3 <sup>2</sup>
CSLT, Tourist Core Area Plan Amendments	3
CSLT, Tahoe Valley Area Plan Amendments	1 <sup>2</sup>

1 Additional public meetings held between 2018 and 2020.

2 Additional public meetings held in 2020

### PERFORMANCE MEASURE #13

#### Complete mitigation measures identified in the Regional Plan Update EIS

This measure is related to the mitigation measures called for in the 2012 Regional Plan Update Environmental Impact Statement (EIS). The mitigation measures address construction best practices for air quality and noise, Region-wide traffic noise reduction, noise policy for mixed-use development, and greenhouse gas emissions reduction. The benchmark for this performance measure is to develop and adopt the mitigation measure identified in the Regional Plan Update EIS.

Performance Measure #13: Summary	2021 Level-1 Benchmark	2021 Level-2 Benchmark
Complete mitigation measures identified in the Regional Plan Update EIS	Met	Met

Mitigation programs for all the specified categories were developed and the TRPA Governing Board adopted these programs in November 2013.

### PERFORMANCE MEASURE #14

#### Increase rate of redevelopment

An objective of the 2012 Regional Plan is to improve economic vitality through accelerated property improvement and redevelopment associated with environmental improvement. This

performance measure tracks the average annual rate of permits issued for rebuild, addition, and remodel projects (Table 13). The level-1 benchmark requires an increase in redevelopment from the 2002 to 2012 baseline. The level-2 benchmark seeks a 10 percent increase in redevelopment from the baseline.

<b>Performance Measure #14: Summary</b>	<b>2021 Level-1 Benchmark</b>	<b>2021 Level-2 Benchmark</b>
Approve more than 108.2 redevelopment permits (level-1) and 119 redevelopment permits (level-2)	Met	Met

\* Close to target indicates that the performance measure is within 5% of the benchmark.

TRPA approved 115 redevelopment permits in 2021, including 110 residential permits and 5 commercial/tourist accommodation permits. The 2013 to 2021 average of 130.3 redevelopment projects exceeds the level-1 and level-2 benchmarks.

<b>Table 13: Annual average of TRPA permits issued for additions/modifications/rebuilds after 2012</b>				
<b>Additions/Modifications/Rebuilds</b>	<b>2021</b>	<b>2013-2021 Average</b>	<b>Level-1 Pre-2012 Baseline Average (2002 – 2012)</b>	<b>Level-2 10% Increase from Level 1</b>
Residential Permits	110	122.2	n/a	n/a
Commercial/Tourist Permits	5	8.1	n/a	n/a
<b>Total</b>	<b>115</b>	<b>130.3</b>	<b>108.2</b>	<b>119</b>

**Table 13: Summary of regional plan performance measures and indicators with 2021 status**

Category	Performance Measure	Indicator	Level-1 Benchmark	2021 Level-1 Results	2021 Level-1 Status	Level-2 Benchmark	2021 Level-2 Results	2021 Level-2 Status
Regional Land Use Patterns	PM1. Distribution of development for land-use types	Increase the percent of commercial floor area located within centers to more than 63.13% (level-1) and 63.23% (level-2)	63.13%	64.84%	103% = Met	63.23%	64.84%	103% = Met
		Decrease the percent of commercial floor area in remote areas to less than 26.32% (level-1) and 26.22% (level-2)	26.32%	25.77%	102% = Met	26.22%	25.77%	102% = Met
		Increase the percent of residential units located within centers to more than 3.84% (level-1) and 4.24% (level-2)	3.84%	4.70%	122% = Met	4.24%	4.70%	111% = Met
		Decrease the percent of residential units in remote areas to less than 67.66% (level-1) and 67.26% (level-2)	67.66%	66.78%	101% = Met	67.26%	66.78%	101% = Met
		Increase the percent of tourist accommodation units located within centers to more than 83.37% (level-1) and 83.47% (level-2)	83.37%	82.64%	99% = Close to Target	83.47%	82.64%	99% = Close to Target
		Decrease the percent of tourist accommodation units in remote areas to less than 10.44% (level-1) and 10.34% (level-2)	10.44%	13.29%	79% = Not Met	10.34%	13.29%	78% = Not Met
		Increase the value of property improvements within centers to more than 10.94% (level-1) and 11.14% (level-2)	10.94%	11.00%	101% = Met	11.14%	11.00%	99% = Close to Target
		Decrease the value of property improvements in remote areas to less than 71.38% (level-1) and 71.18% (level-2)	71.38%	71.54%	99% = Close to Target	71.18%	71.54%	99% = Close to Target
	PM2. Annual average number of units transferred to town centers from sensitive and remote land	Transfer more than zero residential units to centers from SEZs	>0	46 units since 2013; annual average of 5.1 units	Met	No Level 2 Benchmark		
		Transfer more than 414.18 square feet of commercial floor area to centers from SEZs	>414.18 sf	0 sf since 2013; annual average of 0	Not Met	No Level 2 Benchmark		

**Table 13: Summary of regional plan performance measures and indicators with 2021 status (continued)**

Regional Land Use Patterns	PM2. Annual average number of units transferred to town centers from sensitive and remote land	Transfer more than 0.36 tourist accommodation units to centers from SEZs	>0.36	12 units since 2013; annual average of 1.3 units	Met	No Level 2 Benchmark
		Transfer more than zero potential residential units* to centers from SEZs	>0	8 units since 2013; annual average of 1 unit	Met	No Level 2 Benchmark
		Transfer more than zero residential units to centers from other sensitive lands	>0	0 units since 2013; annual average of 0 units	Not Met	No Level 2 Benchmark
		Transfer more than 959.55 square feet of commercial floor area to centers from other sensitive lands	>959.55 sf	6,500 sf since 2013; annual average of 812.5 sf	Not Met	No Level 2 Benchmark
		Transfer more than zero tourist accommodation units to centers from other sensitive lands	>0	0 units since 2013; annual average of 0 units	Not Met	No Level 2 Benchmark
		Transfer more than 0.18 potential residential units* to centers from other sensitive lands	>0.18	2 units since 2013; annual average of 0.22 units	Met	No Level 2 Benchmark
		Transfer more than 0.09 residential units to centers from remote areas	>0.09	0 units since 2013; annual average of 0 units	Not Met	No Level 2 Benchmark



		Transfer more than 470.18 square feet of commercial floor area to centers from remote areas	>470.18 sf	0 sf since 2013; annual average of 0	Not Met	No Level 2 Benchmark		
		Transfer more than zero tourist accommodation units to centers from remote areas	>0	12 units since 2013; annual average of 1.3 units	Met	No Level 2 Benchmark		
		Transfer more than 0.09 potential residential units* to centers from remote areas	>0.09	11 units since 2013; annual average of 1.2 units	Met	No Level 2 Benchmark		
	PM3. Removal rate for existing non-residential units of use	Remove existing tourist units of use from sensitive lands (Develop and fund a program to acquire and retire tourist units of use within 4 years – level 1) (acquire 10 TAUs – level 2)	Develop/ fund program	Program developed, not funded	Partially Met	Remove 10 TAUs	94 TAUs have been removed from SEZs since 2012. None have been permanently retired.	Partially Met
Regional Land Use Patterns	PM3. Removal rate for existing non-residential units of use	Remove existing commercial floor area from sensitive lands (Develop and fund a program to acquire CFA within 4 years – level 1) (acquire 5,000 sf of CFA – level 2)	Develop/ fund program	Program developed, not funded	Partially Met	Remove 5K sf CFA	Nearly 29,000 sf of CFA have been removed and banked from SEZs since 2012. None have been	Partially Met

							permanently retired.	
	PM4. Housing availability for residents and workers	Average annual rate of multi-residential bonus unit utilization 20.23 units per year (level-1) and 21.24 units per year (level-2)	20.23 units/year	316 units since 2013; annual average of 35 units	173% = Met	21.24 units/year	316 units since 2013; annual average of 35 units	165% = Met
Travel Behavior	PM5. Percentage of all trips using non-automobile modes of travel (transit, bicycle, pedestrian)	Increase percentage of trips by non-auto modes (transit, bicycle, pedestrian) above 19.07% (level-1) and above 19.32% (level-2)	19.07%	24.50%	128% = Met	19.32%	24.50%	127% = Met
	PM6. Automobile vehicle miles traveled per capita (excluding through trips)	Decrease per-capita VMT below baseline average of 33.7 miles per day (level-1) and 33.4 miles per day (level-2)	33.7 miles/day	Not Evaluated	Not Evaluated	33.4 miles/day	Not Evaluated	Not Evaluated
	PM7. Construction of pedestrian and bicycle improvements	Construction of pedestrian and bicycle improvements: 4.15 miles per year (level-1) and 9 miles per year (level-2)	4.15 miles/year	35.8 miles since 2013; annual average of 4.0 miles	96% =Close to Target	9 miles/year	35.8 miles since 2013; annual average of 4.0 miles	44% = Not Met
Environmental Restoration Environmental Restoration	PM8. Coverage removal from Stream Environment Zones and other sensitive lands (privately-funded)	Increase the amount of coverage removed and transferred from SEZs to more than 0.14 acres/year (level-1) and 0.17 acres/year (level-2)	0.14 acres/year	2.8 acres since 2013; annual average of 0.31 acres/year	222% = Met	0.17 acres/year	2.8 acres since 2013; annual average of 0.31 acres/year	183% = Met
		Increase the coverage removed and transferred from other sensitive areas to more than 0.17 acres/year (level-1) and 0.2 acres/year (level-2)	0.17 acres/year	0.04 acres since 2013; annual average of 0.005 acres/year	Not Met	0.2 acres/year	0.04 acres since 2013; annual average of 0.005 acres/year	Not Met

		Increase the collection of excess coverage mitigation fees: more than \$693,738/year (level-1) and \$728,425/year (level-2)	\$693,738 /year	\$830,812 /year	120% = Met	\$728,425 /year	\$830,812 /year	114% = Met
	PM9. Issuance of best management practices (BMP) certificates in conjunction with property improvements and area-wide BMP installations	Increase the rate of BMP Certificates issued in conjunction with property improvements: issue BMP certificates to 1% of outstanding properties through permitting (level-1) and 1.25% (level-2)	1.00%	1.0%	100% = Met	1.25%	1.0%	80% = Not Met
	PM10. Lake Tahoe Total Maximum Daily Load (TMDL) performance benchmarks	Completion of required TMDL load reductions as established by State TMDL programs	Achieve Reductions	Achieved Reductions	Met	No Level 2 Benchmark		
	PM11. Scenic improvement rate on urban roadways	Accelerate scenic improvement on urban roadways by increasing annual scenic scores for urban roadway units by 1.45 points/year (level-1) and 1.74 points/year (level-2)	1.45	Increase of 3 points from 2015 to 2019 evaluation; annual average of 0.75 points	Not Met	1.74	Increase of 3 points from 2015 to 2019 evaluation; annual average of 0.75 points	Not Met
	PM12. Prepare and maintain area plans in conformance with the 2012 Regional Plan	Include 20% of private land in new area plans (level-1 and -2)	20%	34%	170% = Met	No Level 2 Benchmark		
		100% recertification rate for area plans (level-1 and -2)	100%	100%	100% = Met	No Level 2 Benchmark		

Effective Regional Plan Implementation	PM12. Prepare and maintain area plans in conformance with the 2012 Regional Plan	At least two public meetings for each area plan under development (level-1 and -2)	2	21	Met	No Level 2 Benchmark		
	PM13. Complete mitigation measures identified in the Regional Plan Update environmental impact statement	Complete mitigation measures identified in the Regional Plan Update EIS	Complete Measures	Completed Measures	Met	No Level 2 Benchmark		
Economic Vitality	PM14. Rate of redevelopment	Approve more than 108.2 redevelopment permits (level-1) and 119 redevelopment permits (level-2)	108.2	130.3	120% = Met	119	130.3	110% = Met

Note: Close to target indicates that the performance measure is within 5% of the benchmark.

## Report on the Net Changes in Development in the Lake Tahoe Region for the past two years

The TRPA Governing Board adopted amendments to the TRPA Regional Plan in October 2018 to implement proposed changes to the development rights system.

As a requirement of these changes, TRPA tracks development right transfer transactions in accordance with TRPA Code Chapter 6: Tracking, Accounting, and Banking and prepares an annual report of transfer activity.

This report includes the total net changes in development rights for each jurisdiction over the previous two years, including:

- Total number of existing development rights built or approved for a project within each jurisdiction as of the date of the report
- The net change of existing development rights being used within each jurisdiction for the past two years.
- Total number of banked development rights within each jurisdiction as of the date of the report.
- Total number of development rights transferred out of each jurisdiction in the past two years.
- Total number of development rights transferred into each jurisdiction in the past two years.
- Total number of development rights converted by development type and quantity within each jurisdiction in the past two years.

### Existing, Banked, and Transacted Development Rights by Jurisdiction

As of December 2021, there are an estimated 47,905 residential units, 11,262 tourist accommodation units, and 6,353,592 square feet of commercial floor area in the Lake Tahoe Region. Table 14 below shows the net change in existing development in 2020 and 2021, including new construction, and any development removed during the past two years for banking, conversions, and transfers. The current qualities of banked development rights are also included in Table 1, as well as a summary of the net of transfer activity into/out of each jurisdiction and the net of conversions from 2020 and 2021.

Table 15 provides additional detail on the inter-jurisdictional transfers into and out of each jurisdiction, and the net changes for 2020-2021. The total net change is also displayed as a percentage of the existing development. Interjurisdictional transfers between 2020-2021 did not result in significant changes in any development types or jurisdictions. The largest net change was in commercial floor area, where Douglas County, NV declined during this period by -1.9% of existing development, as commercial floor area was transferred to the City of South Lake Tahoe and Washoe County, resulting in an +0.8% increase in Washoe County.

Table 16 details the conversion activity for development rights in 2020 and 2021. Conversion information is shown by jurisdiction and by the original and converted development right type. During 2020-2021, the net conversion of development rights resulted in 56 additional residential units, while tourist accommodation units in the Tahoe Region were reduced by 12 units and commercial floor area was reduced by 11,600 square feet. This shift is consistent with TRPA's Tahoe Living Workforce Housing and Community Revitalization Working Group reports detailing the need for greater housing availability,

and BAE recommendations after the 2012 Regional Plan update to address housing shortages through providing greater flexibility in the development rights system, including conversions and transfers. These recommendations were implemented through the 2018 development rights initiative and although the changes are small, the expected shifts away from commercial and tourist to residential that were hypothesized in the Regional Plan EIS, BAE report, and other information, appear to be what is happening on the ground.

Table 14. Tahoe Region by Jurisdiction - Estimated Existing, Banked, and Transacted Development Rights

As of December 31, 2021

<b>Residential Units</b>						
<b>Jurisdiction</b>	<b>Existing Residential Units 2021</b>	<b>Net Development Change, 2020 and 2021</b>	<b>Current Banked Inventory (ERU)</b>	<b>Current Banked Inventory (PRU)</b>	<b>Net Transfers Since 2020 (ERU+PRU)</b>	<b>Net Conversions Since 2020</b>
Carson City	1	+ 0	0	0	0	0
City/South Lake Tahoe	15,725	+ 24	89	73	+ 12	+ 25
Douglas	4,462	+ 7	83	22	0	0
El Dorado	8,796	+ 34	19	88	- 2	+ 1
Placer	11,391	+ 31	37	117	0	+ 18
Washoe	7,530	+ 12	23	3	- 10	+ 12
<b>Grand Total</b>	<b>47,905</b>	<b>+ 108</b>	<b>251</b>	<b>303</b>	<b>0</b>	<b>+ 56</b>

<b>Tourist Accommodation Units</b>					
<b>Jurisdiction</b>	<b>Existing Tourist Accommodation Units 2021</b>	<b>Net Development Change, 2020 and 2021</b>	<b>Current Banked Inventory</b>	<b>Net Transfers Since 2020</b>	<b>Net Conversions Since 2020</b>
Carson City	0	+ 0	0	0	0
City/South Lake Tahoe	5,606	- 16	818	0	- 12
Douglas	3,551	+ 0	0	0	0
El Dorado	112	+ 0	0	0	0
Placer	1,034	+ 0	146	0	0
Washoe	959	+ 0	34	0	0
<b>Grand Total</b>	<b>11,262</b>	<b>- 16</b>	<b>998</b>	<b>0</b>	<b>- 12</b>

**Commercial Floor Area**

Jurisdiction	Existing Commercial Floor Area 2021	Net Development Change, 2020 and 2021	Current Banked Inventory	Net Transfers Since 2020	Net Conversions Since 2020
Carson City	0	+ 0	0	0	0
City/South Lake Tahoe	2,867,693	- 2,700	104,441	- 1,088	- 4,200
Douglas	702,496	+ 3,310	14,953	- 9,500	0
El Dorado	328,923	- 124	7,245	+ 1,000	- 300
Placer	1,291,158	- 6,323	50,208	0	- 3,700
Washoe	1,163,322	- 8,353	56,400	+ 9,588	- 3,400
<b>Grand Total</b>	<b>6,353,592</b>	<b>- 14,190</b>	<b>233,247</b>	<b>0</b>	<b>- 11,600</b>

Table 15. Interjurisdictional Transfers and Net Change by Jurisdiction for Residential Units, Tourist Accommodation Units and Commercial Floor Area for 2020-2021

Existing/Potential Residential Unit of Use (PRU and ERU) - Transfers 2020-2021						
From/To Jurisdiction	To DG	To CSLT	To EL	To PL	To WA	To Total
From DG	1	0	1	0	0	2
From CSLT	1	6	6	0	0	13
From EL	0	8	0	0	0	8
From PL	0	0	0	3	0	3
From WA	0	11	0	0	0	11

Interjurisdictional Total
1
7
8
0
11

Residential Unit of Use (RUU) and Potential Residential Units (PRU) - Net Transfers Since 2020-2021				
From/To Jurisdiction	Out	In	Net Change	Net Change % of Existing
From DG	-1	+1	0	0.0%
From CSLT	-7	+19	+12	+0.1%
From EL	-8	+7	-1	-0.0%
From PL	0	0	0	0.0%
From WA	-11	0	-11	-0.1%



From Total	2	25	7	3	0	37
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27
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From Total	-27	+27	0	0.0%
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Tourist Accommodation Units - Transfers 2020-2021						
From/To Jurisdiction	To DG	To CSLT	To EL	To PL	To WA	To Total
From DG	0	0	0	0	0	0
From CSLT	0	6	0	0	0	6
From EL	0	0	0	0	0	0
From PL	0	0	0	0	0	0
From WA	0	0	0	0	0	0
From Total	0	6	0	0	0	6

Interjurisdictional Total
0
0
0
0
0
0
0

Tourist Accommodation Units - Net Transfers Since 2020-2021				
From/To Jurisdiction	Out	In	Net Change	Net Change % of Existing
From DG	0	0	0	0.0%
From CSLT	0	0	0	0.0%
From EL	0	0	0	0.0%
From PL	0	0	0	0.0%
From WA	0	0	0	0.0%
From Total	0	0	0	0.0%

Commercial Floor Area - Transfers 2020-2021						
From/To Jurisdiction	To DG	To CSLT	To EL	To PL	To WA	To Total
From DG	0	6,500	0	0	6,500	13,000
From CSLT	0	5,430	0	0	3,200	8,630
From EL	0	0	0	0	0	0
From PL	0	0	0	0	0	0
From WA	0	112	0	0	0	112
From Total	0	12,042	0	0	9,700	21,742

Interjurisdictional Total
13,000
3,200
0
0
112
16,312

Commercial Floor Area - Net Transfers 2020-2021				
From/To Jurisdiction	Out	In	Net Change	Net Change % of Existing
From DG	-13,000	0	-13,000	-1.9%
From CSLT	-3,200	+6,612	+3,412	+0.1%
From EL	0	0	0	0.0%
From PL	0	0	0	0.0%
From WA	-112	+9,700	+9,588	+0.8%
From Total	-16,312	16,312	0	0.0%

Table 16. Conversions by Jurisdiction and Development Right Type, 2020-2021.

Jurisdiction	Residential Units of Use		Tourist Accommodation Units		Commercial Floor Area (sq. ft.)	
	From Residential	To Residential	From TAU	To TAU	From CFA	To CFA
Carson City	0	0	0	0	0	0
City/South Lake Tahoe	- 3	+ 28	- 13	+ 1	- 4,200	0
Douglas	0	0	0	0	0	0
El Dorado	0	+1	0	0	- 300	0
Placer	0	+ 18	0	0	- 3,700	0
Washoe	0	+ 12	0	0	- 3,400	0
<b>Grand Total</b>	<b>- 3</b>	<b>+ 59</b>	<b>- 13</b>	<b>+ 1</b>	<b>- 11,600</b>	<b>0</b>



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## STAFF REPORT

Date: February 16, 2022

To: TRPA Operations Committee

From: TRPA Staff

Subject: Informational briefing on updating TRPA planning software and exploring funding options

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Summary:

Staff will provide an informational briefing on updating the agency's planning software to better enable expeditious review and processing of applications.

Project Description/Background:

TRPA has used our current software for 15 years. Because of the age of the current system, outdated system design, and customization decisions that were made years ago, TRPA has limited ability to make significant improvements to the system.

Overhauling and updating our software will improve TRPA review times. And, with improved application tools, we will receive higher quality applications the first time, providing better customer service. Electronic document review tools and automation will enable planners to review projects, enter data, and issue permits more quickly and efficiently. And, new reporting and dashboard tools will provide real-time access to workloads and review times, improving transparency and accountability for the public and enabling TRPA management to better allocate resources.

TRPA received record numbers of applications in each of the past two years. These much-needed enhancements will modernize TRPA's permitting system with easy-to-use interfaces for the public and staff users, provide more automated tools and new workflows to streamline and accelerate review times, enable email/text notifications, electronic document review, and markup tools and e-signatures, and integrated document management.

TRPA issued a request for proposal (RFP) for land use permitting software in late 2021. We received 16 proposals for permitting software. Following interviews, product demonstrations, and detailed testing, the selection committee has a clear choice. The preferred software is cloud-hosted by the vendor, which is current practice in the software industry and will allow for regular and timely updates to address security and performance issues. Most of the local jurisdictions in the region also use the preferred software. Staff will discuss funding options with the committee.

Contact Information:

For questions regarding this agenda item, please contact Ken Kasman, Research and Analysis Division Manager, at (775) 589-5253 or [kkasman@trpa.gov](mailto:kkasman@trpa.gov).



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## STAFF REPORT

Date: February 16, 2022  
To: TRPA Environmental Improvement, Transportation, and Public Outreach Committee  
From: TRPA Staff  
Subject: Transportation Funding Update

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### Summary and Staff Recommendation:

Provide feedback on the transportation funding initiative following a presentation of information from staff and the consultant team Regional Government Services (RGS). No action is requested at this time.

### Background:

New transportation funding to deliver transportation priorities in the Regional Transportation Plan has been elevated broadly over the last few years. TRPA is supporting the Bi-State Consultation on Transportation, local partners, and Tahoe Transportation District to engage in a collaborative approach to developing sustainable funding for transportation priorities in the Regional Transportation Plan.

The Environmental Improvement Program, Transportation and Public Outreach (EITPO) Committee will be providing important policy guidance in the development of a sustainable transportation funding proposal. Periodic updates such as this to the Committee are needed to guide the technical work and work through regional policy issues that may come up. TRPA and TTD staff are cooperatively leading this effort.

Regional Government Services (RGS) will cover the following at the February 23 EITPO Committee meeting:

- Debrief on Bi-State Consultation Working Group Meeting 1/31/22
  - Update on shared responsibility to generate new transportation revenue
  - Status of funding options for Federal, State and Regional/Local sectors
- Next Steps Nevada Legislature preparation and priority project funding opportunities

Project website: [Sustainable Funding Initiative | Tahoe Regional Planning Agency - TRPA](#)

### Contact Information:

For questions regarding this agenda item, please contact Nick Haven, Division Manager, Long Range and Transportation Planning Division, at [nhaven@trpa.gov](mailto:nhaven@trpa.gov).



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STAFF REPORT

Date: February 16, 2022  
To: TRPA Regional Plan Implementation Committee  
From: TRPA Staff  
Subject: Consideration and Possible Recommendation of Approval to Amend the Bijou/Al Tahoe Community Plan to Add a Special Height Standard for Public and Quasi-Public Facilities

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Staff Recommendation:

TRPA staff requests that the Regional Plan Implementation Committee (RPIC) review the materials provided in this packet to ensure the proposed Bijou/Al Tahoe Community Plan amendments are in conformance with the Regional Plan and recommend approval of the amendments to the TRPA Governing Board.

Required Motions:

To recommend approval of the proposed amendments, the RPIC must make the following motions, based on this staff report and materials provided within this packet:

- 1) A motion to recommend TRPA Governing Board approval of the required findings, as described in Attachment D, including a Finding of No Significant Effect, for adoption of the community plan amendments as provided in this packet; and
- 2) A motion to recommend TRPA Governing Board adoption of Ordinance 2022-\_\_\_\_, amending Ordinance No. 2020-04, as previously amended, to amend the Bijou/Al Tahoe Community Plan as shown in Attachment E, Exhibit 1.

In order for motions to pass, an affirmative vote of a majority of the quorum in attendance is required.

Approval and Adoption Process:

Local plan amendments are typically first approved and adopted by the local jurisdiction and then by the TRPA Governing Board. Upon TRPA approval and adoptions, local plans then become components of the Regional Plan. These plans may also serve as a component of a local jurisdiction's general or master plan. Local plans include area plans, community plans, and plan area statements. Local jurisdiction staff engage with TRPA staff early and often throughout the development and planning process for local plans and amendments to ensure conformance with the Regional Plan.

The Bijou/Al Tahoe Community Plan amendments as provided in this packet were initiated by the City of South Lake Tahoe in January 2021 in anticipation of a new recreation and aquatic center on a property commonly referred to as the 56-acre site or project area (see Location Map 1 on the subsequent page).

The City of South Lake Tahoe is developing a [master plan](#) to envision future recreational and public services for the entire site. A new recreation and aquatic center application is currently under review with TRPA and is anticipated to come before the TRPA Governing Board for consideration in April 2022. The new recreation center, if approved, would be located south of Lake Tahoe Boulevard adjacent to the existing El Dorado County Library. The proposed amendments include a special height standard to facilitate the construction of the building and future redevelopment of the area. Further discussion and rationale for the amendments can be found in the subsequent section of this staff summary and in Attachments A – E.

The City of South Lake Tahoe held a public meeting of the Planning Commission on December 16, 2021 recommending that the City Council adopt the environmental analysis and the proposed amendments as provided in this packet. City Council held a first reading of the amendments on January 4, 2022 and a second reading with adoption on January 18, 2022 (City Ordinance 2022-1159).

If the RPIC recommends TRPA Governing Board adoption, TRPA staff anticipate bringing these proposed amendments to the Advisory Planning Commission on March 9, 2022 for consideration of recommended approval and to the Governing Board on March 23, 2022 for consideration of final approval and adoption.

Summary:

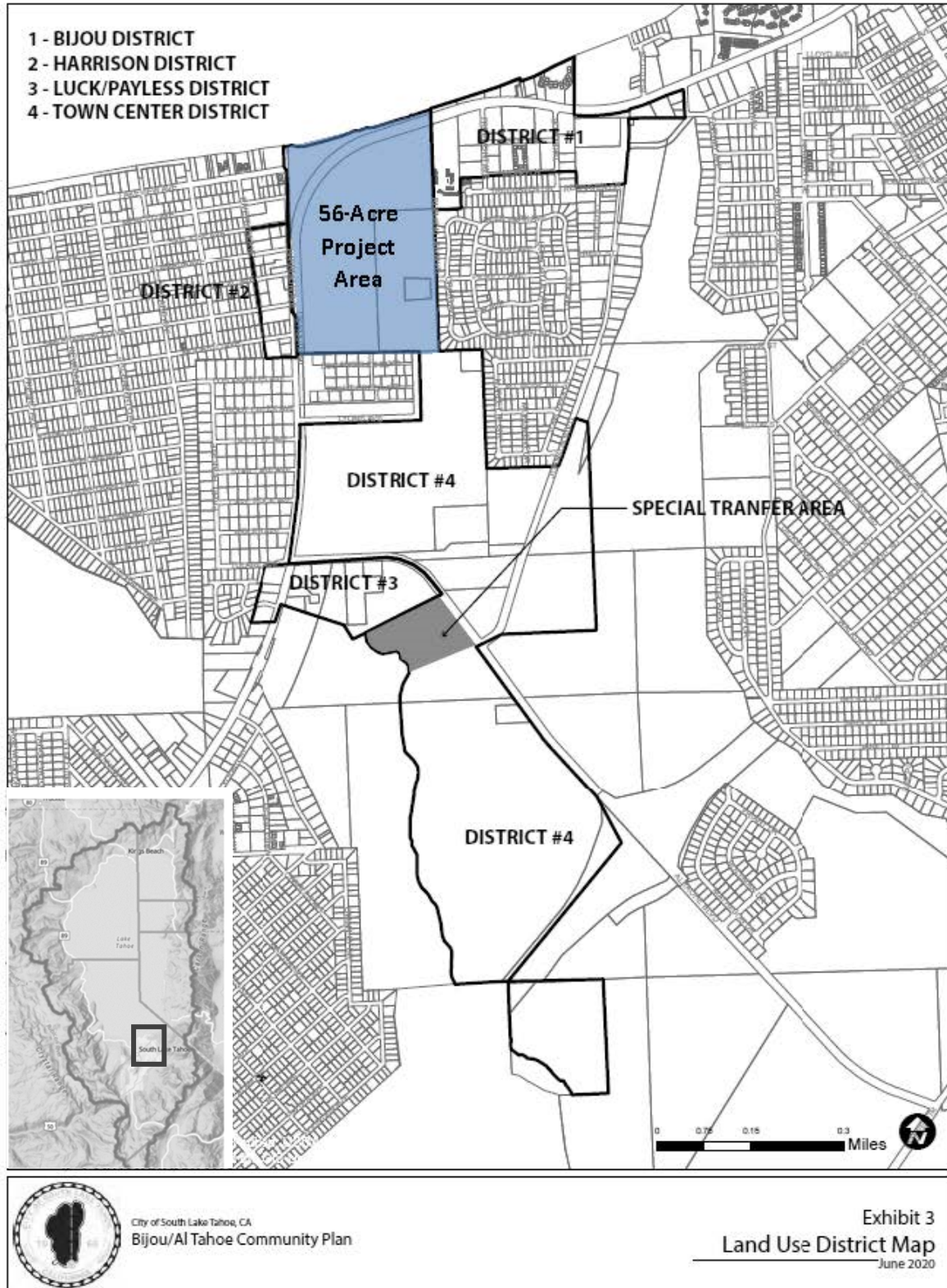
The City of South Lake Tahoe and the TRPA Governing Board adopted the Bijou/Al Tahoe Community Plan in 1995. The plan includes a guiding vision for the area, as well as goals and policies, permissible land uses, and specific design standards to ensure that development is compatible with the natural and built environment.

The community plan area is centrally located on Lake Tahoe's south shore and generally extends from Johnson Boulevard, near the Safeway grocery store, along the US Highway 50 corridor west to the commercial and retail development at the corner of US Highway 50 and Al Tahoe Boulevard and southwest of Al Tahoe Boulevard to encompass the Lake Tahoe Community College site (see Location Map 1 on the following page).

The Bijou/Al Tahoe Community Plan area includes a concentration of existing public services uses including: the Lake Tahoe Community College, South Tahoe Middle School, El Dorado County government offices, USDA Forest Service administration offices, a post office, county sheriff and city police stations, a juvenile detention center and jail, and Lake Tahoe Historical Museum. Other land uses within the plan area include recreational, commercial, retail uses, and some residential.



Location Map 1: Bijou/Al Tahoe Community Plan and the 56-Acre Project Area



The amendments, as proposed, would allow additional building height up to a maximum of 42 feet for public or quasi-public buildings with no minimum cross slope or roof pitch requirements for the property commonly referred to as the 56-acre site or project area and as shown in Map 1 on the previous page. This property is publicly owned by El Dorado County. The amendments would also allow alternative “natural appearing siding” as opposed to strictly wood siding as called for in the existing plan. Height limits for community plan areas outside of the 56-acre project area would remain unchanged.

The existing Bijou/Al Tahoe Community Plan establishes a minimum roof pitch of 7:12 and refer to TRPA Code of Ordinances Chapter 37 for height allowances within the plan area. The maximum building height currently allowed in the project area with a 7:12 roof pitch is 32.5 feet.

The City’s staff report (see Attachment A) provides further information and rationale for the proposed special height standard and allowance of lower roof pitch. In summary, the proposed maximum building height of 42 feet is the minimum necessary for the functionality of the proposed recreation center and to feasibly implement the project. Further, adherence to a minimum roof pitch of 7:12 would significantly increase energy demand due to additional building height and volume.

It is important to note that the design and permitting for the recreation center is not before your committee today. As noted above, the project application is anticipated for consideration at the April 2022 Governing Board meeting. This proposal will amend the community plan’s special height and architectural treatment standards.

The proposed amendment does not include any changes to boundaries, maps, goals and policies, or permissible land uses within the Bijou/Al Tahoe Community Plan or the Regional Plan. Specific changes (i.e. language) proposed by these amendments is included in Exhibit 1 to Attachment A.

The Bijou/Al Tahoe Community Plan was last amended with TRPA Governing Board adoption on June 24, 2020 (Ordinance Number 2020-04) at the request of the City to allow greater height allowances at Lake Tahoe Unified School District properties in District 4 of the plan. A special height standard for the Lake Tahoe Community College and Lake Tahoe Unified School District allows height issues for those sites to be addressed by TRPA on an individual project basis and may be in excess of Chapter 37 based on project setback, visibility, or other design criteria.

Environmental Review and Regional Plan Conformance:

TRPA staff reviewed a joint Initial Study, as required by the California Environmental Quality Act, and Initial Environmental Checklist (IEC) pursuant to TRPA Code of Ordinances Chapter 3: Environmental Documentation and Article VI of the Rules of Procedure for community plan amendments. The joint document was prepared by Hauge Brueck Associates for the City of South Lake Tahoe. The IEC finds that the proposed amendments would not result in significant environmental effects (see Attachment B).

To ensure conformance with the Regional Plan and that proposed actions will not adversely impact the attainment or maintenance of environmental threshold standards, TRPA staff prepared a compliance measures evaluation and required findings. These documents are included in the packet as Attachment C and D respectively. References to regional environmental threshold standards are also included within the IEC (Attachment B).

Contact Information:

For questions regarding this item, please contact Jennifer Self, Principal Planner, at (775) 589-5261 or [jself@trpa.gov](mailto:jself@trpa.gov).

Attachments:

- A. City Staff Summary
  - Exhibit 1: Proposed Amendments to the Bijou/Al Tahoe Community Plan
- B. Initial Study and Initial Environmental Checklist (IEC)
- C. Compliance Measures Evaluation
- D. Required Findings
- E. TRPA Adopting Ordinance 2022-\_\_
  - Exhibit 1: Proposed Amendments to the Bijou/Al Tahoe Community Plan

Attachment A  
City Staff Summary



# City of South Lake Tahoe Report to TRPA Regional Plan Implementation Committee

**Meeting Date:** February 23, 2022

**Title:** Consideration and Possible Recommendation of Approval to Amend the Bijou/Al Tahoe Community Plan to Add a Special Height Standard for Public and Quasi-Public Facilities

**Location:** Bijou/Al Tahoe Community Plan District #4, 56-acres (Multiple APNs)

**Responsible Staff Members:** John Hitchcock, Planning Manager (530) 542-7405

## **Background:**

The City of South Lake Tahoe is proposing to amend the Bijou/Al Tahoe Community Plan (B/AT CP) to allow for additional building height for public or quasi-public buildings and lower roof pitch requirements for buildings that require flatter roofs to span large interior spaces proposed within the 56-acres project area of the B/AT CP Town Center District #4 (see Location Map 1 on page 7 of this staff report). The amendments were prepared pursuant to Chapter 12 of the Tahoe Regional Planning Agency (TRPA) Code of Ordinances, which allows local governments to adopt conforming Community Plans that contain policies and development ordinances that are consistent with and further the goals and policies of the TRPA Regional Plan.

## **Issue and Discussion:**

### Purpose and Need

The B/AT CP was adopted by the City in 1995. As required by the TRPA Regional Plan, the B/AT CP includes specific design standards to ensure development is compatible with the natural environment and contributes to the character and quality of the built environment.

District 4 of the B/AT CP is a “centralized public service district” where a large concentration of public and institutional uses are located. These include a recreation center, campground, sheriff’s station, police station, jail, middle school, ice arena, county offices, forest service offices, and the community college. The B/AT CP established four zoning districts, as well as design and development standards for each district. A special standard for this district allows TRPA to address height issues at the community college site and Lake Tahoe Unified School District properties on an individual project basis. The TRPA interprets this to include deviation from Chapter 37 of the TRPA Code of Ordinances and the community plan’s roof pitch standard, which requires that roofs have a pitch between 7:12 and 12:12. Because of the unique design characteristics required for large institutional spaces, most of the roof pitches at the college are

lower than 7:12. However, this standard is only applicable to buildings located on the campus of the community college. All other buildings/structures within District #4 would be required to have a minimum roof pitch of 7:12.

The City is proposing to construct a new multi-generational recreation center (recreation center) within District #4 and the 56-acres project area. The recreation center will be located south of Lake Tahoe Boulevard adjacent to the existing El Dorado County Library. The new recreation center will house a swimming pool, lazy river, a gymnasium, indoor track, office and meeting spaces, and a commercial-grade kitchen. The proposed design incorporates shed-style architecture, using low-pitched roofs with clerestory windows. This design was selected to provide solar access to the interior of the building, which can help reduce energy demands from lighting and heating and to also span large spaces (i.e., swimming pool, gymnasium). The proposed design is similar to many of the structures on the community college campus; however, the project cannot be approved as proposed due to TRPA height standard and the community plan standard that requires a minimum 7:12 roof pitch.

The proposed recreation center was designed for the functionality of services, energy efficiency, and its compatibility to the surrounding neighborhood and to ensure consistency with TRPA's scenic threshold standard. A strict adherence to the standard would cause a greater scenic impact and energy demand due to additional building height and greater volume. A roof pitch of 7:12 would result in exceeding TRPA's maximum height standard of 42 feet and create a greater volume of conditioned space that would be more visually intrusive and out of character with the surrounding neighborhood. High roof pitches result in a larger interior volume than needed which must be conditioned and maintained resulting in increased energy consumption and operation costs, which is contrary to the City's long-term sustainability goals. Additionally, high roof pitches also increase construction costs due to additional building material necessitated by the roof pitch requirement without any added functionality and is inconsistent with environmental and community sustainability goals.

The proposed amendment would only apply to public and quasi-public structures that are located in the 56-acres project area. The objective of this action is to 1) revise the height standards in the B/AT CP District 4, specific to the 56-acres area to allow heights in excess of TRPA Code Chapter 37, 2) encourage redevelopment in the 56-acres project area for large public or quasi-public land uses/buildings that typically require shed roofs based on their larger size, and 3) encourage high-quality designs that achieve the City's long term sustainability and environmental goals.

Any proposed project within the 56-acre project area would be subject to the following design and development standards and guidelines:

- Citywide Design and Development Standards (Chapter 6.10 and 6.55 of the City Municipal Code),

- TRPA Code of Ordinances Section 37.7 and Chapter 66: Scenic Quality
- Findings 1, 3, 4, 5, 7, and 8 of TRPA Code Section 37.7 (Findings for Additional Building Height) for any proposed project exceeding height standards of TRPA Section 37.4 or 37.5 with a maximum allowable height of 42 feet

The standards and guidelines within the references listed above serve as mitigation to protect and preserve scenic quality and ensure that any future development is compatible with the natural environment. Specifically, these design and development standards require but are not limited to:

- Proposed development will not extend above the forest canopy or a ridgeline, when present.
- Any proposed building shall be designed to minimize interference with existing views within the area to the extent practicable.
- Find that any structure with a height exceeding height standards in TRPA Code Section 37.4 or 37.5 up to a maximum height of 42 feet is necessary for the functionality of that proposed use and the minimum necessary to feasibly implement the project.
- Proposed development is adequately screened, as seen from major arterials, the waters of lakes, and other public areas from which the building is frequently viewed.
- The maximum building height at any corner of two exterior walls of the building is not greater than 90 percent of the maximum building height.
- A frontal setback of 20 feet for commercial and public services buildings and 50 feet for recreational buildings.
- Requirement that the natural forest setting be preserved by maintaining the maximum number of trees in the project site.
- Proposed development shall have architectural treatments that use natural materials and colors that create visual interest variations in facades and building forms.

### Initial Study/Initial Environmental Checklist

To evaluate the potential environmental impacts of the proposed amendment, the City contracted with Hauge Bruck Associates to prepare a joint Initial Study/Negative Declaration (IS/ND) pursuant to the California Environmental Quality Act (CEQA) and Initial Environmental Checklist (IEC). The Draft IS/ND/IEC provides an analysis of the potential for the project to result in significant environmental impacts.

Areas of analysis include aesthetics, agriculture and forestry, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, utility and services systems, and additional mandatory findings of significance related to potential cumulative impacts.

The analysis demonstrates that the project either has no impacts or has less than significant impacts in all of these areas and staff recommended a Negative Declaration (ND) be adopted by the City for the proposed amendment and is recommending a Finding of No Significant Effect by the TRPA Governing Board.

### Tribal Consultation

Pursuant to state law, the City has completed requirements for consultation with Native American tribes under Assembly Bill 52 and the CEQA Guidelines. The City received a comment from the United Auburn Indian Community acknowledging the proposed project and deferring to the Washoe Tribe of Nevada and California. No other comments were received. Staff sent a notice to Chairman Serrell Smokey and Darrel Cruz, Cultural Resources Director of the Washoe Tribe of Nevada and California. At this time, no comments have been received from the Washoe Tribe of Nevada and California.

### Public Comment Period and Public Noticing

The Draft IS/ND/IEC sent, along with a Notice of Preparation and Notice of Completion, to the California State Clearinghouse for distribution to state and regional agencies for review. The IS/ND/IEC was also made available at City offices (1052 Tata Lane) and online at <https://www.cityofslt.us/DocumentCenter/View/16271/Project-Summary-Page-Bijou-Al-Tahoe-Community-Plan-Amendment-20211026>. The public review and comment period began October 22, 2021 and ended on November 22, 2021. A Notice of Availability and Notice of Intent, advertising the review period and the public hearing date, was mailed to all affected property owners within 300 feet on October 27, 2021 and published in the Tahoe Daily Tribune on October 29, 2021.

The City received seven public comments on the IS/ND/IEC. Six comments from members of the public and one comment from the Tahoe Regional Planning Agency (TRPA). All comments from the public stated their opposition to the proposed amendment primary on the following grounds: scenic impacts, historic resource impacts, CEQA project segmentation and conflict of interest issues. TRPA comments primarily focused on editorial edits, project description clarification, and additional analysis in support of the proposed amendment.

A public notice was sent to all affected property owners on December 3, 2021 providing the date and time of the Planning Commission meeting to consider the B/ATCP amendments and IS/ND and was published in the Tahoe Daily Tribune on December 3, 2021.



On December 16, 2021, the Planning Commission held a duly noticed public hearing, receive public comment, deliberated and passed Resolution 2021-18 recommending that the City Council adopt the IS/ND and the Bijou/Al Tahoe Community Plan Amendments.

A public notice was sent to all affected property owners on December 17, 2021 providing the date and time of the City Council meeting to consider the B/ATCP amendments and IS/ND and was published in the Tahoe Daily Tribune on December 17, 2021.

**Environmental Considerations:**

See “Issue and Discussion” section above.

**Financial Implications:**

None

**Policy Implications:**

City of South Lake Tahoe General Plan

The proposed amendment to the B/AT CP is consistent with the goals and policies of the City of South Lake Tahoe General Plan. The 56-acres project area is currently designated as recreation in the City’s General Plan. Recreation land use designation is defined as follows:

*This designation provides for outdoor recreation areas, active and passive recreational uses, habitat protection, and public/quasi-public uses. This designation is applied to areas with existing and proposed outdoor recreation and areas without overriding environmental constraints.*

The Land Use and Community Design Element of the General Plan include the following goals and policies to encourage development, redevelopment, and upgrades to existing development.

*Goal LU-2 : To focus future commercial, multi-family residential, tourist, civic, and social gathering space development in community plan area in order to maximize incentives and create transit-, bicycle-, and pedestrian-oriented places that serve the needs of both residents and visitors.*

*Policy LU-2.1: Community Plan Redevelopment, Expansion, and Upgrade  
The City shall encourage public and private investment in the expansion and upgrade of commercial and tourist accommodation projects within the Tahoe Valley,*

*Bijou/Al Tahoe, and Stateline/Ski Run community plan areas and use appropriate financing tools, such as redevelopment, to achieve economic and land use goals, as determined proper to achieve this objective.*

*Policy LU-2.2: Community Plan Preparation, Adoption, and Implementation*

*The City shall periodically update and implement the four Community Plans as a way to focus development commodities and revitalization efforts.*

*Policy LU-2.5: Bijou/Al Tahoe Community Plan Area*

*The City shall encourage the creation of a viable residential neighborhood with appropriate neighborhood amenities and compatible high quality family-oriented recreation and public facilities including government offices.*

Bijou/Al Tahoe Community Plan

The B/AT CP was adopted by the City and states that the area “should serve as a family oriented and recreation center, as well as the Town Center for the local Community. To accomplish this goal, policies must encourage diversification of recreational and commercial attractions to create the high-quality development expected in a family oriented resort area.” The proposed amendments will further the goals of the B/AT CP by encouraging the redevelopment of an infill site with high quality recreation opportunities with development that complements the overall natural setting.

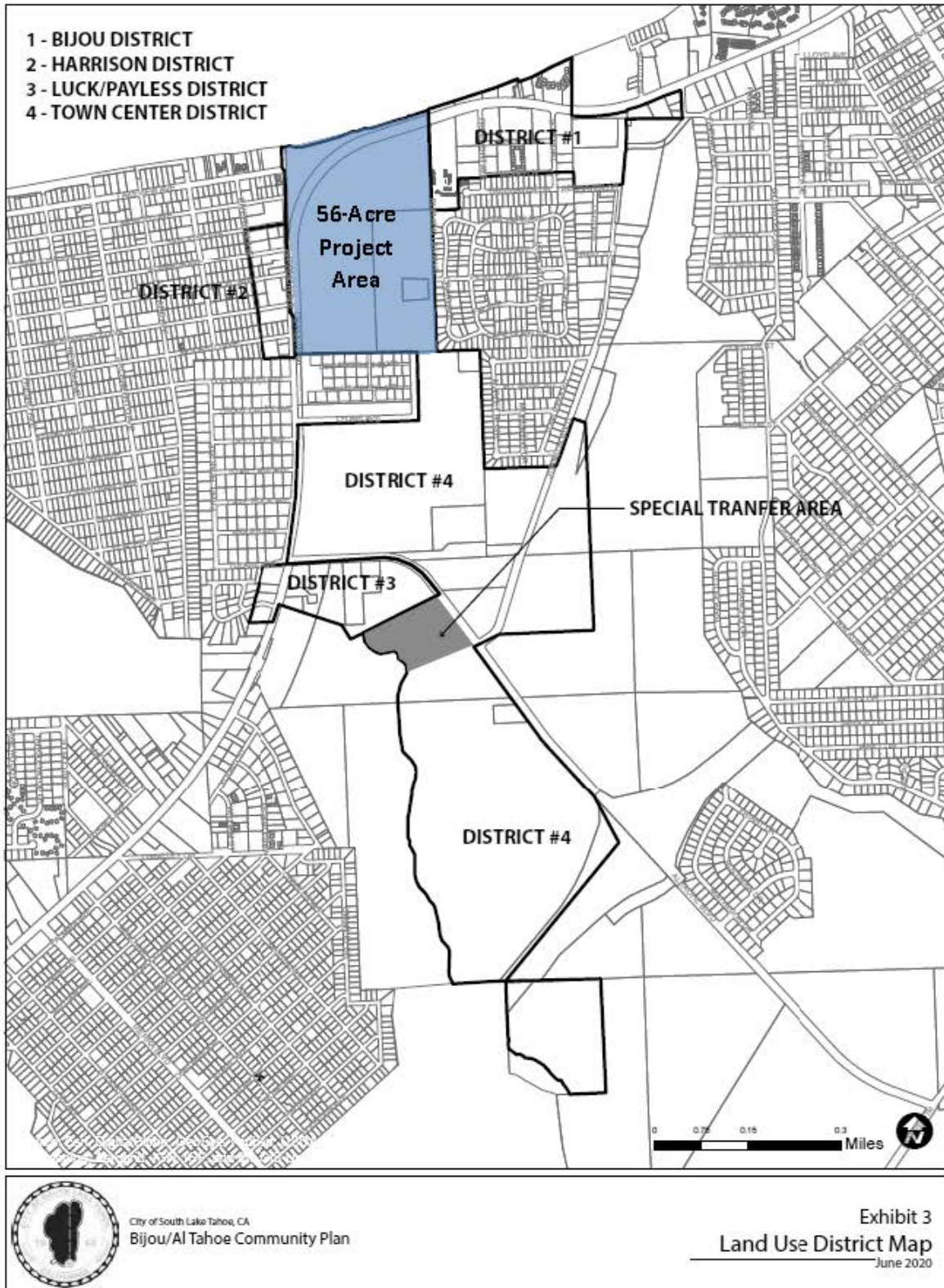
The proposed amendments are consistent with the B/AT CP “Town Center” designation, encouraging the relocation of city, county, state, and federal offices to the district and expanding recreational activities within the district and immediate surrounding areas.

In addition, the proposed B/AT CP amendment is consistent with the following policy:

*Policy A: Establish four unique, separate districts.*

*Town Center District. Areas currently described as Campground by the Lake, South Tahoe Middle School, John Boulevard areas and Lake Tahoe Community College shall be combined to accommodate the following uses: Commercial (public service support orientation, or receiving area for transfer of SEZ/Scenic Corridor), Public Service, Recreation, and designation as a “Special Events Area.”*

Location Map 1: Bijou/Al Tahoe Community Plan and the 56-Acre Project Area



Attachment A – Exhibit 1

Proposed Amendments to the Bijou/Al Tahoe Community Plan

**EXHBIT 1: PROPOSED AMENDMENTS TO THE  
BIJOU / AL TAHOE COMMUNITY PLAN**

Amend Appendix A: *Bijou/Al Tahoe Community Plan Standards, Section Two: Public Service/Recreation Theme, Subsection B: Height, Special Standard*, as follows:

*Added language shown in red and underlined.*

**SECTION TWO – PUBLIC SERVICE/RECREATION THEME**

<b>DISTRICTS</b>	<b>MAP AND USE MATRIX IDENTIFICATION</b>
District 4	4
A. PERMITTED USES	Refer to use matrix for district uses.
B. HEIGHT	
Standard	Refer to TRPA Code of Ordinances Chapter 37.
Special Std.	The following shall apply to:  Lake Tahoe Community College and Lake Tahoe Unified School District properties:  Height issues for these sites shall be addressed by TRPA on an individual project basis, and may be in excess of Chapter 37 based on project setback, visibility, or other design criteria.  <b><u>El Dorado County and City properties located in 56-Acre project area:</u></b>  <b><u>For public and quasi-public owned buildings, the maximum height permitted is 42 feet, with no minimum cross slope or roof pitch requirements, provided TRPA makes Finding 1, Finding 3, Finding 4, Finding 5, Finding 7, and Finding 8 of Code Section 37.7.</u></b>
C. BULK	
Standard	Refer to Redevelopment Design Element, Sections 1 and 2
D. COVERAGE	
Standard	Refer to TRPA Code of Ordinances Chapter 30.
E. SETBACKS	
Standard	Refer to City Wide Design Manual, Section 3 of Chapter 1 & 2.
Special Std.	In addition to the City Wide Design Manual, the following shall apply to specific properties located within the Town Center District, including:  The vacant 7.5 acre parcel north of Al Tahoe and west of Johnson Boulevard (adjacent to the existing El Dorado County Government Center) shall require a minimum of a 50' setback from Johnson Boulevard and an increased interior sideyard setback of 20' in that area of the property adjoining the residentially developed district.

F. SITE DESIGN

Standard

Refer to City Wide Design Manual, Section 2, Chapters 1 & 2.

Special Standard

In addition to the City Wide Design Manual, the following standards shall apply to the entire Town Center:

1. A natural forest setting shall be preserved by designing projects that maintain the maximum number of trees, shrubs, boulders, and other natural amenities at a project site. Landscaping shall be designed to blend with the native surroundings, including trees, shrubs, ground covers and flowers.
2. Sidewalks shall connect all buildings within project area.

G. ARCHITECTURAL TREATMENT

Standard

Refer to City Wide Design Standards, Section 2 of Chapters 1 & 2 and City Lighting Standards.

Special Standard

In addition to the City Design Standards, the following standards shall apply:

1. Buildings shall be designed with interest (no box forms, variations in elevation, etc.) and shall incorporate architectural features which blend with the surrounding buildings.
2. Wood siding **or natural appearing siding** shall be used on the exterior of all remodeled newly constructed buildings.
3. Roofs shall have a minimum pitch of 5:12 and a maximum roof pitch of 12:12. **Roofs may have a minimum pitch of 0:12 on public and quasi-public owned buildings within El Dorado County and City properties located in the 56-Acre project area.**
4. Real stone shall be incorporated into the building design. Manufactured stone may be used on a project only if the applicant demonstrates the application of the stone will appear "real."
5. All projects shall incorporate days use amenities, including outdoor furniture, bicycle racks and trash receptacles.

Attachment B

Initial Study and Initial Environmental Checklist (IEC)

INITIAL ENVIRONMENTAL CHECKLIST (TRPA) AND  
INITIAL STUDY (CEQA) JOINT DOCUMENT FOR  
AMENDMENTS TO THE BIJOU/AL TAHOE  
COMMUNITY PLAN

SEPTEMBER 2021

PREPARED BY: HAUGE BRUECK ASSOCIATES  
PREPARED FOR: CITY OF SOUTH LAKE TAHOE



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## **1.0 INTRODUCTION**

The City of South Lake Tahoe is proposing to amend the Bijou/Al Tahoe Community Plan (B/ATCP) to allow for greater building height for public or quasi-public buildings that require flatter roofs to span large interior spaces proposed within the 56-acre area of the B/ATCP District 4. The amendments will be considered pursuant to Chapter 12 of the Tahoe Regional Planning Agency (TRPA) Code of Ordinances, which allows local governments to adopt conforming Community Plans that contain policies and development ordinances that are consistent with and further the goals and policies of the TRPA Regional Plan.

### **1.1 INITIAL STUDY/INITIAL ENVIRONMENTAL CHECKLIST**

This Initial Study/Initial Environmental Checklist (IS/IEC) has been prepared to address the potential environmental effects of amending the Bijou/Al Tahoe Community Plan (B/ATCP), located in the City of South Lake Tahoe, California. An Initial Study is a preliminary environmental analysis that is used by the California Environmental Quality Act (CEQA) lead agency as a basis for determining whether an EIR, a Mitigated Negative Declaration, or a Negative Declaration is required for a project under CEQA guidelines. An Initial Environmental Checklist is a preliminary environmental analysis that is used for determining whether an EIS, a Mitigated Finding of No Significant Effect, or a Finding of No Significant Effect is required for a project under TRPA Rules of Procedure.

The IS/IEC contains a project description, description of environmental setting, identification and explanation of environmental effects, discussion of mitigation for potentially significant environmental effects, evaluation of the project's consistency with existing, applicable land use controls, and the names of persons who prepared the study.

The IS has been prepared pursuant to the California Environmental Quality Act (CEQA) of 1970, Cal. Pub. Res. Code §21000 et seq. The City of South Lake Tahoe is the CEQA lead agency for this project. The IEC has been prepared pursuant to the requirements of Article VI of the TRPA Rules of Procedures and Chapter 3 of TRPA's Code of Ordinances. TRPA serves as lead agency pursuant to its own regulations.

### **1.2 TIERING PROCESS**

#### **California Environmental Quality Act**

The CEQA concept of "tiering" refers to the evaluation of general environmental matters in a broad program-level EIR, with subsequent focused environmental documents for individual projects that implement the program. This environmental document incorporates by reference and tiers from the discussions in the 2011 General Plan EIR (the Program EIR) and concentrates on issues specific to the B/ATCP. CEQA and the CEQA Guidelines encourage the use of tiered environmental documents to reduce delays and excessive paperwork in the environmental review process. This is accomplished in tiered documents by eliminating repetitive analyses of issues that were adequately addressed in the Program EIR and by incorporating those analyses by reference.

Section 15168(d) of the State CEQA Guidelines provides for simplifying the preparation of environmental documents on individual parts of the program by incorporating by reference analyses and discussions that apply to the program as a whole. Where an EIR has been prepared or certified for a program or plan, the environmental review for a later activity consistent with the program or plan should be limited to effects

that were not analyzed as significant in the prior EIR or that are susceptible to substantial reduction or avoidance (CEQA Guidelines Section 15152[d]).

This Initial Study is tiered from the City of South Lake Tahoe General Plan EIR, in accordance with Sections 15152 and 15168 of the CEQA Guidelines and Public Resources Code Section 21094. The 2011 General Plan EIR is a Program EIR that was prepared pursuant to Section 15168 of the CEQA Guidelines. The 2011 General Plan is a comprehensive land use plan that guides physical development within the City of South Lake Tahoe through 2030. The 2011 General Plan EIR analyzes full implementation of uses and physical development proposed under the General Plan, and it identifies measures to mitigate the significant adverse program-level and cumulative impacts associated with that growth.

This IS/IEC will evaluate the potential environmental impacts of the proposed B/ATCP amendments with respect to the 2011 General Plan EIR to determine what level of additional environmental review, if any, is appropriate. As shown in the Determination in Section 5.2 of this document and based on the analysis contained in this IS/IEC, it has been determined that the proposed amendments would not have significant effects on the environment that were not adequately addressed in the 2011 General Plan EIR; therefore, a Negative Declaration will be prepared.

This IS/IEC concludes that potentially significant impacts are addressed by adopted policies and regulations applicable to the area, and the mitigation measures that have been adopted as part of the approval of the 2011 General Plan. These mitigation measures, to the extent they are applicable to the B/ATCP, will be incorporated into project approval. Nothing in this Initial Study in any way alters the obligations of the City to implement the General Plan mitigation measures. All future projects within the B/ATCP boundary would be subject to project-level environmental review and permitting by the City and/or TRPA, with the permitting agency determined based on the size, nature and location of the project (Section 13.7.3 of the TRPA Code).

### **Tahoe Regional Planning Agency**

The TRPA concept of "tiering" refers to the coverage of general matters in a broader EIS (Program EIS) and subsequent documents incorporating by reference the general discussions and concentrating solely on the issues specific to the document subsequently prepared. Therefore, when an EIS has been certified for a project or matter, TRPA shall limit the analysis for a later related or consistent project or matter, to effects which were not examined as significant effects in the prior EIS or which are susceptible to substantial reduction or avoidance by revisions in the project or matter through conditions of approval or mitigation. Tiering is limited to situations where a later project or matter is consistent with a program, plan, policy or ordinance for which an EIS was prepared, is consistent with applicable TRPA plans, and a supplemental EIS is not required.

This Initial Environmental Checklist is tiered from the TRPA 2012 RPU EIS in accordance with Section 6.12 of the TRPA Rules of Procedures. The 2012 RPU EIS is a Program EIS that was prepared pursuant to Article VI of TRPA Rules of Procedures (Environmental Impact Statements) and Chapter 3 (Environmental Documentation) of the TRPA Code of Ordinances. The 2012 RPU is a comprehensive land use plan that guides physical development within the Lake Tahoe Region through 2035. The 2012 RPU EIS analyzes full implementation of uses and physical development proposed under the 2012 RPU, and it identifies measures to mitigate the significant adverse program-level and cumulative impacts associated with that growth. The proposed amendments are an element of the growth that was anticipated in the 2012 RPU

and evaluated in the 2012 RPU EIS. By tiering from the 2012 RPU EIS, this Initial Environmental Checklist will rely on the 2012 RPU EIS for the following:

- a discussion of general background and setting information for environmental topic areas;
- overall growth-related issues;
- issues that were evaluated in sufficient detail in the 2012 RPU EIS for which there is no significant new information or change in circumstances that would require further analysis; and
- assessment of cumulative impacts.

This Initial Environmental Checklist evaluates the potential environmental impacts of the proposed project with respect to the 2012 RPU EIS to determine what level of additional environmental review, if any, is appropriate. As shown in the Determination in Section 5.3 of this document and based on the analysis contained in this Initial Environmental Checklist, it has been determined that the proposed project would not have significant effects on the environment. Therefore, a Finding of No Significant Effect will be prepared.

This Initial Environmental Checklist concludes that many potentially significant project impacts are addressed by the measures that have been adopted as part of the approval of the 2012 RPU. Therefore, those 2012 RPU EIS mitigation measures that are related to, and may reduce the impacts of, this project will be identified in this Initial Environmental Checklist. These mitigation measures will be incorporated into the approval for this project. Nothing in this Initial Environmental Checklist in any way alters the obligations of the City or TRPA to implement the mitigation measures adopted as part of the RPU.

### **1.3 BACKGROUND**

All of the land within the Lake Tahoe Basin falls under the jurisdiction of the Tahoe Regional Planning Agency. This includes land under the local jurisdiction of the City of South Lake Tahoe. In order to be responsive to the unique needs and opportunities of the Region and local communities, the TRPA Regional Plan encourages and authorizes local jurisdictions to develop and adopt individual Area Plans that provide more specific development objectives and standards that are adapted to the needs of the specified area. Local jurisdictions are permitted to develop, adopt, and implement regulations so long as they are consistent with the TRPA Regional Plan. The General Plan and Zoning Ordinances are the City's primary policy documents that guide land use, transportation, infrastructure, community design, housing, environmental, and other decisions in a manner consistent with the planning statutes for the State of California. The B/ATCP is designed to supplement the City's General Plan and Zoning Ordinance by designating zoning districts and providing specific guidance for the area included within the B/ATCP boundary. The Community Plan is considered a specific plan pursuant to California State Law.

The process of amending a specific plan is provided in CA Government Code Section 65359 and generally follows the general plan amendment process outlined in Sections 65350 through 65358. This includes public hearings with public notice, and adoption by resolution or by ordinance. Specific plans may be amended as often as necessary by the local legislative body, but the amendments must be consistent with the adopted general plan for the area. TRPA Code of Ordinances Chapter 12 also indicates plan amendments require public hearing, and must be consistent with the Regional Plan. Amendments require findings, conformance review (conformance checklist), and threshold and compliance measure evaluations.

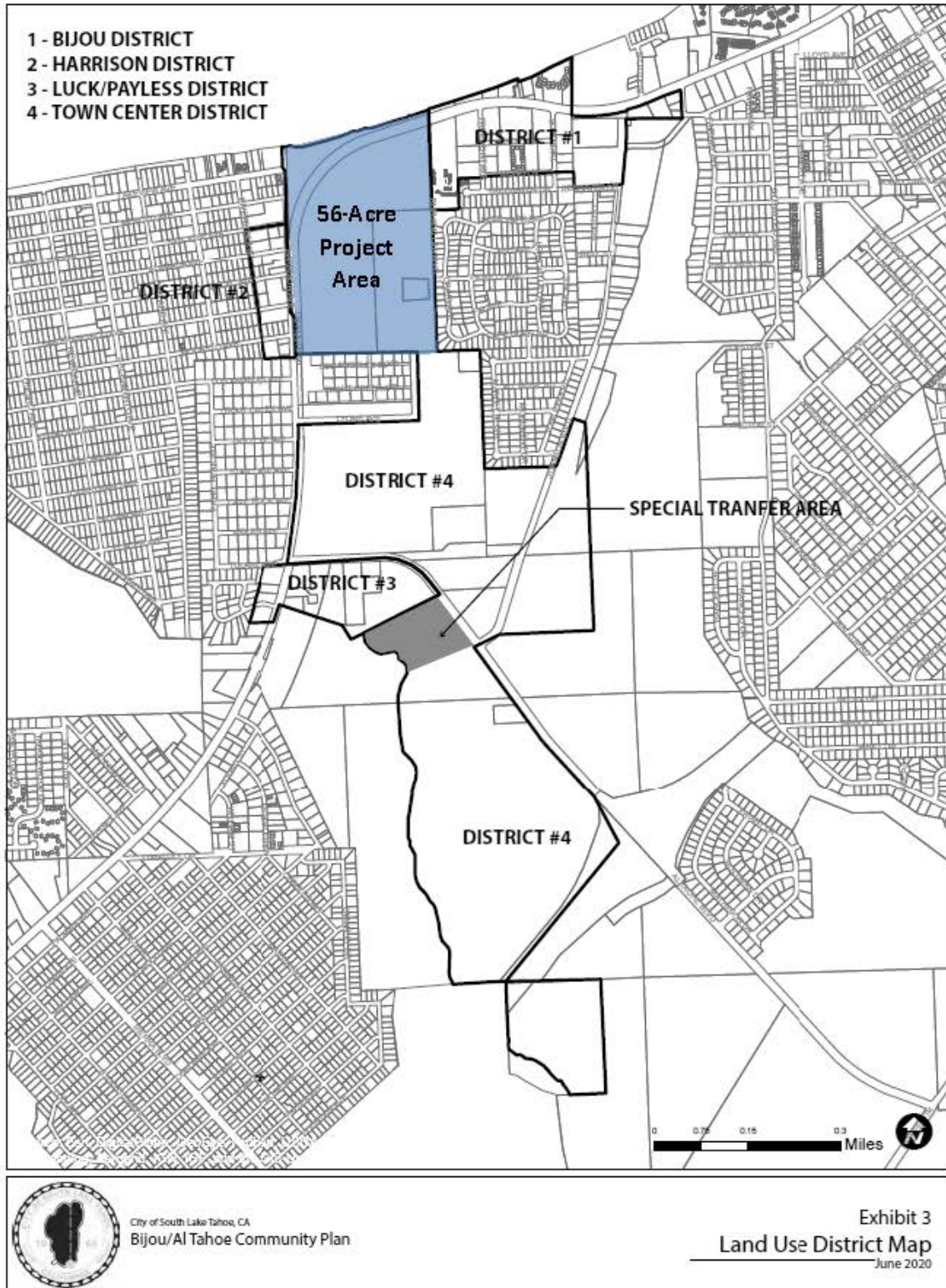
The 1995 B/ATCP serves as a comprehensive land use plan, consistent with the Regional Plan and General Plan at the time it was written, although it does not address all the issues identified in the current Regional and General Plans due to age, with its most recent amendments occurring in October 2020. The B/ATCP establishes the area vision and is intended to support and implement the City's and TRPA's goals, policies and strategies. The B/ATCP includes vision statements for land use, transportation, conservation, recreation, and public service. The Planning Statement indicates, "The area should be developed to provide regional commercial, recreational and public services for the South Shore." The amendments apply to the B/ATCP District 4 whose vision is to:

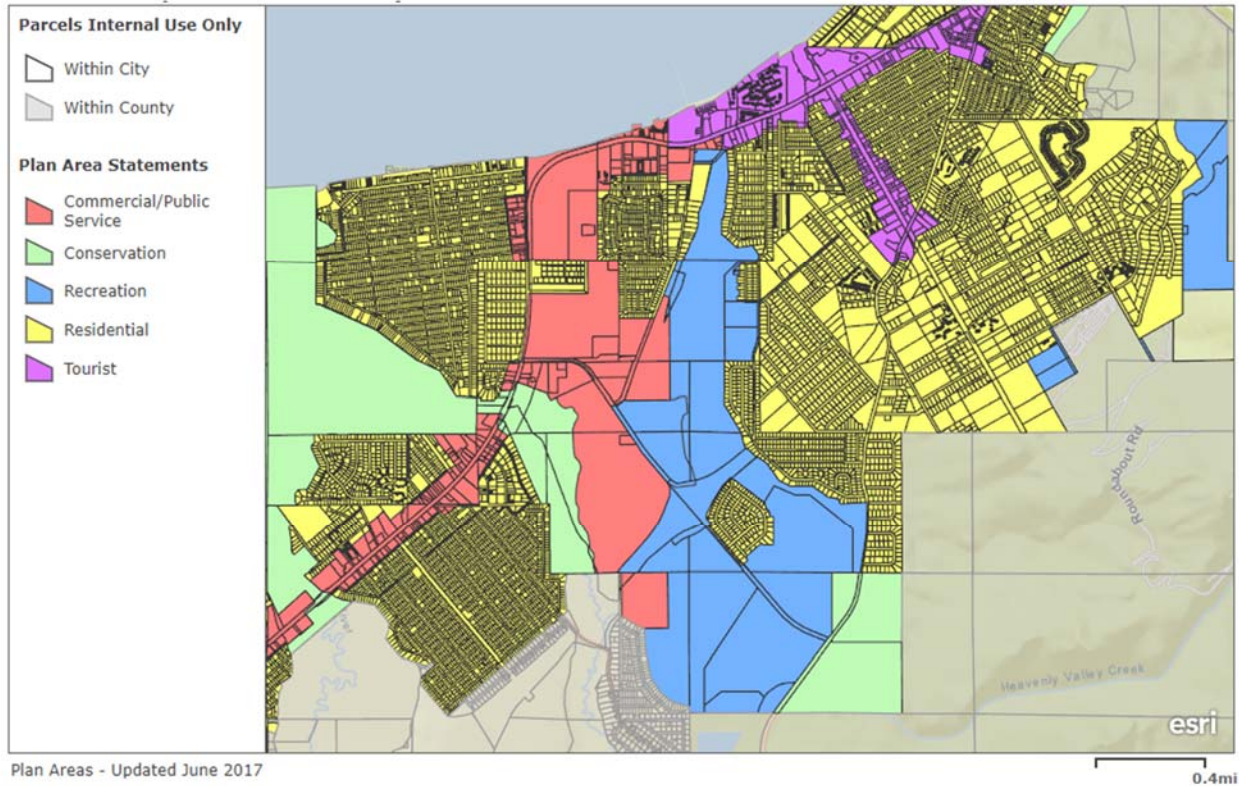
*"Create a centralized public service district by expanding the existing El Dorado County Government Center (Al Tahoe and Johnson Boulevards). Encourage the relocation of city, county, state and federal offices to the district that will provide an anchor for the community plan. Expand recreational activities within the district and the immediate surrounding areas."*

#### **1.4 PROJECT LOCATION, SETTING AND SURROUNDING LAND USES**

The B/ATCP functions as the central commercial hub in the South Lake Tahoe area. The boundaries of the B/ATCP generally extend from Fairway Avenue along US 50, just west of Al Tahoe Boulevard, as well as property between Johnson Boulevard and US 50, including property on Al Tahoe Boulevard terminating at the west boundary of Bijou Park and at the east boundary of Lake Tahoe Community College. District 4 of the Bijou/Al Tahoe Community Plan is a centralized public service district where a large concentration of public and institutional uses are located. These include a recreation center, campground, sheriff's precinct, jail, middle school, ice arena, county offices, forest service offices, and the community college. Land use patterns in this area are widely varied and include commercial, governmental office, school, and recreation, although the predominant theme of businesses is retail oriented including restaurants, and a sizable area of the B/ATCP is devoted to public service uses (e.g., schools, parks, government offices). The area proposed for building height and roof pitch amendments serves as a direct recreation access point to Lake Tahoe (Lakeview Commons) along with the City and County owned facilities located south of US 50 across from Lakeview Commons. The area is served by transit, with US 50 stops near Rufus Allen Blvd (Library), San Jose Ave, and Modesto Ave (So Tahoe Visitor Center), with links to other Tahoe Transportation District routes. A bike lane and multi-use path parallel to US 50 run through the B/ATCP boundary and link to other bike lanes, bike routes, and multi-use trails in the South Shore with connections extending to Stateline, Meyers, Tahoe Keys, and Camp Richardson. The proposed amendment area is located within a portion of B/ATCP District 4, which is designated public service and recreation. Since the adoption of the B/ATCP, the 56-acre park area has been designated as a TRPA Regional Plan land use classification of Mixed-Use.

Figure 1-1 Amendment Area



**Figure 1-2 TRPA Regional Plan Land Use Map**

Surrounding land uses include residential neighborhoods, and a similar mix of commercial uses and tourist accommodations along US 50. Lake Tahoe is directly north of the B/ATCP boundary and the 56-acre project area proposed for the building height and roof pitch amendments. Existing land uses within the 56-acre project area include an overnight campground, recreational beach/park area (Lakeview Commons), City recreation center and ice area, historical museum, and senior center.

The B/ATCP was adopted by the City and TRPA in 1995 and has been amended on numerous occasions with the most recent amendments being adopted on June 24, 2020 facilitating the development of the Boys and Girls Club and on October 28, 2020 when a portion of District 1 of the B/ATCP was added to the Tourist Core Area Plan Gateway District.

## 1.5 PROJECT OBJECTIVES/PURPOSE AND NEED

The purpose of the Community Plan amendments is to permit greater building height for public/quasi-public and recreation facilities requiring flatter roof pitches to span large interior spaces (e.g., recreation center) that are being considered as part of the 56-acre park master plan process. The objective of this action is to 1) revise the standards of the B/ATCP District 4, specific to the 56-acre area, to allow for flexibility in the height and roof pitch standards that will encourage redevelopment in the 56-acre project area for large public or quasi-public land uses/buildings that typically require additional height and flat roofs based on their large size, 2) ensure that appropriate design standards are in place to mitigate the visual impact of redevelopment, and 3) bring the roof pitch requirement for all other building in the 56-acre project area into alignment with the city-wide minimum roof pitch requirement of 5:12.

## 1.6 DOCUMENT ORGANIZATION

This IS/IEC includes the standard content for environmental documents under CEQA and TRPA Code of Ordinances and Rules of Procedures. An EIR/EIS was determined to be unnecessary, as there are not potentially significant environmental effects associated with the implementation of proposed amendments to the B/ATCP. This IS/IEC is a full disclosure document, describing the plan amendments and their environmental effects in sufficient detail to aid decision-making.

**Chapter 1** includes a description of the IS/IEC process, the tiering process, project background, the location of the Project and surrounding land uses, Project Objectives and Purpose and Needs Statement, the public involvement process and history, and the relationship of the B/ATCP to other land use plans, policies, and regulations.

**Chapter 2** contains a description of the B/ATCP amendments, including an overview of the proposed changes to the Community Plan.

**Chapter 3** provides the baseline conditions for the environmental analysis.

**Chapter 4** contains the methods and assumptions used to analyze the potential environmental effects of the amendments.

**Chapter 5** contains a detailed analysis of the environmental effects and necessary mitigation measures if applicable.

## 1.7 PUBLIC INVOLVEMENT

Pursuant to the requirements of CEQA, this IS/IEC will be sent, along with a Notice of Completion, to the California State Clearinghouse. In addition, copies of this document will be distributed to other Lake Tahoe Region reviewing agencies and interested stakeholders for review. A Notice of Availability and Notice of Public Hearing will be published in the Tahoe Daily Tribune and a Planning Commission hearing will be conducted to solicit comments during a 30-day public review period. After closure of the public review period, the City of South Lake Tahoe and TRPA staff will respond to comments. City staff will then prepare an agenda item for the City Planning Commission's recommendation and City Council's action that include the IS/IEC, comments on the IS/IEC, and responses to the comments. If the City Council determines that the amendments would not have significant adverse impacts, the City Council may adopt a Negative Declaration of environmental impact and adopt the proposed B/ATCP amendments. Following City Council approval, a Notice of Determination would be filed with the El Dorado County recorder-clerk's office and with the California State Clearinghouse.

Pursuant to the TRPA's Rules of Procedure and Chapter 3 of the TRPA Code of Ordinances, the agencies IEC will be made available for public review along with the project staff report at least 14 days prior to hearings held to consider the proposed amendments. TRPA staff will prepare agenda items for the TRPA Regional Plan Implementation Committee, TRPA Advisory Planning Commission's, and TRPA Governing Board consideration. If it is determined that no significant adverse impacts would result from the proposed project, the TRPA Governing Board may issue a Finding of No Significant Effect and adopt the amendments.



## 1.8 RELATIONSHIP TO LAND USE PLANS, POLICIES AND REGULATIONS

The B/ATCP falls under the direct jurisdiction of both The City of South Lake Tahoe and the Tahoe Regional Planning Agency. In addition, federal and state agencies exercise varying levels of control concerning specific parcels or resources. This section identifies each agency's responsibility relative to the proposed amendments; it also identifies the plans and policies to which the B/ATCP must show compliance.

### REGIONAL

The Tahoe Regional Planning Agency (TRPA) is a bi-state planning agency with authority to regulate growth and development within the Lake Tahoe Region. TRPA implements that authority through a Bi-State Compact and the TRPA Regional Plan. The Regional Plan Goals and Policies establish an overall framework for development and environmental conservation in the Lake Tahoe Region.

In December 2012, the TRPA Governing Board adopted an updated Lake Tahoe Regional Plan. General priorities of the updated Regional Plan that apply to these amendments include:

- Accelerating water quality restoration and other threshold gains by supporting environmental beneficial redevelopment opportunities, restoration of disturbed lands and Environmental Improvement Program (EIP) investments.
- Transitioning to more permitting delegated to local governments to create one-stop-shopping for homeowner improvements to return TRPA to a more regional role that the Bi-State Compact originally intended.
- Creating walkable communities and increasing alternative transportation options.

Important policies addressed in the Lake Tahoe Regional Plan include:

- Retaining the established regional growth control system. Under this system, rampant overdevelopment was stopped, and open spaces preserved. Most of the policies from the 1987 Regional Plan stayed in place.
- Creating a more efficient planning system that integrates TRPA requirements into the plans and permits of other applicable government agencies.
- Encouraging property owners to transfer development rights from sensitive and remote areas into Town/Regional Centers with the goal of restoring these lands.
- Eliminating regulatory barriers to support upgrades and environmentally beneficial redevelopment of rundown buildings with aging infrastructure.
- Simplifying overly complicated regulations for homeowners while achieving threshold gain.
- Incorporating the 2020 Linking Tahoe: Regional Transportation Plan (adopted in 2021) and the Active Transportation Plan (adopted in 2018) to support sidewalk and bike trail projects that reduce automobile dependency and increase walkability and safety.

- Continuing to deliver restoration projects under the EIP which achieves erosion control on roadways and restore forests and wetlands.

Under the 2012 Regional Plan update, Community Plans are intended to be replaced by Area Plans; however, Chapter 12 (Community Plans) of the TRPA Code of Ordinances addresses Community Plans, their applicability, contents, and process. Specifically, Section 12.8 addresses the maintenance and modification of Community Plans, stating:

*“Adopted community plans shall be reviewed by TRPA at five-year intervals to determine conformance with approved schedules of development and adequacy of programs, standards, mitigation, and monitoring. TRPA may defer approval of projects within community plans if the review indicates approved goals, targets, and requirements are not being achieved. Community plans may be modified as a result of such reviews as deemed appropriate by TRPA to achieve environmental thresholds or to otherwise improve the community plans. The procedure for modification shall be consistent with this chapter.”*

Section 12.7.4 indicates modification approvals occur through review of the modification and recommendation by the TRPA Advisory Planning Commissions, followed by Governing Board review, or an alternate process (Section 12.7.5) that may better facilitate the planning process.

Regional Plan Policy LU-4.3 indicates, “Community plans have been approved for some properties in the region to refine and supersede the plan area statements. These community plans were adopted in accordance with the 1987 regional plan and shall remain in effect until superseded by area plans that are developed in accordance with and found in conformance with this regional plan. If any community plan contains provisions that contradict newer provisions of the regional plan or development code, the newer provisions of the regional plan or development code shall prevail, but only to the extent that specific provisions conflict.”

## STATE OF CALIFORNIA

Several State agencies may play a role in development decisions within the Tahoe Region. As such, these State agencies must grant permits or other forms of permission prior to physical development. Affected agency staff will review the proposed amendments for consistency with adopted plans and policies. State agencies that may have a responsible agency role in projects that may be implemented include:

California Department of Transportation (Caltrans): Caltrans is responsible for planning, designing, constructing, and maintaining all state highways (e.g., US 50). The jurisdictional interest of Caltrans extends to improvements to roadways on the state highway system (including roadways designated as U.S. highways). Any federally funded transportation improvements would be subject to review by Caltrans staff and the California Transportation Commission, either on or off of the state highway system.

California Tahoe Conservancy: The mission of the California Tahoe Conservancy (CTC) is to protect and restore the natural environment of Lake Tahoe, including the lake’s exceptional clarity and diversity of wildlife habitat in the Region. The CTC implements a comprehensive set of programs to affirmatively address resource needs in the Tahoe Region, including the protection and restoration of the natural environment, especially water quality; enhancement of wildlife habitat; provision of public access and recreation opportunities; and management of acquired public land at Lake Tahoe.

Within the 56-Acre project area, the CTC has provided grant funding (most recently in 2020) for the City to partner with the County and the local community to complete a master plan for the areas of the 56-Acre site located south of US 50. The site includes Campground by the Lake, a recreation center, ice arena, library, and senior facilities. Future master plan facilities could include a new government center, a new recreation center, and an outdoor music amphitheater.

*Lahontan Regional Water Quality Control Board:* Lahontan has water quality responsibilities including the California-side of the Lake Tahoe Region. This agency establishes water quality standards, subject to the approval of the State Board, and has broader enforcement power than TRPA. By issuing waste discharge permits and requiring monitoring to show compliance, among other activities, Lahontan actively enforces attainment of standards.

Any party responsible for construction activity over one acre must obtain a National Pollution Discharge Elimination System Permit (NPDES Permit) from Lahontan to eliminate or reduce pollutants from construction related storm water discharged to surface waters, which include riparian zones.

Lahontan is also responsible for incorporating the Lake Tahoe Daily Maximum (TMDL) pollutant load reduction targets into the NPDES permit for California municipalities in the Tahoe Region. This permit regulates stormwater discharge from El Dorado County's stormwater management infrastructure and Federal rules require that El Dorado County implement programs to control pollutant runoff. The NPDES permit issued to El Dorado County stipulates a September 30, 2020 deadline to reduce estimated 2004 baseline jurisdictional pollutant loads of fine sediment particles by 21%, total nitrogen by 14% and total phosphorus by 14%. Lahontan is expected to update the NPDES permit every five years to include additional load reduction targets. Attainment of the 2026 target, termed the Clarity Challenge, is estimated to return Lake Tahoe to an average annual transparency of 80 feet (Lahontan 2010).

The NPDES Permit requires the City to prepare an updated Pollutant Load Reduction Plan (PLRP) by March 15, 2018 detailing the approach for meeting pollutant load reduction requirements. The City Council adopted a PLRP in January 2013 that outlined the proposed strategy for meeting the first 2016 load reduction targets.

*California Trustee Agencies:* State agencies with trustee responsibility in the B/ATCP boundary include: California Division of Forestry (tree removal and forest resource concerns), State Historic Preservation Officer (cultural resources), and California Department of Fish and Wildlife (plant and wildlife resources), and State Lands Commission, which oversees state-owned sovereign lands (Lake Tahoe).

## **CITY OF SOUTH LAKE TAHOE**

The City of South Lake Tahoe implements its regulatory authority through its General Plan and City Code. The City's 1999 General Plan adopted TRPA's Plan Area Statements (PASs) and Community Plans to replace its previous local zoning. In the City's 2011 General Plan update, the City adopted new land use designations for PASs located within the County's jurisdiction but retained the PASs and Community Plans in the Lake Tahoe Region as its zoning system. The existing PASs and Community Plan will remain in effect until superseded by an adopted conforming Area Plan or amendments to existing Area Plans.

## **EL DORADO COUNTY**

El Dorado County owns 41 acres of the 56-acre project area and is participating in preparation of the 56 Acres Master Plan, a joint effort between the city and county to update the area and provide for trails, recreational and civic uses. A new recreation center and senior center are included within the plan proposals. The 56-acre area also contains 15 acres owned by the City of South Lake Tahoe. Portions of this site were deeded to El Dorado County by D. L. Bliss in 1923 and by the Lake Valley Community Club in 1959. The City, through a cooperative lease agreement with El Dorado County, operates and manages the on-site facilities and uses for a public park, recreation, cultural, and visitor information purposes. That 50-year lease expires in 2023.

## 2.0 PROJECT DESCRIPTION

The City of South Lake Tahoe proposes two amendments to the B/ATCP. These amendments are summarized below:

1. The proposed amendment would allow a maximum height of 42 feet for public, quasi-public, or recreation facilities within the 56-acre project area of District 4 with no minimum cross slope or roof pitch requirements. Height limits for B/ATCP areas outside of the 56-acre project area would remain unchanged.
2. Reduce minimum roof pitch requirements to 5:12 for other structures within the 56-acre project area.

The amended plan will serve as a mutual plan for the City of South Lake Tahoe and TRPA by providing direction for how the applicable area shall be regulated to achieve regional environmental and land use objectives. The development standards and the specific policies referenced in the amendments are the land use standards intended to administer and regulate development within the 56-acre project area of the B/ATCP (see Figure 2-1). The proposed B/ATCP amendments, shown in track changes (strike through and bold/underline font) follow the figure.

Any proposed project within the subject area will be subject to the following design and development standards and guidelines:

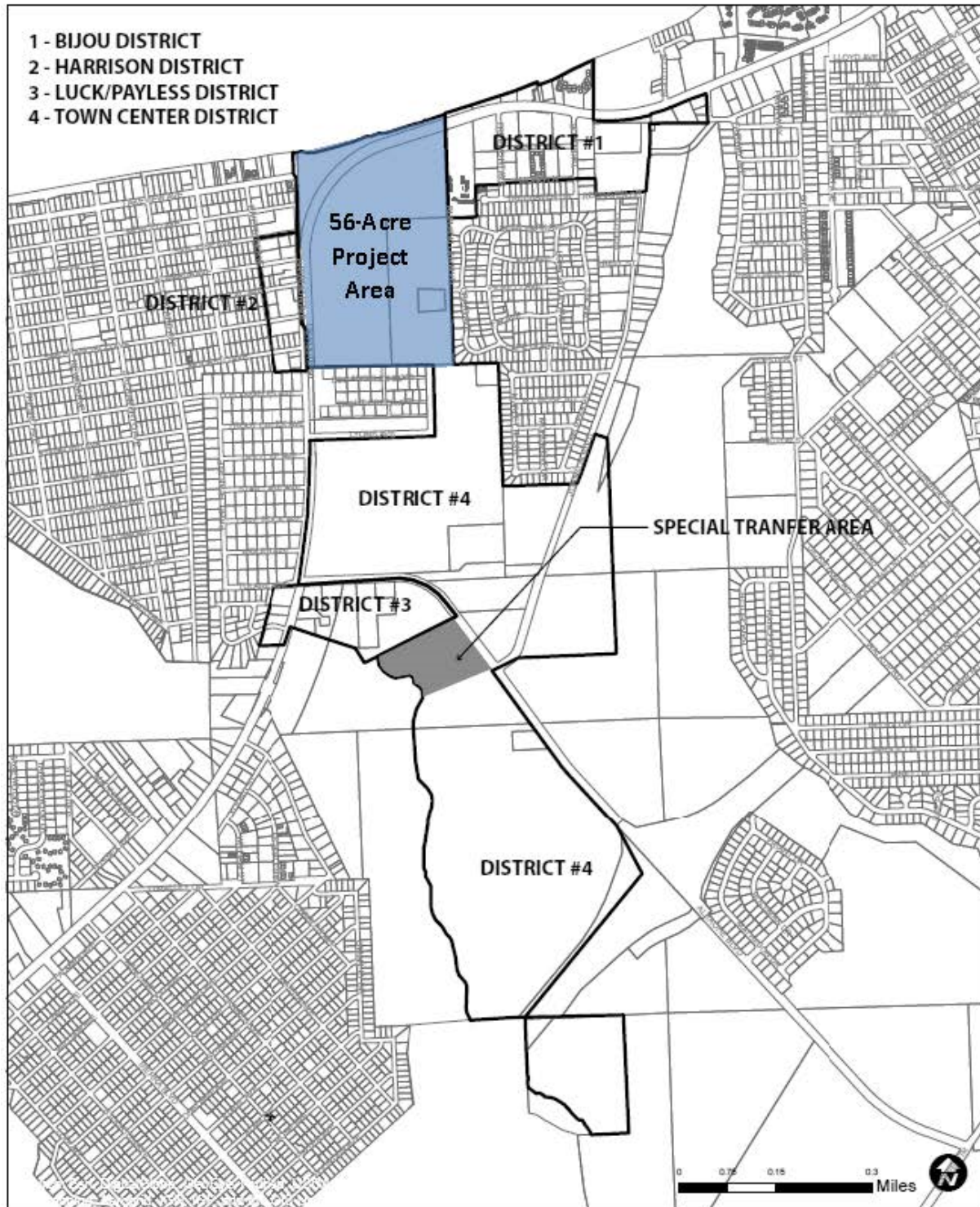
- Citywide Design and Development Standards (Chapter 6.10 and 6.55 of the [City Municipal Code](#)),
- TRPA Code of Ordinances Section 37.7 and Chapter 66: Scenic Quality
- Findings 1, 3, 4, 5, 7, and 8 of TRPA Code Section 37.7 (Findings for Additional Building Height) for any proposed project exceeding height standards of TRPA Section 37.4 or 37.5 with a maximum allowable height of 42 feet

The standards and guidelines within the references listed above serve as mitigation to protect and preserve scenic quality and ensure that any future development is compatible with the natural environment. Specifically, these design and development standards require but are not limited to:

- Proposed development will not extend above the forest canopy or a ridgeline, when present.
- Any proposed building shall be designed to minimize interference with existing views within the area to the extent practicable.
- Find that any structure with a height exceeding height standards in TRPA Code Section 37.4 or 37.5 up to a maximum height of 42 feet is necessary for the functionality of that proposed use and the minimum necessary to feasibly implement the project.
- Proposed development is adequately screened, as seen from major arterials, the waters of lakes, and other public areas from which the building is frequently viewed.
- The maximum building height at any corner of two exterior walls of the building is not greater than 90 percent of the maximum building height.
- A frontal setback of 20 feet for commercial and public services buildings and 50 feet for recreational buildings.
- Requirement that the natural forest setting be preserved by maintaining the maximum number of trees in the project site.

- Proposed development shall have architectural treatments that use natural materials and colors that create visual interest variations in facades and building forms.

Figure 2-1 – 56-Acre Portion of Bijou/Al Tahoe Community Plan District 4



City of South Lake Tahoe, CA  
Bijou/Al Tahoe Community Plan

Exhibit 3  
Land Use District Map  
June 2020

**APPENDIX A: BIJOU/AL TAHOE COMMUNITY PLAN STANDARDS AND GUIDELINES**

*(Amendments shown in red and underlined.)*

**SECTION TWO – PUBLIC SERVICE/RECREATION THEME**

<b>DISTRICTS</b>		<b>MAP AND USE MATRIX IDENTIFICATION</b>
	Town Center	4
A	PERMITTED USES	Refer to use matrix for district uses.
B	HEIGHT	
	Standard	Refer to TRPA Code of Ordinances Chapter 37.
	Special Standard	<p>The following shall apply to:</p> <p>Lake Tahoe Community College and Lake Tahoe Unified School District properties:</p> <p>Height issues for these sites shall be addressed by TRPA on an individual project basis, and may be in excess of Chapter 37 based on project setback, visibility, or other design criteria.</p> <p><b><u>El Dorado County and City properties located in 56-Acre project area:</u></b></p> <p><b><u>For public and quasi-public owned buildings, the maximum height permitted is 42, with no minimum cross slope or roof pitch requirements, provided TRPA makes Findings 1, Finding 3, Finding 4, Finding 5, Finding 7, and Finding 8 of TRPA Code Section 37.7.</u></b></p>
C	BULK	
	Standard	Refer to Redevelopment Design Element, Sections 1 and 2.
D	COVERAGE	
	Standard	Refer to TRPA Code of Ordinances Chapters 30.
E	SETBACKS	
	Standard	Refer to City Wide Design Manual Section 3 of Chapter 1 & 2.



Special Standard

In addition to the City Wide Design Manual, the following shall apply to specific properties located with the Town Center District, including:

The vacant 7.5 acre parcel north of Al Tahoe and west of Johnson Boulevard (Adjacent to the existing El Dorado County Government Center) shall required a minimum of a 50’ setback from Johnson Boulevard and an increased interior sideyard setback of 20’ in that area of the property adjoining the residentially developed district.

The vacant 12 acre parcel, north of Al Tahoe and east of Johnson Boulevard (adjacent to Bijou Community Park) shall require a minimum of a 50’ setback from Johnson Boulevard for development.

Development on the Lake Tahoe Community College property shall have a minimum setback of 50’ from Al Tahoe Boulevard.

F SITE DESIGN

Standard Refer to City Wide Design Manual, Section 2, Chapters 1 & 2

Special Standard

In addition to the City Wide Design Manual, the following standards shall apply to the entire Town Center:

1. A natural forest setting shall be preserved by designing projects that maintain the maximum number of trees, shrubs, boulders, and other natural amenities at a project site. Landscaping shall be designed to blend with the native surroundings, including trees, shrubs, ground covers and flowers.
2. Sidewalks shall connect all buildings within project area.

G ARCHITECTURAL TREATMENT

Standard Refer to City Wide Design Standards, Section 2 of Chapters 1 & 2 and City Lighting Standards.

Special Standard

In addition to the City Design Standards, the following standards shall apply:

1. Buildings shall be designed with interest (no box forms, variations in elevation, etc.) and shall incorporate architectural features which blend with the surrounding buildings.

2. Wood siding **or natural appearing siding** shall be used on the exterior of all remodeled newly constructed buildings.
3. Roofs shall have a minimum pitch of 5:12 and a maximum roof pitch of 12:12. **Roofs may have a minimum pitch of 0:12 on public and quasi-public owned buildings within El Dorado County and City properties located in 56-Acre project area.**
4. Real stone shall be incorporated into the building design. Manufactured stone may be used on a project only if the applicant demonstrates the application of the stone will appear “real.”
5. All projects shall incorporate days use amenities, including; outdoor furniture, bicycle racks and trash receptacles.

### **3.0 BASELINE**

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As specified in Section 13.3.1 of the TRPA Code, all plans, policies, and regulations in the Regional Plan and the TRPA Code shall remain in effect unless superseded by the provisions of an adopted conforming Area Plan. Thus, existing baseline conditions for the purposes of this IS/IEC reflect current environmental conditions with the updated Regional Plan, TRPA Code, City of South Lake Tahoe General Plan and Zoning Ordinance in effect, and the existing TRPA plans (e.g., B/ATCP and adjacent area plans), maps, and ordinances also in effect.

The proposed project evaluated in this IS/IEC is the amendment of the B/ATCP. With approval, the B/ATCP amendments would become part of the TRPA Regional Plan and would amend the existing B/ATCP. The focus of the analyses herein is on the amendment of the existing plan, maps, and ordinances to reflect the revised boundaries of design standards and the potential environmental effects of implementing the amendments to the B/ATCP over its plan horizon.

## 4.0 METHODOLOGY AND ASSUMPTIONS

This IS/IEC was prepared to evaluate the potential environmental effects of the B/ATCP amendments using as a tool the CEQA initial study and TRPA initial environmental checklist questions, responses, and supporting narrative. The analysis tiers and incorporates by reference specific analyses contained in the following environmental review documents, as appropriate:

- TRPA, *Regional Plan Update EIS*, certified by the TRPA Governing Board on December 12, 2012 (RPU EIS)
- TRPA/Tahoe Metropolitan Planning Organization (TMPO), *Mobility 2035: Regional Transportation Plan/Sustainable Communities Strategy EIR/EIS*, certified by the TMPO Board and the TRPA Governing Board on December 12, 2012 (RTP EIR/EIS)
- TRPA/Tahoe Metropolitan Planning Organization (TMPO), *2020 Linking Tahoe: Regional Transportation Plan/Sustainable Communities Strategy IS/MND/IEC/FONSE*, certified by the TMPO Board and the TRPA Governing Board in April 2021 (RTP IS/IEC)
- City of South Lake Tahoe, *General Plan Update EIR*, certified by the City Council on May 17, 2011 (City GP EIR)

These program-level environmental documents include a regional and city-wide scale analysis and a framework of mitigation measures that provide a foundation for subsequent environmental review at a community plan/area plan level. These documents serve as first-tier documents for the City and TRPA review of the proposed Amendments. To the extent that the B/ATCP is consistent with the Regional Plan and the RTP, for which the program EISs were prepared, the Amendments could be found to be “within the scope” of the program EISs.

The B/ATCP Amendments IS/IEC is also a program-level environmental document. No specific development projects are proposed at this time or analyzed herein. All future projects within the B/ATCP boundary (including the 56-acre project area) would be subject to project-level environmental review and permitting by the City of South Lake Tahoe and/or TRPA, with the permitting agency determined based on the size, nature and location of the project. Project-level environmental documents would require identification of, and mitigation for any potentially significant environmental impacts.

## 5.0 ENVIRONMENTAL CHECKLIST AND IMPACT ANALYSIS

**1. Project title:** B/ATCP Amendments

**2. Lead agency name and address:**

The City of South Lake Tahoe is the California Environmental Quality Act (CEQA) lead agency responsible for preparing an Initial Study/Negative Declaration (IS/ND) and the Tahoe Regional Planning Agency (TRPA) will serve as the lead agency for the Initial Environmental Checklist/Finding of No Significant Effect (IEC/FONSE) under the Tahoe Regional Planning Compact.

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

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

**3. Contact person(s) and phone number(s):**

City of South Lake Tahoe: John Hitchcock, Planning Manager, (530) 542-7472, [jhitchcock@cityofslt.us](mailto:jhitchcock@cityofslt.us)

Tahoe Regional Planning Agency: Jennifer Self, Principal Planner (775) 589-5261, [jself@trpa.gov](mailto:jself@trpa.gov)

**4. Project location:**

The B/ATCP is located within the City of South Lake Tahoe, and the portion of the B/ATCP proposed for amendment to building height and roof pitch standards is the City and County owned 56-acre public service and recreation area located between US Highway 50 and Rufus Allen Blvd, from Lake Tahoe south to the Lake Tahoe Historical Museum and South Lake Tahoe Recreation Center shown on Figure 1-1.

**5. Project sponsor's name and address:**

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

**6. General Plan designation:** The City's General Plan designates the 56-acre project area land use as Recreation and TRPA's Conceptual Land Use Map designates it as Mixed-Use (Commercial/Public Service).

**7. Zoning:** Commercial/Public Service

**8. Description of project:** Refer to Chapter 2 of this document.

**9. Surrounding land uses and setting:** Refer to Section 1.4 in Chapter 1 of this document.

**10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

Amendment of the B/ATCP requires City of South Lake Tahoe City Council and the TRPA Governing Board approval. Projects that may move forward as a result of the implementation of these

amendments will undergo project-level environmental review and may also require approval by the California Department of Forestry and Fire Protection (tree removal), California Tahoe Conservancy (funding source), California Regional Water Quality Control Board, Lahontan Region (waste discharge), El Dorado County Air Quality Management District (generators), and/or the California Department of Transportation (highway encroachment/ROW).

**5.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

If environmental factors are checked below, there would be at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages. As discussed in the IS/IEC checklist, there are no potentially significant impacts associated with the B/ATCP amendments. Applicable mitigation measures for general and cumulative impacts associated with the General Plan and the RPU are incorporated into the project approval.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture/Forest Resources	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Energy
<input type="checkbox"/> Geology Resources	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards/Hazardous Materials
<input type="checkbox"/> Hydrology/Water Quality	<input type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources
<input type="checkbox"/> Noise	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Public Services
<input type="checkbox"/> Recreation	<input type="checkbox"/> Transportation/Traffic	<input type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Utilities/Service Systems	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Mandatory Findings of Significance
	<input checked="" type="checkbox"/> None	<input type="checkbox"/> None with Mitigation Incorporated

**5.2 CEQA ENVIRONMENTAL DETERMINATION**

On the basis of this Initial Study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

10/20/2021

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John Hitchcock, Planning Manager  
City of South Lake Tahoe

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Date

**5.3 TRPA ENVIRONMENTAL DETERMINATION (TO BE COMPELTED BY TRPA)**

On the basis of this TRPA Initial Environmental Checklist:

- a. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA’s Rules of Procedures  Yes  No
- b. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA’s Rules of Procedures.  Yes  No
- c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and TRPA’s Rules of Procedures.  Yes  No

Signature of Evaluator

Principal Planner, TRPA

Title of Evaluator

1/12/2022

Date



## 5.4 EVALUATION OF ENVIRONMENTAL IMPACTS

The following environmental analysis has been prepared using the CEQA Guidelines Appendix G: Environmental Checklist Form to complete an Initial Study (IS). This checklist also includes analysis of environmental impacts required in the TRPA Initial Environmental Checklist (IEC) found at: [http://www.trpa.org/wp-content/uploads/Initial\\_Environmental\\_Checklist.pdf](http://www.trpa.org/wp-content/uploads/Initial_Environmental_Checklist.pdf).

### 5.4.1 CEQA

CEQA requires a brief explanation for answers to the Appendix G: Environmental Checklist except "No Impact" responses that are adequately supported by noted information sources (see Table 5-1). Answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

Table 5-1: CEQA Defined Levels of Impact Significance	
Impact Severity	Definition
No Impact	A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
Less than Significant Impact	"Less than Significant Impact" applies where the Project's impact creates no significant impacts based on the criterion or criteria that sets the level of impact to a resource and require no mitigation to avoid or reduce impacts.
Less than Significant Impact after Mitigation	"Less than Significant Impact after Mitigation" applies where the incorporation of mitigation measures has reduced an effect from potentially "Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
Significant Impact	"Significant Impact" is appropriate if there is substantial evidence that an effect is potentially significant, as based on the criterion or criteria that sets the level of impact to a resource. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
Source: CEQA Appendix G Environmental Checklist Form 2018	

### 5.4.2 TRPA

Article VI of the TRPA Rules of Procedures presents the rules governing the preparation and processing of environmental documents pursuant to Article VII of the Compact and Chapter 3 of the Revised TRPA Code of Ordinances.

TRPA uses an IEC, in conjunction with other available information, to determine whether an EIS will be prepared for a project or other matter. This could include preparation of an Environmental Assessment, in accordance with Section 3.4 of the TRPA revised Code, when TRPA determines that an IEC will not provide sufficient information to make the necessary findings for a project.

The IEC includes a series of questions categorized by and pertaining to resources regulated by TRPA. Each checklist item requires a checked response of “Yes,” “No,” “No, with Mitigation,” or “Data Insufficient.” A checked response of “Data Insufficient” or a determination that a project may have a significant effect on the environment (Section 3.3.2 of the TRPA Code) indicates that additional environmental review in the form of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) would be required. The IEC form indicates that all “Yes” and “No, with Mitigation” responses require written explanations. This IEC provides supporting narrative for all responses. Where a checked response may not be intuitive or easily understood by the reader, that response has been marked with an asterisk (\*) and a brief clarifying statement supporting the rationale for the checked response is included. Based on an initial review of the Project, TRPA and City staff determined that an IEC would provide sufficient information regarding the Project to make one of the findings below. As set forth in Code Subsection 3.3.1, based on the information submitted in the IEC, and other information known to TRPA, TRPA shall make one of the following findings and take the identified action:

1. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA’s Rules of Procedure.
2. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA’s Rules of Procedure.
3. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this Chapter and TRPA’s Rules of Procedure.

When completed, TRPA reviews the IEC to determine the adequacy and objectivity of the responses. When appropriate, TRPA consults informally with federal, state, or local agencies with jurisdiction over the project or with special expertise on applicable environmental impacts.

### 5.4.3 AESTHETICS (CEQA), SCENIC RESOURCES/COMMUNITY DESIGN AND LIGHT AND GLARE (TRPA)

This section presents the analyses for potential impacts to aesthetics, scenic resources/community design and light and glare. Table 5-2 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

<b>Table 5-2: Aesthetics, Scenic Resources/Community Design and Light and Glare</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>5.4.3-1.</b> Have a substantial adverse effect on a scenic vista? (CEQA Ia)			<b>X</b>	
<b>5.4.3-2.</b> Substantially damage scenic resources, including, but not limited				<b>X</b>

to, trees, rock outcroppings, and historic buildings, within a state scenic highway? (CEQA Ib)				
<b>5.4.3-3.</b> Substantially degrade the existing visual character or quality of the site and its surroundings? (CEQA Ic)			X	
<b>5.4.3-4.</b> Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (CEQA Id)			X	
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
<b>5.4.3-5.</b> Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe? (TRPA item 18a)	X			
<b>5.4.3-6.</b> Be visible from any public recreation area or TRPA designated bicycle trail? (TRPA item 18b)	X			
<b>5.4.3-7.</b> Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area? (TRPA item 18c)	X			
<b>5.4.3-8.</b> Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan? (TRPA item 18d)				X
<b>5.4.3-9.</b> Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines? (TRPA item 18e)				X
<b>5.4.3-10.</b> Include new or modified sources of exterior lighting? (TRPA item 7a)				X
<b>5.4.3-11.</b> Create new illumination which is more substantial than other lighting, if any, within the surrounding area? (TRPA item 7b)				X
<b>5.4.3-12.</b> Cause light from exterior sources to be cast off-site or onto public lands? (TRPA item 7c)				X
<b>5.4.3-13.</b> Create new sources of glare through the siting of the improvements or through the use of reflective materials? (TRPA item 7d)				X

**5.4.3-1. Would the Project have a substantial adverse effect on a scenic vista? (CEQA Ia)**

The B/ATCP contains scenic vistas visible from public roadways; including views to Lake Tahoe from US 50 within the 56-acre project area. The 56-acre project area is characterized by heavy forest growth to the southeast in park lands of the South Lake Tahoe recreation area (library, campground, and senior center area), and wide expansive panoramas of Lake Tahoe and surrounding mountains where US 50 closely parallels the Lake Tahoe shoreline (through Lakeview Commons park). While development and redevelopment could occur in the future without the amendments, changes are likely to be positive by improving the visual quality of the built environment consistent with the TRPA Code of Ordinances, City Design Guidelines, City Code Title 6, the standards of the B/ATCP, and the general recommendations for site planning found in the TRPA Scenic Quality Improvement Program (SQIP).

The portion of US 50 in the 56-acre amendment area is associated with TRPA Scenic Roadway Unit# 34 (El Dorado Beach) viewsheds #1 and 2 and Unit #35 (Al Tahoe). Views from the Roadway Unit #34 area towards the south and east consist of a heavily forested area of the South Lake Tahoe recreation area with very little understory vegetation, many recreational facilities including a campground, and some buildings and associated parking. Views from this Roadway Unit area towards the north consist of a major panorama of Lake Tahoe seen through a line of pine trees located between the highway and the lake shoreline. The 2019 rating for this area included a travel route rating threshold composite score of 18 (attainment) and a scenic quality rating of 8 (attainment) for natural landscapes and 12 (attainment) for views to the Lake. Visual improvements to roadway distractions and lake views occurred between 2011 and 2019 with the removal of the Alta Mira commercial building located between US 50 and Lake Tahoe, new bus shelters, landscaping along US 50, Lakeview commons improvements, the Harrison Avenue project that reconfigured parking, sidewalks and landscaping to reduce visual clutter, and façade improvements to Hotel Azure. The 2018 Threshold Evaluation noted these beneficial improvements continue to incrementally improve scenic quality in the unit, but not sufficient to change the scenic ratings. View from the Roadway Unit #35 are primarily retail and commercial man-made development. The 2019 rating for this area included a travel route rating threshold composite score of 9.5 (non-attainment) and a scenic quality rating of 3.5 (non-attainment) for man-made features. New sidewalks with real rock walls are improvements that have been made within the last few years and replacement of aging development, such as an amusement park with a beer garden, are improvements. Redeveloped buildings near Harrison Avenue also benefited the man-made features score.

The project area also includes TRPA Shoreline Unit 32 (Al Tahoe), which is in attainment with a 2019 threshold composite rating of 11 and scenic quality rating of 8 for shoreline views. The 2018 evaluation identifies improvements to Shoreline Unit 32 from completion of shoreline components of Lakeside Commons Park removal of the Alta Mira commercial building and residential rebuilds behind Regan Beach. However, similar to the roadway unit, the improvements were incrementally beneficial, but not sufficient to increase the scenic ratings.

The project proposes the following changes to the 56-acre project area within the B/ATCP in relation to scenic resources and visual quality:

- The proposed amendment would allow a maximum height of 42 feet for public, quasi-public, or recreation facilities with the 56-acre project area of District 4 with no minimum cross slope or roof pitch requirements.
- Reduce minimum roof pitch requirements to 5:12 for other structures within the 56-acre project area.

New public service and recreation buildings are being considered for the 56-acre project area as part of the City, County and CTC master planning process that is currently in process. Current height and roof pitch requirements utilize TRPA Code Chapter 37 limits for establishing maximum building height and B/ATCP District 4 development standards for minimum roof pitch (7:12). The maximum height permitted for a building with a 7:12 roof pitch is 32.5 feet and is not adequate to accommodate public service and recreation facilities that require large footprints and high ceilings (e.g., recreation centers, gyms, performance spaces, etc.). In addition, to span a large space with a 7:12 roof pitch would likely result in a structure that not only exceeds 32.5 feet but would also exceed the maximum height permitted by TRPA of 42 feet and results in a design with “excessive roof components.”

The proposed amendment to allow a maximum height of 42 feet for public, quasi-public, or recreation facilities within the 56-acre project area of District 4 with no minimum cross slope or roof pitch requirements is to provide the same height standards for new buildings on Lake Tahoe Unified School District property and the Lake Tahoe Community College properties. Both sites, like 56-acres, are intended for larger-scale buildings to house public education programs. Requiring such buildings to have high pitched roofs results in designs with “excessive” roof components, which is contrary to TRPA’s and the City’s goals of promoting environmentally beneficial and sustainable development.

Public service and recreation facilities are designed with low pitched roofs appropriate for their function and sustainable design but cannot be currently approved by TRPA or City because the current B/ATCP requires a minimum roof pitch of 7:12 and a maximum height of 32.5 feet.

The minimum high roof pitch requirement would create buildings that are out of scale for its function and more intrusive on the surrounding neighborhood. This creates a negative visual impact with a larger than necessary man-made structure that dominates and obstructs views of surrounding natural elements. All of which is contrary to TRPA’s visual regulations which are intended to protect natural views and reduce the visual intrusion of man-made structures.

Higher roof pitches also result in larger interior volume than needed, which must be conditioned and maintained, resulting in increase energy consumption and operation costs, which is contrary to long term sustainability goals

The reduction in roof pitch for other structures within the 56-acres project area is to bring the roof pitch requirement into alignment with the city-wide minimum requirement of 5:12 and the City’s long-term sustainability goals.

The proposed B/ATCP amendment would require public or quasi-public structures of up to 42 feet in the 56-acre project area to meet height findings 1, 3, 4, 5, 7, and 8 as defined in Section 37.7 of the TRPA Code of Ordinances. These findings (listed below) ensure the additional height does not extend above forest canopies, minimizes interference with existing views, particularly within the shoreline, is adequately screened from public viewpoint locations, and is the minimum building height necessary to feasibly implement the project. If the findings cannot be made, the additional height would not be permitted for future projects within the 56-acre project area. This ensures no significant impact would result from the increased height allowance proposed within the amendment area.

**37.7.1 Finding 1:** When viewed from major arterials, scenic turnouts, public recreation areas, or the waters of Lake Tahoe, from a distance of 300 feet, the additional height will not cause a

building to extend above the forest canopy, when present, or a ridgeline. For height greater than that set forth in Table 37.4.1-1 for a 5:12 roof pitch, the additional height shall not increase the visual magnitude beyond that permitted for structures in the shoreland as set forth in subsection 66.3.7, Additional Visual Magnitude, or Appendix H, Visual Assessment Tool, of the Design Review Guidelines.

*Proposed development within the 56-acre project area will be located within a heavily forested area south of US 50 and buildings up to 42 feet in height would remain well below the height of the forest canopy, as viewed from US 50 or Lake Tahoe. The majority of trees located within the 56-acres project area south of US 50 are primarily mature conifers in excess of 100 feet in height. Any proposed building at 42 feet in height would still be well below 66 feet, which is approximately two-thirds of the existing tree canopy, and thus when viewed from major arterials, scenic turnouts, public recreation areas, or the waters of Lake Tahoe, the additional height would not extend above the forest canopy.*

**37.7.3. Finding 3:** With respect to that portion of the building that is permitted the additional height, the building has been designed to minimize interference with existing views within the area to the extent practicable.

*Future development proposals for the 56-acre project area will have to document how building design and placement minimize interference with existing views. Since existing views include heavily forested recreation uses to south of US 50 and open panoramas of Lake Tahoe as viewed north from US 50, future building placement must ensure that forest/landscape buffers remain between US 50 and the development south of US 50, and open panoramas are not blocked as viewed north from US 50.*

**37.7.4. Finding 4:** The function of the structure requires a greater maximum height than otherwise provided for in this chapter.

*Future development proposals will have to document how building structural requirements (e.g., gym, covered pool, recreation center, etc.) warrant a maximum building height greater than what would be provided in Code chapter 37.4.*

**37.7.5. Finding 5:** The portion of the building that is permitted additional building height is adequately screened, as seen from major arterials, the waters of lakes, and other public areas from which the building is frequently viewed. In determining the adequacy of screening, consideration shall be given to the degree to which a combination of the following features causes the building to blend or merge with the background: a) the horizontal distance from which the building is viewed; b) the extent of screening; and c) proposed exterior colors and building materials.

*Future development proposals will have to document how buildings are adequately screened to protect existing scenic quality (e.g., lake views, landscape views, man-made features, roadway distractions, etc.) from US 50 and Lake Tahoe viewpoints.*

**37.7.7. Finding 7:** The additional building height is the minimum necessary to feasibly implement the project and there are no feasible alternatives requiring less additional height.

*Future development proposals will have to document how building structural requirements (e.g., gym, covered pool, recreation center, etc.) warrant a proposed building height that is greater than what would otherwise be provided in Code chapter 37.4.*

Since this amendment proposes no other changes to the B/ATCP Design Standards other than the possibility of earning additional height (up to 42 feet) and allowing flat roofs for public or quasi-public buildings, no significant impact is anticipated. Any future proposed project would be required to implement the design standards of the B/ATCP and be in compliance with TRPA and City requirements to ensure no significant impact to scenic vistas would occur as these standards offset the impacts of additional height.

Those requirements include preserving the maximum number of trees, shrubs, boulders and other natural amenities on site. Incorporating architectural treatments that limit box forms creates variations in elevations and facades to blend with the natural landscape. The standards also require the use of earthtone colors and the use of natural and natural-appearing materials. Moreover, due to the existing major conifers located within the 56-acres project area south of US 50, any proposed project would not extend above the forest canopy. Implementation of the theses measures for any future project that results from this amendment and making TRPA findings for additional height is not expected to result in a significant impact on scenic vistas, scenic quality, or community character when viewed from major arterials, scenic turnouts, public recreation areas, or the water of Lake Tahoe.

Environmental Analysis: *Less than Significant Impact.*

Required Mitigation: **None.**

**5.4.3-2. Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (CEQA Ib)**

US 50 is not an officially designated state scenic highway in the project area, through it is listed as an eligible route. An eligible State highway becomes officially designated through a process in which the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a State Scenic Highway by the Caltrans Director. Other than distant views of the ridgelines and tree canopy outside the area proposed for amendment, the area footprint does not contain other unique visual resources such as rock outcroppings, trees, or historical buildings, as the parcels have been substantially developed with public service/recreational structures and infrastructure. Therefore, the Project has no impact on state designated scenic highways.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.3-3. Would the Project substantially degrade the existing visual character or quality of the site and its surroundings? (CEQA Ic)**

As discussed above in Question 5.4.3-1, the existing visual character of a majority of the 56-acre project area consists of heavy forest growth to the southeast of US 50 in lands used for the South Lake Tahoe

recreation area (library, campground, and senior center/historical museum area). The northern most corner of the 56-acre project area includes wide expansive panoramas of Lake Tahoe and surrounding mountains where US 50 closely parallels the Lake Tahoe shoreline (viewed through Lakeview Commons park). As such, the existing visual character of the 56-acre project area appears less urban than other US 50 corridors north and south of the project area, with less evidence of man modifications and fewer roadway distractions.

The existing B/ATCP includes detailed design standards that are intended to ensure that the built environment complements the natural appearing landscape while promoting recreational and public service uses in the 56-acre project area. The B/ATCP specifically regulates building form, materials and colors and includes the following: buildings shall be designed with interest and provide adequate articulation and detail to avoid a bulky box-like appearance; a unified palette of quality materials shall be used; a variety of natural-appearing materials should be used on building facades to create contrast; and colors should blend with the setting. The amendments would allow public or quasi-public buildings to be approximately 10 (with a 7:12 roof pitch) to 18 feet taller (with a flat roof) than currently permitted, but other existing B/ATCP requirements for building standards and design would remain unchanged.

As a result, an increase in the height and roof pitch of future public or quasi-public buildings may occur as a result of the amendments but would not result in a significant change to visual character or quality of the area for the following reasons: public or quasi-public buildings that may utilize the additional height and flat roof provision will serve recreational or public service uses that are compatible with the existing visual character and requirements to make TRPA height findings will protect visual quality in the 56-acre project located between US 50 and Lake Tahoe. Finally, changes to allowable building height will not impact existing US 50 or shoreline viewsheds due to the required findings for additional height which includes screening of the additional height or limits height to below the tree canopy when viewed from major roadways, the waters of the lake or public viewpoints, and also requires no net loss of views along a scenic travel route, among other findings.

Environmental Analysis: *Less than Significant Impact.*

Required Mitigation: **None.**

**5.4.3-4. Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (CEQA Id)**

The 56-acre project area is currently developed with recreation and public service uses, and no changes to lighting design standards is proposed. Therefore, glare or reflectivity from a project proposed under the amended B/ATCP would not change compared to projects developed under the existing Community Plan, and will not adversely affect day or nighttime views in the area. Pursuant to the City Code Section 6.10.160 and TRPA Code Section 36.8 all lighting shall have cutoff shields, be directed downward, and shall not spray above the horizontal plane. No new impact would occur.

Environmental Analysis: *Less than Significant Impact.*

Required Mitigation: **None.**

**5.4.3-5. Would the Project be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe? (TRPA 18a)**



The proposed amendment will affect development that will be potentially visible from US Highway 50, which is not a Caltrans Officially Designated State Scenic Highway at this location, but is a TRPA designated urban scenic corridor. As discussed in Question 5.4.3-1, the project area includes Scenic Roadway Travel Unit #34 (El Dorado Beach) and Unit #35 (Al Tahoe). Urban Scenic Corridors are generally urbanized where man-made development is the dominant visual feature, but development still blends with the natural environment (TRPA Code Chapter 66, Scenic Quality). Such development would be authorized under current standards. The revision of the special height standard allows more flexibility in structural design (e.g. shallower roof pitches) and increase allowable height for public service buildings.

Any proposed project within the subject area will be subject to the following design and development standards and guidelines:

- Citywide Design and Development Standards (Chapter 6.10 and 6.55 of the [City Municipal Code](#)),
- TRPA Code of Ordinances Section 37.7 and Chapter 66: Scenic Quality
- Findings 1, 3, 4, 5, 7, and 8 of TRPA Code Section 37.7 (Findings for Additional Building Height) for any proposed project exceeding height standards of TRPA Section 37.4 or 37.5 with a maximum allowable height of 42 feet

The standards and guidelines within the references listed above serve as mitigation to protect and preserve scenic quality and ensure that any future development is compatible with the natural environment. Specifically, these design and development standards require but are not limited to:

- Proposed development will not extend above the forest canopy or a ridgeline, when present.
- Any proposed building shall be designed to minimize interference with existing views within the area to the extent practicable.
- Find that any structure with a height exceeding height standards in TRPA Code Section 37.4 or 37.5 up to a maximum height of 42 feet is necessary for the functionality of that proposed use and the minimum necessary to feasibly implement the project.
- Proposed development is adequately screened, as seen from major arterials, the waters of lakes, and other public areas from which the building is frequently viewed.
- The maximum building height at any corner of two exterior walls of the building is not greater than 90 percent of the maximum building height.
- A frontal setback of 20 feet for commercial and public services buildings and 50 feet for recreational buildings.
- Requirement that the natural forest setting be preserved by maintaining the maximum number of trees in the project site.
- Proposed development shall have architectural treatments that use natural materials and colors that create visual interest variations in facades and building forms.

The 2019 Threshold Evaluation indicates attainment with recent improvements in the visual quality of the built environment. The detailed design standards in the B/ATCP ensure that the built environment complements the natural appearing landscape in the Tahoe Region while providing public service and recreational opportunities for residents and visitors. The B/ATCP specifically regulates building form, materials and colors to avoid bulky and “box-like” appearance, to promote materials and colors that blend with the natural setting, to reduce glare and reflectivity, and preserve views of the lake, ridgelines and meadows. With application of the design standards, the overall visual quality and character of the amendment area is expected to remain high while allowing for new and relocated public service and

recreational uses. Thus, implementation of the amendments will not result in adverse impacts on views from any state or federal highway, Pioneer Trail or from Lake Tahoe.

Environmental Analysis: *Yes, but No Impact.*

Required Mitigation: **None.**

#### **5.4.3-6. Would the Project be visible from any public recreation area or TRPA designated bicycle trail? (TRPA 18b)**

The 56-acre project area is visible from El Dorado Beach/Lakeview Commons, which is included as part of the 56-acre area, and from Lake Tahoe. There is also a newly constructed Class I bike trail along US Highway 50 within the project area. Visual impacts have the potential to occur to each of these recreational locations, since the 56-acre project area is visible from each; however, the design standards and guidelines listed in 5.4.3-5 above and the following recommendations included in the TRPA Lake Tahoe Scenic Resource Evaluation (1993) would protect views from these recreational land uses:

- Existing trees should be preserved as a visual screen between structures and major public use areas.
- Structures should not be permitted to exceed the height of the existing tree cover.
- Development should not be permitted where tree cover is too sparse to visually absorb new structures, road cuts, and other attendant improvements.
- Use of reflective materials should be restricted and use of materials which blend into the surrounding landscape encouraged.

Development within the amendment area would be consistent with the B/ATCP's Design Standards and Chapter 66 (Scenic Quality) of the TRPA Code of Ordinances that would prohibit buildings to protrude above the forest canopy or ridgeline, include site-specific design features that minimize ground disturbance, incorporate screening, use of earth tone colors, materials and architectural style that complements the Tahoe landscape. Thus, development within the amendment area will not adversely impact views from any public recreation area or TRPA designated bicycle trails.

Environmental Analysis: *Yes, but no Impact.*

Required Mitigation: **None.**

#### **5.4.3-7. Would the Project block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area? (TRPA 18c)**

As discussed above in Questions 5.4.3-1 (CEQA Checklist 1a) and 5.4.3-6 (TRPA 18b) scenic viewsheds in the 56-acre project area include wide panorama views of Lake Tahoe from US 50 and the recreational uses south of US 50.

Future development projects located north of US 50 in the El Dorado Beach/Lakeview Commons area have the potential to disrupt existing scenic vistas of Lake Tahoe as viewed from US 50 or the campground. Scenic findings required by TRPA for additional building height would prohibit buildings in these locations

to earn additional height if they were to impact scenic viewpoints, especially those within the Lake Tahoe shoreline (finding 1). For projects in other parts of the 56-acre project area, the findings would prohibit buildings to protrude above the forest canopy or ridgeline, include site-specific design features that minimize ground disturbance, incorporate screening, and require use of earth tone colors, materials and architectural style that complements the Tahoe landscape. Public and quasi-public buildings located within the 56-acre project area that request additional height and flatter roofs would be visible from US 50; however, impacts to overall scenic vistas would be less than significant and would not detract from the visual experience based on protections included in the scenic findings. Thus, the B/ATCP amendments would not result in new obstructed views to and from Lake Tahoe or other scenic vistas.

See response to 5.4.3-5 above for additional design and development standards required of future projects.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

#### **5.4.3-8. Would the Project be inconsistent with the height and design standards required by the applicable ordinance or Community Plan? (TRPA 18d)**

The B/ATCP includes design standards with which future development in the amendment area would be required to comply. The B/ATCP Design Standards and Guidelines for District 4 primarily defer to the TRPA Code of Ordinances, City Zoning and Sign Ordinances, City Wide Design Manual, City Lighting Standards, and South Tahoe Redevelopment Design Element. Special standards for District 4 include an emphasis on the use of natural wood, development of a landscape boulevard theme, parking lot landscaping, and public art. Since the B/ATCP was adopted in 1995, both the City and TRPA have revised planning documents to reflect the current direction on design. The proposed amendments do not change a majority of the adopted design standards, but do propose amendment to maximum height limits and minimum roof pitch requirements within the 56-acre project area, which would apply therein only, and only for public or quasi-public buildings.

The B/ATCP amendments would apply a 42 foot maximum height allowance to the 56-acre project area for any public or quasi-public building, if the existing additional height findings can be met. The current limit is 42 feet, but can only be earned on project sites where the ground slopes at 24 percent across the building pad, and where a 12:12 roof pitch is proposed. The 42 foot maximum height limit proposed in the amendment is similar or lower to other urban land use areas within the City, including most of the Districts in the TCAP and each of the Districts along US 50 in the TVAP. As such, the proposed height allowance for public or quasi-public buildings within the 56-acre project area is consistent with height limits applied elsewhere along a majority of US 50 frontage. Combined with the other remaining design standards, and protective measures incorporated in TRPA additional height findings, the visual quality and character of the affected area would be protected; therefore, no significant impact would result from implementing the amended height and roof pitch standards within the 56-acre project area.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.3-9. Would the Project be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines? (TRPA 18e)**

The SQIP does not include recommendations for scenic improvement to the 56-acre project area portion of US 50, since the roadway unit has been in attainment for each review period since the SQIP was prepared.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.3-10. Would the Project include new or modified sources of exterior lighting? (TRPA 7a)**

See discussion and analysis for Question 5.4.3-4, which concludes no significant impact.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.3-11. Would the Project create new illumination, which is more substantial than other lighting, if any, within the surrounding area? (TRPA 7b)**

See discussions and analysis and for Question 5.4.3-4, which concludes no significant impact.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.3-12. Would the Project cause light from exterior sources to be cast off-site or onto public lands? (TRPA 7c)**

See discussions and analysis for Question 5.4.3-4, which concludes no significant impact.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.3-13. Would the Project create new sources of glare through the siting of the improvements or through the use of reflective materials? (TRPA 7d)**

See discussion and analysis for Question 5.4.3-4, which concludes no significant impact.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**Current and historic status of the TRPA scenic resources standards can be found at the links below:**

- [Built Environment](#)
- [Other Areas](#)
- [Roadway and Shoreline Units](#)

**5.4.4 AGRICULTURE AND FORESTRY RESOURCES**

This section presents the analyses for potential impacts to agriculture and forestry resources. Some TRPA checklist items concern impacts to vegetation, which are addressed in Section 5.4.6, Biological Resources. Table 5-3 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

<b>Table 5-3: Agriculture and Forestry Resources</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>5.4.4-1.</b> Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the CA Resources Agency, to a non-agricultural use? (CEQA IIa)				<b>X</b>
<b>5.4.4-2.</b> Conflict with existing zoning for agricultural use, or a Williamson Act contract? (CEQA IIb)				<b>X</b>
<b>5.4.4-3.</b> Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g), timberland (as defined by Public Resource Code section 4526) or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? (CEQA IIc)				<b>X</b>
<b>5.4.4-4.</b> Result in the loss of forest land or conversion of forest land to non-forest use? (CEQA IId)				<b>X</b>
<b>5.4.4-5.</b> Involve other changes in the existing environment which, due to their location or nature,				<b>X</b>

could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (CEQA IIe)				
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**5.4.4-1. Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use? (CEQA IIa)**

The amendments do not change policies related to farmland.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.4-2. Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract? (CEQA IIb)**

The amendments do not change land use and no contracts exist within the project area.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.4-3. Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g), timberland (as defined by Public Resource Code section 4526) or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? (CEQA IIc)**

The amendments do not change land use or zoning of forested land.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.4-4. Would the Project result in the loss of forest land or conversion of forest land to non-forest use? (CEQA II d)**

The amendments do not result in loss of forested lands or increase the possibility of forest land conversion.

Environmental Analysis: *No Impact*

Required Mitigation: **None.**

**5.4.4-5. Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (CEQA IIe)**

The amendments would permit increased building height for public or quasi-public buildings within the 56-acre project area which may facilitate development that would not occur without the availability of additional height. However, public service uses could be constructed on the site with or without the proposed height amendment, so the amendment does not create a new impact not addressed in previous B/ATCP environmental review.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**Current and historic status of TRPA vegetation preservation standards can be found at the links below:**

- [Common Vegetation](#)
- [Late Seral/Old Growth Ecosystems](#)
- [Sensitive Plants](#)
- [Uncommon Plant Communities](#)

**5.4.5 AIR QUALITY**

This section presents the analyses for potential impacts to air quality. Table 5-4 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-4: Air Quality				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
5.4.5-1. Conflict with or obstruct implementation of the applicable air quality plan? (CEQA IIIa)				X
5.4.5-2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standards? (CEQA IIIb)				X

5.4.5-3. Expose sensitive receptors to substantial pollutant concentrations? (CEQA IIIc)				X
5.4.5-4. Result in other emissions, such as objectionable odors, adversely affecting a substantial number of people? (CEQA III d)				X
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
5.4.5-5. Substantial air pollutant emissions? (TRPA 2a)				X
5.4.5-6. Deterioration of ambient (existing) air quality? (TRPA 2b)				X
5.4.5-7. Creation of objectionable odors? (TRPA 2c)				X

**5.4.5-1. Would the Project conflict with or obstruct implementation of the applicable air quality plan? (CEQA IIIa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to air quality and proposes no changes to air quality policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.5-2. Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standards (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (CEQA IIIb)**

The B/ATCP amendments would not contribute to an increase in any criterial pollutant because they only address building height and roof pitch and not land use or density.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.5-3. Would the Project expose sensitive receptors to substantial pollutant concentrations? (CEQA IIIc)**

The B/ATCP amendments do not create new opportunities for sensitive receptors to be constructed nearby existing pollutants, nor would the amendments contribute to higher pollutant levels from future development.



Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.5-4. Would the Project result in other emissions, such as objectionable odors, adversely affecting a substantial number of people? (CEQA IIIId)**

B/ATCP amendments to height limits and roof pitch standards would not change possibility for objectionable odors.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.5-5. Would the Project result in substantial air pollutant emissions? (TRPA 2a)**

See analysis for Question 5.4.5-1.

Environmental Analysis: *No Impact*

Required Mitigation: **None.**

**5.4.5-6. Would the Project result in deterioration of ambient (existing) air quality? (TRPA 2b)**

See analysis for Question 5.4.5-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.5-7. Would the Project result in creation of objectionable odors? (TRPA 2c)**

See analysis for Question 5.4.5-4.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

***Current and historic status of TRPA air quality standards can be found at the links below:***

- [\*\*Carbon Monoxide \(CO\)\*\*](#)
- [\*\*Nitrate Deposition\*\*](#)
- [\*\*Ozone \(O3\)\*\*](#)
- [\*\*Regional Visibility\*\*](#)
- [\*\*Respirable and Fine Particulate Matter\*\*](#)
- [\*\*Sub-Regional Visibility\*\*](#)

### 5.4.6 BIOLOGICAL RESOURCES (STREAM ENVIRONMENT ZONES, WETLANDS, WILDLIFE AND VEGETATION)

This section presents the analyses for potential impacts to biological resources, including impacts to SEZs, wetlands, wildlife and vegetation. Table 5-6 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

<b>Table 5-6: Biological Resources</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>5.4.6-1.</b> Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (CEQA IVa)				X
<b>5.4.6-2.</b> Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? (CEQA IVb)				X
<b>5.4.6-3.</b> Have a substantial adverse effect on federally protected (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (CEQA IVc)				X
<b>5.4.6-4.</b> Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (CEQA IVd)				X
<b>5.4.6-5.</b> Conflict with any local policies or ordinances protecting biological resources, such as tree				X

preservation policy or ordinance? (CEQA IVe)				
<b>5.4.6-6.</b> Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (CEQA IVf)				X
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
<b>5.4.6-7.</b> Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system? (TRPA 4a)				X
<b>5.4.6-8.</b> Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table? (TRPA 4b)				X
<b>5.4.6-9.</b> Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species? (TRPA 4c)				X
<b>5.4.6-10.</b> Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)? (TRPA 4d)				X
<b>5.4.6-11.</b> Reduction of the numbers of any unique, rare or endangered species of plants? (TRPA 4e)				X
<b>5.4.6-12.</b> Removal of streambank and/or backshore vegetation, including woody vegetation such as willows? (TRPA 4f)				X
<b>5.4.6-13.</b> Removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications? (TRPA 4g)				X

5.4.6-14. A change in the natural functioning of an old growth ecosystem? (TRPA 4h)				X
5.4.6-15. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)? (TRPA 5a)				X
5.4.6-16. Reduction of the number of any unique, rare or endangered species of animals? (TRPA 5b)				X
5.4.6-17. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? (TRPA 5c)				X
5.4.6-18. Deterioration of existing fish or wildlife habitat quantity or quality? (TRPA 5d)				X

**5.4.6-1. Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (CEQA IVa)**

The B/ATCP amendments do not create a new physical development impact not addressed in previous B/ATCP environmental review. While the amendment allows for additional height and changes to roof pitch standards, it does not propose specific new development that threaten biological resources habitat or protection of any candidate, sensitive, or special status species.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-2. Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? (CEQA IVb)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-3. Would the Project have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (CEQA IVc)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None**

**5.4.6-4. Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (CEQA IVd)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-5. Would the Project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance? (CEQA IVe)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-6. Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (CEQA IVf)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-7. Would the Project result in removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system? (TRPA 4a)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-8. Would the Project result in removal of riparian vegetation other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table? (TRPA 4b)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-9. Would the Project result in introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species? (TRPA 4c)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-10. Would the Project result in change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)? (TRPA 4d)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-11. Would the Project result in reduction of the numbers of any unique, rare or endangered species of plants? (TRPA 4e)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None**

**5.4.6-12. Would the Project result in removal of streambank and/or backshore vegetation, including woody vegetation such as willows? (TRPA 4f)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-13. Would the Project result in removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA’s Conservation or Recreation land use classifications? (TRPA 4g)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None**

**5.4.6-14. Would the Project result in a change in the natural functioning of an old growth ecosystem? (TRPA 4h)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-15. Would the Project result in change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)? (TRPA 5a)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-16. Would the Project result in reduction of the number of any unique, rare or endangered species of animals? (TRPA 5b)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-17. Would the Project result in introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? (TRPA 5c)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.6-18. Would the Project result in deterioration of existing fish or wildlife habitat quantity or quality? (TRPA 5d)**

See analysis for Question 5.4.6-1.

Environmental Analysis: *No Impact*.

Required Mitigation: **None**.

***Current and historic status of TRPA soil conservation standards can be found at the links below:***

- [Impervious Cover](#)
- [Stream Environment Zone](#)

***Current and historic status of TRPA water quality standards can be found at the links below:***

- [Aquatic Invasive Species](#)
- [Deep Water \(Pelagic\) Lake Tahoe](#)
- [Groundwater](#)
- [Nearshore \(Littoral\) Lake Tahoe](#)
- [Other Lakes](#)
- [Surface Runoff](#)
- [Tributaries](#)
- [Load Reductions](#)

***Current and historic status of TRPA vegetation preservation standards can be found at the links below:***

- [Common Vegetation](#)
- [Late Seral/Old Growth Ecosystems](#)
- [Sensitive Plants](#)
- [Uncommon Plant Communities](#)
- [Special Interest Species](#)

***Current and historic status of the TRPA fisheries standards can be found at the links below:***

- [Instream Flow](#)
- [Lake Habitat](#)
- [Stream Habitat](#)

## **5.4.7 CULTURAL RESOURCES (CEQA) AND ARCHAEOLOGICAL/HISTORICAL (TRPA)**

This section presents the analyses for potential impacts to cultural, archaeological and historical resources, discussing the Project impacts on cultural resources related to the disturbance of archaeological, historical, architectural, and Native American/traditional heritage resources. The section also addresses disturbance of unknown archaeological resources, as well as paleontological resources (fossils). Table 5-7 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.



Table 5-7: Cultural Resources and Archaeological/Historical				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
5.4.7-1. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (CEQA Va)				X
5.4.7-2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (CEQA Vb)				X
5.4.7-3. Disturb any human remains, including those interred outside of formal cemeteries? (CEQA Vc)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
5.4.7-4. Will the proposal result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building? (TRPA 20a)				X
5.4.7-5. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records? (TRPA 20b)				X
5.4.7-6. Is the property associated with any historically significant events and/or sites or persons? (TRPA 20c)				X

**5.4.7-1. Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (CEQA Va)**

The B/ATCP amendments do not create a new physical development impact not addressed in previous B/ATCP environmental review. While the amendment allows for additional height and changes to roof pitch standards, it does not propose specific new development that threaten cultural and historical resources or policies designed to protect historical resources.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.7-2. Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (CEQA Vb)**

See analysis for Question 5.4.7-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.7-3. Would the Project disturb any human remains, including those interred outside of formal cemeteries? (CEQA Vc)**

See analysis for Question 5.4.7-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.7-4. Will the Project result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building? (TRPA 20a)**

See analysis for Question 5.4.7-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.7-5. Is the Project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records? (TRPA 20b)**

See analysis for Question 5.4.7-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.7-6. Is the Project associated with any historically significant events and/or sites or persons? (TRPA 20c)**

See analysis for Question 5.4.7-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.8 ENERGY (CEQA/TRPA)**

This section presents the analyses for potential impacts to energy. Table 5-8 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-8: Energy				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
5.4.8-1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (CEQA VIa)				X
5.4.8-2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (CEQA VIb)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
5.4.8-3. Use of substantial amounts of fuel or energy? (TRPA 15a)				X
5.4.8-4. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy? (TRPA 15b)				X

**5.4.8-1. Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (CEQA VIa)**

The B/ATCP amendments do not create a new physical development impact not addressed in previous B/ATCP environmental review. While the amendment allows for additional height and changes to roof pitch standards, it does not propose changes to policies designed to conserve energy resources.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.8-2. Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (CEQA VIb)**

See analysis for Question 5.4.8-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.8-3. Would the Project use substantial amounts of fuel or energy? (TRPA 15a)**

See analysis for Question 5.4.8-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.8-4. Will the Project substantially increase the demand upon existing sources of energy, or require the development of new sources of energy? (TRPA 15b)**

See analysis for Question 5.4.8-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9 GEOLOGY AND SOILS (CEQA) AND LAND (TRPA)**

This section presents the analyses for potential impacts to geology, soils and land. Table 5-9 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-9: Geology and Soils and Land				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
<p><b>5.4.9-1.</b> Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <p>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?</p> <p>ii) Strong seismic ground shaking?</p>				X

iii) Seismic-related ground failure, including liquefaction? iv) Landslides? (CEQA VIIa)				
<b>5.4.9-2.</b> Result in substantial soil erosion or the loss of topsoil? (CEQA VIIb)				X
<b>5.4.9-3.</b> Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (CEQA VIIc)				X
<b>5.4.9-4.</b> Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (CEQA VIId)				X
<b>5.4.9-5.</b> Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? (CEQA VIIf)				X
<b>5.4.9-6.</b> Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (CEQA VIIf)				X
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
<b>5.4.9-7.</b> Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)? (TRPA 1a)				X
<b>5.4.9-8.</b> A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions? (TRPA 1b)				X
<b>5.4.9-9.</b> Unstable soil conditions during or after completion of the proposal? (TRPA 1c)				X
<b>5.4.9-10.</b> Changes in the undisturbed soil or native				X

geologic substructures or grading in excess of 5 feet? (TRPA 1d)				
<b>5.4.9-11.</b> The continuation of or increase in wind or water erosion of soils, either on or off the site? (TRPA 1e)				<b>X</b>
<b>5.4.9-12.</b> Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake? (TRPA 1f)				<b>X</b>
<b>5.4.9-13.</b> Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards? (TRPA 1g)				<b>X</b>

**5.4.9-1. Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**5.4.9-1.i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? (CEQA VIIa).**

The B/ATCP amendments do not create a new physical development impact not addressed in previous B/ATCP environmental review. While the amendment allows for additional height and changes to roof pitch standards, it does not propose changes to policies designed to protect people and structures from geological resources.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-1.ii) Strong seismic ground shaking?**

See analysis for Question 5.4.9-1.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-1.iii) Seismic-related ground failure, including liquefaction?**

See analysis for Question 5.4.9-1.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-1.iv) Landslides?**

See analysis for Question 5.4.9-I.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-2. Would the Project result in substantial soil erosion or the loss of topsoil? (CEQA VIIb)**

See analysis for Question 5.4.9-I.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-3. Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (CEQA VIIc)**

See analysis for Question 5.4.9-I.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-4. Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (CEQA VIId)**

See analysis for Question 5.4.9-I.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-5. Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (CEQA VIIE)**

See analysis for Question 5.4.9-I.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-6. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (CEQA VIIIf)**

See analysis for Question 5.4.9-l.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-7. Would the Project result in compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)? (TRPA 1a)**

See analysis for Question 5.4.9-l.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-8. Will the Project result in a change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions? (TRPA 1b)**

See analysis for Question 5.4.9-l.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-9. Will the Project result in unstable soil conditions during or after completion of the proposal? (TRPA 1c)**

See analysis for Question 5.4.9-l.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-10. Will the Project result in changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet? (TRPA 1d)**

See analysis for Question 5.4.9-l.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-11. Will the Project result in the continuation of or increase in wind or water erosion of soils, either on or off the site? (TRPA 1e)**

See analysis for Question 5.4.9-l.i.



Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-12. Will the Project result in changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake? (TRPA 1f)**

See analysis for Question 5.4.9-l.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.9-13. Will the Project result in exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mudslides, ground failure, or similar hazards? (TRPA 1g)**

See analysis for Question 5.4.9-l.i.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

***Current and historic status of TRPA soil conservation standards can be found at the links below:***

- [Impervious Cover](#)
- [Stream Environment Zone](#)
- [Surface Runoff](#)

**5.4.10 GREENHOUSE GAS EMISSIONS (CEQA) AND AIR QUALITY (TRPA)**

This section presents the analyses for potential impacts to greenhouse gas (GHG) emissions. Table 5-10 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

<b>Table 5-10: Greenhouse Gas Emissions and Air Quality</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>5.4.10-1.</b> Greenhouse gas emissions, either directly or indirectly, that may have a				<b>X</b>

significant impact on the environment? (CEQA VIIIa)				
<b>5.4.10-2.</b> Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (CEQA VIIIb)				X
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
<b>5.4.10-3.</b> Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally? (TRPA 2d)				X
<b>5.4.10-4.</b> Increased use of diesel fuel? (TRPA 2e)				X

**5.4.10-1. Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (CEQA VIIIa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to air quality/greenhouse gas emissions and proposes no changes to air quality or greenhouse gas emission policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.10-2. Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (CEQA VIIIb)**

See analysis for Question 5.4.10-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.10-3. Would the Project result in alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally? (TRPA 2d)**

See analysis for Question 5.4.10-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.10-4. Would the Project result in increased use of diesel fuel? (TRPA 2e)**

See analysis for Question 5.4.10-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11 HAZARDS AND HAZARDOUS MATERIALS (CEQA) AND RISK OF UPSET AND HUMAN HEALTH (TRPA)**

This section presents the analyses for potential impacts to hazards and hazardous materials and risk of upset and human health. Table 5-11 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

<b>Table 5-11: Hazards and Hazardous Materials and Risk of Upset and Human Health</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>5.4.11-1.</b> Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (CEQA IXa)				<b>X</b>
<b>5.4.11-2.</b> Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (CEQA IXb)				<b>X</b>
<b>5.4.11-3.</b> Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (CEQA IXc)				<b>X</b>
<b>5.4.11-4.</b> Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (CEQA IXd)				<b>X</b>

5.4.11-5. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (CEQA IXe)				X
5.4.11-6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (CEQA VIII f)				X
5.4.11-7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (CEQA IXg)				X
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
5.4.11-8. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions? (TRPA 10a)				X
5.4.11-9. Involve possible interference with an emergency evacuation plan? (TRPA 10b)				X
5.4.11-10. Creation of any health hazard or potential health hazard (excluding mental health)? (TRPA 17a)				X
5.4.11-11. Exposure of people to potential health hazards? (TRPA 17b)				X

**5.4.11-1. Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (CEQA IXa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to hazards or hazardous materials/risk of upset and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-2. Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (CEQA IXb)**

See analysis for Question 5.4.11-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-3. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (CEQA IXc)**

See analysis for Question 5.4.10-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-4. Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (CEQA IXd)**

See analysis for Question 5.4.10-1.

No hazardous waste facilities or contaminated sites are identified within the proposed B/ATCP amendment area. There are two closed GeoTracker Leaking Underground Storage Tank (LUST) cleanup sites (one at the Beach Bear Café site and one at a former Express Gas station in the Pioneer Center west of US 50) in the vicinity of the 56-acre site, but neither were located within the publicly owned lands.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-5. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area? (CEQA IXe)**

The B/ATCP 56-acre amendment area is not located within Lake Tahoe Airport Safety Zones as depicted in the City's 2019 Airport Land Use Compatibility Plan (Figure 4-4), and therefore has no potential impact on public safety.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-6. Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (CEQA IXf)**

The amendments would not alter or revise existing regulations or amend the City's Local Emergency Operations Plan or Emergency Management Plan. The amendments would not impair the implementation of or physically interfere with the City Natural Hazard Management Plan or Emergency Management Plan and therefore results in no impact.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-7. Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (CEQA IXg)**

See analysis for Question 5.4.10-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-8. Will the Project involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions? (TRPA 10a)**

See analysis for Question 5.4.10-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-9. Will the Project involve possible interference with an emergency evacuation plan? (TRPA 10b)**

See discussion and analysis for Question 5.4.11-6 above that concludes that implementation of the B/ATCP amendments will not impact existing emergency evacuation plans.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-10. Will the Project result in creation of any health hazard or potential health hazard (excluding mental health)? (TRPA 17a)**

See analysis for Question 5.4.10-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.11-11. Will the Project result in exposure of people to potential health hazards? (TRPA 17b)**

See analysis for Question 5.4.10-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**Current and historic status of TRPA air quality standards can be found at the links below:**

- [Carbon Monoxide \(CO\)](#)
- [Nitrate Deposition](#)
- [Ozone \(O3\)](#)
- [Regional Visibility](#)
- [Respirable and Fine Particulate Matter](#)
- [Sub-Regional Visibility](#)

**5.4.12 HYDROLOGY AND WATER QUALITY**

This section presents the analyses for potential impacts to hydrology and water quality. Table 5-12 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-12: Hydrology and Water Quality				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
5.4.12-1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? (CEQA Xa)				X
5.4.12-2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (CEQA Xb)				X

<p><b>5.4.12-3.</b> Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would</p> <p>i) Result in substantial erosion or siltation on- or off-site;</p> <p>ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;</p> <p>iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</p> <p>iv) Impede or redirect flood flows? (CEQA Xc)</p>				X
<p><b>5.4.12-4.</b> In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (CEQA Xd)</p>				X
<p><b>5.4.12-5.</b> Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (CEQA Xe)</p>				X
<p><b>TRPA Initial Environmental Checklist Item</b></p>	Yes	No, With Mitigation	Data Insufficient	No
<p><b>5.4.12-6.</b> Changes in currents, or the course or direction of water movements? (TRPA 3a)</p>				X
<p><b>5.4.12-7.</b> Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site? (TRPA 3b)</p>				X
<p><b>5.4.12-8.</b> Alterations to the course or flow of 100-year flood waters? (TRPA 3c)</p>				X
<p><b>5.4.12-9.</b> Change in the amount of surface water in any water body? (TRPA 3d)</p>				X



5.4.12-10. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity? (TRPA 3e)				X
5.4.12-11. Alteration of the direction or rate of flow of ground water? (TRPA 3f)				X
5.4.12-12. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? (TRPA 3g)				X
5.4.12-13. Substantial reduction in the amount of water otherwise available for public water supplies? (TRPA 3h)				X
5.4.12-14. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches? (TRPA 3i)				X
5.4.12-15. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality? (TRPA 3j)				X
5.4.12-16. Is the Project located within 600 feet of a drinking water source? (TRPA 3k)				X

**5.4.12-1. Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? (CEQA Xa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to hydrology and water quality and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-2. Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (CEQA Xb)**

See analysis for Question 5.4.12-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-3. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would (CEQA Xc):**

**5.4.12-3.i) Result in substantial erosion or siltation on- or off-site?**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-3.ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-3.iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-3.iv) Impede or redirect flood flows?**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-4. Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (CEQA Xd)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-5. Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (CEQA Xe)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-6. Will the Project result in changes in currents, or the course or direction of water movements? (TRPA 3a)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-7. Will the Project result in changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site? (TRPA 3b)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-8. Will the Project result in alterations to the course or flow of 100-year floodwaters? (TRPA 3c)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-9. Will the Project result in change in the amount of surface water in any water body? (TRPA 3d)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-10. Will the Project result in discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity? (TRPA 3e)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-11. Will the Project result in alteration of the direction or rate of flow of ground water? (TRPA 3f)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-12. Will the Project result in change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? (TRPA 3g)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-13. Will the Project result in substantial reduction in the amount of water otherwise available for public water supplies? (TRPA 3h)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-14. Will the Project result in exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches? (TRPA 3i)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.12-15. Will the Project result in potential discharge of contaminants to the groundwater or any alteration of groundwater quality? (TRPA 3j)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact*.

Required Mitigation: **None**.

**5.4.12-16. Is the Project located within 600 feet of a drinking water source? (TRPA 3k)**

See analysis for Question 5.4.12-l.

Environmental Analysis: *No Impact*.

Required Mitigation: **None**.

**Current and historic status of TRPA water quality standards can be found at the links below:**

- [Aquatic Invasive Species](#)
- [Deep Water \(Pelagic\) Lake Tahoe](#)
- [Groundwater](#)
- [Nearshore \(Littoral\) Lake Tahoe](#)
- [Other Lakes](#)
- [Surface Runoff](#)
- [Tributaries](#)
- [Load Reductions](#)

**5.4.13 LAND USE AND PLANNING**

This section presents the analyses for potential impacts to land use and planning. Table 5-13 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-13: Land Use and Planning				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
5.4.13-1. Physically divide an established community? (CEQA XIa)				X
5.4.13-2. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (CEQA XIb)				X

TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
5.4.13-3. Include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan? (TRPA 8a)				X
5.4.13-4. Expand or intensify an existing non-conforming use? (TRPA 8b)				X

**5.4.13-1. Would the Project physically divide an established community? (CEQA XIa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to land use and proposes no changes to applicable policies that would divide an established community. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.13-2. Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (CEQA XIb)**

The B/ATCP amendments would not alter or conflict with the policies in the TRPA Regional Plan or City General Plan that direct land use, nor would they amend land use policies in the adopted B/ATCP. However, the amendments would result in changes to design standards including allowable building height and minimum roof pitch. The existing building height and roof pitch standards were included in the B/ATCP to protect scenic resources, including community design as viewed from US Highway 50. Refer to Section 5.4.3 for analysis of scenic quality impacts and the determination that the proposed amendments would not alter the B/ATCP’s ability to protect scenic resources from future development within the 56-acre project area.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.13-3. Will the Project include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan? (TRPA 8a)**

The B/ATCP amendments would not alter, revise, or conflict with permissible uses included in the B/ATCP. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.13-4. Will the Project expand or intensify an existing non-conforming use? (TRPA 8b)**

See analysis for Question 5.4.13-I.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**Current and historic status of TRPA soil conservation standards can be found at the links below:**

- [Impervious Cover](#)
- [Stream Environment Zone](#)

**5.4.14 MINERAL RESOURCES (CEQA) AND NATURAL RESOURCES (TRPA)**

This section presents the analyses for potential impacts to mineral resources and natural resources. Table 5-14 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-14: Mineral Resources and Natural Resources				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
5.4.14-1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (CEQA XIIa)				X
5.4.14-2. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (CEQA XIIb)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
5.4.14-3. A substantial increase in the rate of use of any natural resources? (TRPA 9a)				X
5.4.14-4. Substantial depletion of any non-renewable natural resource? (TRPA 9b)				X

**5.4.14-1. Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (CEQA XIIa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to mineral/natural resources. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.14-2. Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (CEQA XIIb)**

See analysis for Question 5.4.14-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.14-3. Will the Project result in a substantial increase in the rate of use of any natural resources? (TRPA 9a)**

See analysis for Question 5.4.14-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.14-4. Will the Project result in a substantial depletion of any non-renewable natural resource? (TRPA 9b)**

See analysis for Question 5.4.14-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.15 NOISE**

This section presents the analyses for potential impacts related to noise. Table 5-15 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.



<b>Table 5-15: Noise</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>5.4.15-1.</b> Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or other applicable local, state, or federal standards? (CEQA XIIIa)				<b>X</b>
<b>5.4.15-2.</b> Generation of excessive groundborne vibration or groundborne noise levels? (CEQA XIIIb)				<b>X</b>
<b>5.4.15-3.</b> For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels? (CEQA XIIIc)				<b>X</b>
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
<b>5.4.15-4.</b> Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan? (TRPA 6a)				<b>X</b>
<b>5.4.15-5.</b> Exposure of people to severe noise levels? (TRPA 6b)				<b>X</b>
<b>5.4.15-6.</b> Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold? (TRPA 6c)				<b>X</b>
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
<b>5.4.15-7.</b> The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible? (TRPA 6d)				<b>X</b>
<b>5.4.15-8.</b> The placement of uses that would generate an incompatible noise				<b>X</b>

level in close proximity to existing residential or tourist accommodation uses? (TRPA 6e)				
5.4.15-9. Exposure of existing structures to levels of ground vibration that could result in structural damage? (TRPA 6f)				X

**5.4.15-1. Would the Project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or other applicable local, state, or federal standards? (CEQA XIIIa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to noise and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.15-2. Would the Project generate excessive groundborne vibration or groundborne noise levels? (CEQA XIIIb)**

See analysis for Question 5.4.15-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.15-3. For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels? (CEQA XIIIc)**

The B/ATCP amendment area is not within the vicinity of a private airstrip or within two miles of a public airport or public use airport. The B/ATCP 56-acre amendment area is not located within Lake Tahoe Airport Safety Zones as depicted in the City’s 2019 Airport Land Use Compatibility Plan (Figure 4-4). The amendments would only result in changes to building height and roof pitch and therefore does not expose people working in the project area to excessive noise levels from aircraft.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.15-4. Would the Project result in increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan? (TRPA 6a)**

See analysis for Question 5.4.15-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.15-5. Would the Project result in exposure of people to severe noise levels? (TRPA 6b)**

See analysis for Question 5.4.15-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.15-6. Will the Project result in single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold? (TRPA 6c)**

See analysis for Question 5.4.15-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.15-7. Will the Project result in the placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible? (TRPA 6d)**

See analysis for Question 5.4.15-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.15-8. Will the Project result in the placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses? (TRPA 6e)**

See analysis for Question 5.4.15-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.15-9. Will the Project expose existing structures to levels of ground vibration that could result in structural damage? (TRPA 6f)**

See analysis for Question 5.4.15-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

***Current and historic status of the TRPA noise standards can be found at the links below:***

- [Cumulative Noise Events](#)
- [Single Noise Events](#)

### 5.4.16 POPULATION AND HOUSING

This section presents the analyses for potential impacts to population and housing. Table 5-16 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

<b>Table 5-16: Population and Housing</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>5.4.16-1.</b> Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (CEQA XIVa)				<b>X</b>
<b>5.4.16-2.</b> Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (CEQA XIVb)				<b>X</b>
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
<b>5.4.16-3.</b> Alter the location, distribution, density, or growth rate of the human population planned for the Region? (TRPA 11a)				<b>X</b>
<b>5.4.16-4.</b> Include or result in the temporary or permanent displacement of residents? (TRPA 11b)				<b>X</b>

TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
<p><b>5.4.16-5.</b> Affect existing housing, or create a demand for additional housing?</p> <p>To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions: (1) Will the proposal decrease the amount of housing in the Tahoe Region? (2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households? (TRPA 12a)</p>				X
<p><b>5.4.16-6.</b> Will the proposal result in the loss of housing for lower-income and very-low-income households? (TRPA 12b)</p>				X

**5.4.16-1. Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (CEQA XIVa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to population and housing and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.16-2. Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (CEQA XIVb)**

See analysis for Question 5.4.16-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.16-3. Will the Project alter the location, distribution, density, or growth rate of the human population planned for the Region? (TRPA 11a)**

See analysis for Question 5.4.16-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.16-4. Will the Project include or result in the temporary or permanent displacement of residents? (TRPA 11b)**

See analysis for Question 5.4.16-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.16-5. Will the Project affect existing housing, or create a demand for additional housing?**

**(1) Will the proposal decrease the amount of housing in the Tahoe Region? (2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households? (TRPA 12a)**

See analysis for Question 5.4.16-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.16-6. Will the Project result in the loss of housing for lower-income and very-low-income households? (TRPA 12b)**

See analysis for Question 5.4.16-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.17 PUBLIC SERVICES**

This section presents the analyses for potential impacts to public services. Table 5-17 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-17: Public Services				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
5.4.17-1. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities,				

the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities? (CEQA XVa)				X
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
Will the proposal have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?				
<b>5.4.17-2.</b> Fire protection? (TRPA 14a)				X
<b>5.4.17-3.</b> Police protection? (TRPA 14b)				X
<b>5.4.17-4.</b> Schools? (TRPA 14c)				X
<b>5.4.17-5.</b> Parks or other recreational facilities? (TRPA 14d)				X
<b>5.4.17-6.</b> Maintenance of public facilities, including roads? (TRPA 14e)				X
<b>5.4.17-7.</b> Other governmental services? (TRPA 14f)				X

**5.4.17-1. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection? Police protection? Schools? Parks? Other public facilities? (CEQA XVa)**

The B/ATCP amendments would facilitate taller public or quasi-public building structures within the 56-acre project area. The proposed amendments would allow public or quasi-public structures of up to 42 feet within the 56-acre project area, an increase compared to the current regulations that limit height based on Table 37.4.1-1 and Section 37.5 (Additional Height for Certain Buildings) of the TRPA Code. The amendments would increase the maximum allowable building height using current regulations from 24 feet (building with a flat roof on a flat building site) to up to 42 feet. The City of South Lake Tahoe Fire Department’s new ladder truck is capable of responding to fire incidents in new or redeveloped multi-story structures with the allowed additional height. Therefore, no impact is created with the change to allowable height.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.17-2. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services: fire protection? (TRPA 14a)**

See analysis for Question 5.4.17-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.17-3. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services: police protection? (TRPA 14b)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to police protection and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.17-4. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services: schools? (TRPA 14c)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to schools and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.17-5. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services: parks or other recreational facilities? (TRPA 14d)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to parks and recreational facilities and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact*

Required Mitigation: **None.**

**5.4.17-6. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services in maintenance of public facilities, including roads? (TRPA 14e)**



See analysis for Question 5.4.17-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.17-7. Will the Project have an unplanned effect upon, or result in a need for new or altered governmental services in other governmental services? (TRPA 14f)**

See analysis for Question 5.4.17-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.18 RECREATION**

This section presents the analyses for potential impacts to recreation. Table 5-18 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-18: Recreation				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
5.4.18-1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (CEQA XVIa)				X
5.4.18-2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (CEQA XVIa)				X
TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
5.4.18-3. Create additional demand for recreation facilities? (TRPA 19a)				X
5.4.18-4. Create additional recreation capacity? TRPA 19b)				X

5.4.18-5. Have the potential to create conflicts between recreation uses, either existing or proposed? (TRPA 19c)				X
5.4.18-6. Result in a decrease or loss of public access to any lake, waterway, or public lands? (TRPA 19d)				X

**5.4.18-1. Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (CEQA XVIa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to recreation and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards. The amendments are proposed to permit eventual development of public or quasi-public recreational facilities that would benefit the community.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.18-2. Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (CEQA XVIb)**

See analysis for Question 5.4.18-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.18-3. Will the Project create additional demand for recreation facilities? (TRPA 19a)**

See analysis for Question 5.4.18-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.18-4. Will the Project create additional recreation capacity? (TRPA 19b)**

See analysis for Question 5.4.18-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.18-5. Will the Project have the potential to create conflicts between recreation uses, either existing or proposed? (TRPA 19c)**

See analysis for Question 5.4.18-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.18-6. Will the Project result in a decrease or loss of public access to any lake, waterway, or public lands? (TRPA 19d)**

See analysis for Question 5.4.18-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

***Current and historic status of the TRPA recreation standards can be found at the links below:***

- [Fair Share Distribution of Recreation Capacity](#)
- [Quality of Recreation Experience and Access to Recreational Opportunities](#)

**5.4.19 TRANSPORTATION (CEQA) AND TRAFFIC AND CIRCULATION (TRPA)**

This section presents the analyses for potential impacts to transportation, traffic and circulation. Table 5-19 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

<b>Table 5-19: Transportation, Traffic and Circulation</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>5.4.19-1.</b> Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? (CEQA XVIIa)				<b>X</b>
<b>5.4.19-2.</b> Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (CEQA XVIIb)				<b>X</b>
<b>5.4.19-3.</b> Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (CEQA XVIIc)				<b>X</b>

5.4.19-4. Result in inadequate emergency access? (CEQA XVIIId)				X
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes,</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
5.4.19-5. Generation of 100 or more new Daily Vehicle Trip Ends (DVTE)? (TRPA 13a)				X
5.4.19-6. Changes to existing parking facilities, or demand for new parking? (TRPA 13b)				X
5.4.19-7. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities? (TRPA 13c)				X
5.4.19-8. Alterations to present patterns of circulation or movement of people and/or goods? (TRPA 13d)				X
5.4.19-9. Alterations to waterborne, rail or air traffic? (TRPA 13e)				X
5.4.19-10. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? (TRPA 13f)				X

**5.4.19-1. Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? (CEQA XVIIa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to transportation and circulation and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.19-2. Would the Project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (CEQA XVIIb)**

See analysis for Question 5.4.19-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.19-3. Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (CEQA XVIIc)**

See analysis for Question 5.4.19-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.19-4. Would the Project result in inadequate emergency access? (CEQA XVIIId)**

See analysis for Question 5.4.19-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.19-5. Will the Project result in generation of 100 or more new Daily Vehicle Trip Ends (DVTE)? (TRPA 13a)**

See analysis for Question 5.4.19-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.19-6. Will the Project result in changes to existing parking facilities, or demand for new parking? (TRPA 13b)**

See analysis for Question 5.4.19-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.19-7. Will the Project result in substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities? (TRPA 13c)**

See analysis for Question 5.4.19-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.19-8. Will the Project result in alterations to present patterns of circulation or movement of people and/or goods? (TRPA 13d)**

See analysis for Question 5.4.19-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.19-9. Will the Project result in alterations to waterborne, rail or air traffic? (TRPA 13e)**

See analysis for Question 5.4.19-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.19-10. Will the Project result in increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? (TRPA 13f)**

See analysis for Question 5.4.19-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.20 TRIBAL CULTURAL RESOURCES (CEQA) AND ARCHAEOLOGICAL/HISTORICAL (TRPA)**

This section presents the analyses for potential impacts to tribal cultural, archaeological and historical resources, discussing the Project impacts on tribal cultural resources related to the disturbance of archaeological, historical, and Native American/traditional heritage resources. Table 5-20 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

<b>Table 5-20: Tribal Cultural Resources and Archaeological/Historical</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)? Yes: X No:				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
<b>5.4.20-1.</b> Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? (CEQA XVIIIa)				X
<b>5.4.20-2.</b> A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (CEQA XVIIIb)				X
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
<b>5.4.20-3.</b> Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values? (TRPA 20d)				X
<b>5.4.20-4.</b> Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area? (TRPA 20e)				X

**5.4.20-1. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? (CEQA XVIIIa)?**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to cultural or historic resources and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.20-2. Would the Project cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (CEQA XVIIIb)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.20-3. Does the Project have the potential to cause a physical change which would affect unique ethnic cultural values? (TRPA 20d)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.20-4. Will the Project restrict historic or pre-historic religious or sacred uses within the potential impact area? (TRPA 20e)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**



### 5.4.21 UTILITIES AND SERVICE SYSTEMS (CEQA) AND UTILITIES (TRPA)

This section presents the analysis for potential impacts to utilities and service systems. Table 5-21 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

<b>Table 5-21: Utilities and Service Systems</b>				
<b>CEQA Environmental Checklist Item</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Measures</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>5.4.21-1.</b> Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? (CEQA XIXa)				<b>X</b>
<b>5.4.21-2.</b> Have sufficient water supplies available to serve the and reasonably foreseeable future development during normal, dry, and multiple dry years? (CEQA XIXb)				<b>X</b>
<b>5.4.21-3.</b> Result in a determination by the wastewater treatment provider that serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments? (CEQA XIXc)				<b>X</b>
<b>5.4.21-4.</b> Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (CEQA XIXd)				<b>X</b>
<b>5.4.21-5.</b> Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (CEQA XIXe)				<b>X</b>

TRPA Initial Environmental Checklist Item	Yes	No, With Mitigation	Data Insufficient	No
Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:				
<b>5.4.21-6.</b> Power or natural gas? (TRPA 16a)				X
<b>5.4.21-7.</b> Communication systems? (TRPA 16b)				X
<b>5.4.21-8.</b> Utilize additional water which amount will exceed the maximum permitted capacity of the service provider? (TRPA 16c)				X
<b>5.4.21-9.</b> Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider? (TRPA 16d)				X
<b>5.4.21-10.</b> Storm water drainage? (TRPA 16e)				X
<b>5.4.21-11.</b> Solid waste and disposal? (TRPA 16f)				X

**5.4.21-1. Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? (CEQA XIXa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to public utilities and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-2. Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? (CEQA XIXb)**

See analysis for Question 5.4.21-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-3. Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments? (CEQA XIXc)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-4. Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (CEQA XIXd)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-5. Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (CEQA XIXe)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-6. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to power or natural gas? (TRPA 16a)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-7. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to communication systems? (TRPA 16b)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-8. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to utilize additional water which amount will exceed the maximum permitted capacity of the service provider? (TRPA 16c)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-9. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider? (TRPA 16d)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-10. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to storm water drainage? (TRPA 16e)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.21-11. Except for planned improvements, will the Project result in a need for new systems, or substantial alterations to solid waste and disposal? (TRPA 16f)**

See analysis for Question 5.4.20-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

## **5.4.22 WILDFIRE (CEQA)**

This section presents the analysis for potential impacts related to wildfire. Table 5-23 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-23: Wildfire				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
Is the Project located in or near state responsibility areas or lands classified as high fire hazard severity zones? Yes: X No:				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
<b>5.4.22-1.</b> Substantially impair an adopted emergency response plan or emergency evacuation plan? (CEQA XXa)				X
<b>5.4.22-2.</b> Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (CEQA XXb)				X
<b>5.4.22-3.</b> Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (CEQA XXc)				X
<b>5.4.22-4.</b> Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? (CEQA XXd)				X

**5.4.22-1. Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan? (CEQA XXa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to wildfire protection and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.22-2. Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (CEQA XXb)**

See analysis for Question 5.4.22-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.22-3. Would the Project require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (CEQA XXc)**

See analysis for Question 5.4.22-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.22-4. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? (CEQA XXd)**

See analysis for Question 5.4.22-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.23 MANDATORY FINDINGS OF SIGNIFICANCE**

This section presents the analyses for mandatory findings of significance. Table 5-24 identifies the applicable impacts, anticipated level of impact, and whether mitigation measures are required to reduce impacts to a less than significant level.

Table 5-24: Mandatory Findings of Significance				
CEQA Environmental Checklist Item	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
5.4.23-1. Does the Project have the potential to degrade the quality of the environment,				X

substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory? (CEQA XX1a)				
<b>5.4.23-2.</b> Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (CEQA XX1b)				X
<b>5.4.23-3.</b> Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (CEQA XX1c)				X
<b>TRPA Initial Environmental Checklist Item</b>	<b>Yes</b>	<b>No, With Mitigation</b>	<b>Data Insufficient</b>	<b>No</b>
<b>5.4.23-4.</b> Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory? (TRPA 21a)				X
<b>5.4.23-5.</b> Does the Project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs				X

in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.) (TRPA 21b)				
<b>5.4.23-6.</b> Does the Project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?) (TRPA 21c)				X
<b>5.4.23-7.</b> Does the Project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly? (TRPA 21d)				X

**5.4.23-1. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory? (CEQA XXIa)**

The B/ATCP amendments would not alter, revise, conflict or obstruct the regulations pertaining to biological resources (aquatic, wildlife, or plant) and proposes no changes to applicable policies. No changes would occur to the B/ATCP other than modification of building height and roof pitch standards.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.23-2. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (CEQA XXIb)**

The B/ATCP is a collection of both short- and long-term goals, policies, and measures designed to guide the development of the plan area and support the Region in attaining environmental thresholds and other important objectives. These goals, policies, and measures are inherently cumulative in nature as they are applied over a long-term basis, for the planning area as a whole, and in compliance with City and TRPA goals, policies, measures, and thresholds. The B/ATCP amendments do not propose new policies or alterations to existing policies that would be cumulatively considerable.



Cumulative projects contemplated in the RPU EIS (TRPA 2012a) include Environmental Enhancement, Land Management Plans, TTD/TMPO projects and programs, and other development projects. These projects and programs also apply to the B/ATCP, and therefore, the proposed 56-acre amendment area. The B/ATCP amendments do not propose specific projects for which cumulative impacts could be analyzed. The Regional Plan EIR cumulative impacts analysis applies to the amendment area regardless of the Community or Area Plan in which it is located.

#### Scenic Resources

As discussed in the analysis, the B/ATCP amendments would alter building height and roof pitch standards for public or quasi-public buildings within the 56-acre project area; however, the proposed changes would be highly limited and subject to TRPA's additional height findings to ensure the scenic threshold is maintained, if not improved. The existing B/ATCP scenic protections would not be altered, and all permitted projects would still be required to meet the TRPA scenic threshold non-degradation standard. Therefore, the B/ATCP amendments would not contribute to an adverse cumulative effect on scenic resources.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

#### **5.4.23-3. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (CEQA XIXc)**

As described above, projects permitted under the B/ATCP amendments would require project-level environmental review and would be required to comply with applicable TRPA, federal, state, and City regulations, including protections for human health and safety. The amendments only address building height and roof pitch and the potential for new impacts to humans is low. Therefore, implementation of the amendments would not create a substantial direct or indirect adverse effect on human beings.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

#### **5.4.23-4. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory? (TRPA 21a)**

See analysis for Question 5.4.23-1.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

#### **5.4.23-5. Does the Project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (TRPA 21b)**

The B/ATCP implements the TRPA Regional Plan's policies, ordinances, and land use controls designed specifically to achieve long-term environmental goals, and the City's policies, ordinances, and land use controls which are also designed to achieve long-term goals and guide City development over a period of decades. The B/ATCP amendments would not alter this long-term goal, nor does it propose changes to land use or design that would be substantially different from what is currently allowed or that achieve a short-term goal at the expense of long-range planning for the area. While short-term impacts could occur during redevelopment activities, redevelopment projects have the potential to achieve long-term goals. Since the proposed amendment area is currently developed with recreational land uses, new permanent alterations to previously undeveloped land would not occur, and redevelopment projects are anticipated to support environmental, social, and economic improvements.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.23-6. Does the Project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?) (TRPA 21c)**

See analysis for Question 5.4.23-2.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

**5.4.23-7. Does the Project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly? (TRPA 21d)**

See analysis for Question 5.4.23-3.

Environmental Analysis: *No Impact.*

Required Mitigation: **None.**

## 5.5 REFERENCES

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Attachment C

Compliance Measures Evaluation

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
<b>WATER QUALITY/SEZ - IN PLACE</b>				
1	BMP requirements, new development: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish	N	The Bijou/Al Tahoe Community Plan (BATCP) amendment will not change existing BMP requirements in Chapter 60 of the TRPA Code of Ordinances and is expected to promote planned public redevelopment in the 56-acre project area, increasing the rate of BMP compliance.
2	BMP implementation program -- existing streets and highways: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Trans, Fish	N	
3	BMP implementation program -- existing urban development: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish	N	
4	BMP implementation program -- existing urban drainage systems: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Trans, Fish	N	
5	Capital Improvement Program for Erosion and Runoff Control	WQ, Soils/SEZ, Trans, Fish	N	The BATCP amendment does not adversely affect the Capital Improvements Program for Erosion and Runoff Control. The plan recognizes existing programmed water quality improvements and encourages future improvements.
6	Excess coverage mitigation program: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ	N	The BATCP amendment will not change excess coverage mitigation requirements.
7	Effluent limitations: California (SWRCB, Lahontan Board) and Nevada (NDEP): <i>Code of Ordinances</i> Chapter 5	WQ, Soils/SEZ, Fish	N	The effluent limitations in Chapter 5 of the TRPA Code of Ordinances are not being modified.
8	Limitations on new subdivisions: (See the Goals and Policies: Land Use Element)	WQ, Soils/SEZ, Rec, Scenic	N	All new subdivisions will continue to be limited by the provisions in Chapter 39, Subdivision, of the TRPA Code of Ordinances.
9	Land use planning and controls: See the Goals and Policies: Land Use Element and Code of Ordinances Chapters 11, 12, 13, 14, and 21	WQ, Soils/SEZ, Trans, Scenic	N	The BATCP was developed to meet Regional Plan and Code of Ordinances requirements. The amendment maintains consistency with and supports implementation of Regional Plan goals and policies and Code of Ordinances standards.

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
10	Residential development priorities, The Individual Parcel Evaluation System (IPES): Goals and Policies: Implementation Element and Code of Ordinances Chapter 53	WQ, Soils/SEZ	N	The BATCP amendment does not affect residential development.
11	Limits on land coverage for new development: Goals and Policies: Land Use Element and Code of Ordinances Chapter 30	WQ, Soils/SEZ, Scenic	N	The BATCP amendment does not affect land coverage.
12	Transfer of development: Goals and Policies: Land Use Element and Implementation Element	WQ, Soils/SEZ	N	The BATCP amendment does not change Goals and Policies from the Land Use Element and Implementation Element of the Regional Plan regarding the transfer of development.
13	Restrictions on SEZ encroachment and vegetation alteration: <i>Code of Ordinances</i> Chapter 30	WQ, Soils/SEZ, Veg, Wildlife, Fish, Rec, Scenic	N	The BATCP amendemnt will not alter existing restrictions on SEZ encroachment and vegetation alteration in the TRPA Code of Ordinances, Chapters 30 and 61.
14	SEZ restoration program: Environmental Improvement Program.	WQ, Soils/SEZ, Veg, Wildlife, Fish, Scenic	N	The BATCP amendment does not change policies and provisions that require the protection and restoration of SEZs.
15	SEZ setbacks: <i>Code of Ordinances</i> Chapter 53	WQ, Soils/SEZ, Veg, Wildlife, Fish	N	SEZ setback requirements in the TRPA Code of Ordinances, Chapter 53, Individual Parcel Evaluation System, Section 53.9, will not be altered.
16	Fertilizer reporting requirements: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish, Rec	N	The BATCP amendment will not modify the Resource Management and Protection regulations, Chapters 60 through 68, of the TRPA Code of Ordinances. Thus, fertilizer reporting and water quality mitigation requirements will remain in effect.
17	Water quality mitigation: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ	N	
18	Restrictions on rate and/or amount of additional development	WQ, Soils/SEZ, Wildlife, Scenic	N	The BATCP amendment does not affect the RPU's restrictions on the rate and amount of additional development.

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
19	Improved BMP implementation/enforcement program	WQ, Soils/SEZ	N	See response to Compliance Measures 1 through 4.
20	Increased funding for EIP projects for erosion and runoff control	WQ, Soils/SEZ	N	The BATCP amendment will not increase funding for EIP projects for erosion and runoff control.
21	Artificial wetlands/runoff treatment program	WQ, Soils/SEZ	N	There are no changes to the artificial wetlands/runoff treatment program proposed with the BATCP amendment.
22	Transfer of development from SEZs	WQ, Soils/SEZ, Scenic	N	The BATCP amendment does not provide any additional incentives to hasten the transfer of development rights from sensitive lands, including SEZs, or outlying areas to <u>Town Centers and the Regional Center</u> .
23	Improved mass transportation	WQ, Trans, Noise	N	The BATCP amendment does not affect mass transportation.
24	Redevelopment and redirection of land use: Goals and Policies: Land Use Element and Code of Ordinances Chapter 13	WQ, Soils/SEZ, Scenic	N	The BATCP amendment does not affect redevelopment or redirection of land use and is designed to promote development in the 56-acre project area consistent with the community plan and Regional Plan.
25	Combustion heater rules, stationary source controls, and related rules: <i>Code of Ordinances Chapter 65</i>	WQ, AQ	N	No changes are being proposed in the BATCP amendment that would impact Compliance Measures 25-32. The existing TRPA Code of Ordinance provisions will remain in effect.
26	Elimination of accidental sewage releases: Goals and Policies: Land Use Element	WQ, Soils/SEZ	N	
27	Reduction of sewer line exfiltration: Goals and Policies: Land Use Element	WQ, Soils/SEZ	N	
28	Effluent limitations	WQ, Soils/SEZ	N	
29	Regulation of wastewater disposal at sites not connected to sewers: <i>Code of Ordinances Chapter 60</i>	WQ, Soils/SEZ	N	
30	Prohibition on solid waste disposal: Goals and Policies: Land Use Element	WQ, Soils/SEZ	N	
31	Mandatory garbage pick-up: Goals and Policies: Public Service Element	WQ, Soils/SEZ, Wildlife	N	

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
32	Hazardous material/wastes programs: Goals and Policies: Land Use Element and Code of Ordinances Chapter 60	WQ, Soils/SEZ	N	
33	BMP implementation program, Snow and ice control practices: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, AQ	N	The BATCP amendment will not change requirements of the BMP implementation program. See response to Compliance Measures 1 through 4.
34	Reporting requirements, highway abrasives and deicers: Goals and Policies:, Land Use Element and Code of Ordinances Chapter 60	WQ, Soils/SEZ, Fish	N	
35	BMP implementation program-- roads, trails, skidding, logging practices: <i>Code of Ordinances</i> Chapter 60, Chapter 61	WQ, Soils/SEZ, Fish	N	
36	BMP implementation program-- outdoor recreation: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish, Rec	N	
37	BMP implementation program-- livestock confinement and grazing: <i>Code of Ordinances</i> Chapter 21, Chapter 60, Chapter 64	WQ, Soils/SEZ, Veg, Wildlife, Fish	N	
38	BMP implementation program-- pesticides	WQ, Soils/SEZ	N	
39	Land use planning and controls - timber harvesting: <i>Code of Ordinances</i> Chapter 21	WQ, Soils/SEZ, AQ, Wildlife, Fish, Scenic	N	
40	Land use planning and controls - outdoor recreation: <i>Code of Ordinances</i> Chapter 21	WQ, Soils/SEZ, Wildlife, Noise, Rec, Scenic	N	
41	Land use planning and controls-- ORV use: Goals and Policies: Recreation Element	WQ, Soils/SEZ, AQ, Wildlife, Fish, Noise, Rec, Scenic	N	Regional Plan Policy R-1.5 states that "Off-road vehicle (ORV) use is prohibited in the Lake Tahoe Region except on specified roads, trails, or designated areas where the impacts can be mitigated." The BATCP amendment does not include the expansion of ORV use.
42	Control of encroachment and coverage in sensitive areas	WQ, Soils/SEZ, Wildlife, Rec, Scenic	N	No changes are being proposed that would impact this compliance measure. The existing TRPA Code provisions will remain in effect.
43	Control on shorezone encroachment and vegetation alteration: <i>Code of Ordinances</i> Chapter 83	WQ, Soils/SEZ, Scenic	N	TRPA remains responsible for enforcing and implementing Shorezone regulations, Chapters 80 through 85, of the TRPA Code of Ordinances, as well as other code provisions applicable to projects within the Shorezone. No changes



## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
44	BMP implementation program--shorezone areas: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ	N	are being proposed with the BATCP amendment that would modify existing code provisions related to the Shorezone or impact these compliance measures.
45	BMP implementation program--dredging and construction in Lake Tahoe: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ	N	
46	Restrictions and conditions on filling and dredging: <i>Code of Ordinances</i> Chapter 84	WQ, Soils/SEZ, Fish	N	
47	Protection of stream deltas	WQ, Soils/SEZ, Wildlife, Fish,	N	
48	Marina master plans: <i>Code of Ordinances</i> Chapter 14	WQ, AQ/Trans, Fish, Scenic	N	
49	Additional pump-out facilities: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ	N	
50	Controls on anti-fouling coatings: <i>Code of Ordinances</i> Chapter 60	WQ, Soils/SEZ, Fish	N	
51	Modifications to list of exempt activities	WQ, Soils/SEZ	N	
<b>WATER QUALITY/SEZ - SUPPLEMENTAL</b>				
52	More stringent SEZ encroachment rules	WQ, Soils/SEZ, Wildlife, Fish	N	The BATCP amendment does not include any provisions that would impact Compliance Measures 52 though 61.
53	More stringent coverage transfer requirements	WQ, Soils/SEZ	N	
54	Modifications to IPES	WQ, Soils/SEZ	N	
55	Increased idling restrictions	WQ, Soils/SEZ, AQ	N	
56	Control of upwind pollutants	WQ, Soils/SEZ, AQ	N	
57	Additional controls on combustion heaters	WQ, Soils/SEZ, AQ	N	
58	Improved exfiltration control program	WQ, Soils/SEZ	N	
59	Improved infiltration control program	WQ, Soils/SEZ	N	
60	Water conservation/flow reduction program	WQ, Soils/SEZ, Fish	N	
61	Additional land use controls	WQ, Soils/SEZ, Wildlife	N	

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments	
<b>AIR QUALITY/TRANSPORTATION - IN PLACE</b>					
62	Fixed Route Transit - South Shore	Trans, Rec	N	The BATCP amendment does not impact any transit services bikeways, or pedestrian facilities, except to encourage planned development in the 56-acre and related transportation improvements.	
63	Fixed Route Transit - North Shore	Trans, Rec	N		
64	Demand Responsive Transit - South Shore	Trans	N		
65	Seasonal Trolley Services	Trans, Rec	N		
66	Social Service Transportation	Trans	N		
67	Shuttle programs	Trans	N		
68	Ski shuttle services	Trans, Rec	N		
69	Intercity bus services	Trans	N		
70	Passenger Transit Facilities: South Y Transit Center	Trans	N		
71	Bikeways, Bike Trails	Trans, Noise, Rec, Scenic	N		
72	Pedestrian facilities	Trans, Rec, Scenic	N		
73	Wood heater controls: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N		The BATCP amendment does not make any changes to wood or gas heater controls, or stationary source controls.
74	Gas heater controls: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N		
75	Stationary source controls: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N		

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
76	U.S. Postal Service Mail Delivery	Trans	N	The BATCP amendment does not include any provisions that would impact U.S. Postal Service Delivery.
77	Indirect source review/air quality mitigation: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N	The BATCP amendment does not make any changes to indirect source review requirements, air quality mitigation requirements, or idling restrictions.
78	Idling Restrictions: <i>Code of Ordinances</i> Chapter 65	WQ, AQ	N	
79	Vehicle Emission Limitations(State/Federal)	WQ, AQ	N	The BATCP amendment does not include any provisions related to vehicle emission limitations established by the State/Federal Government.
80	Open Burning Controls: <i>Code of Ordinances</i> Chapters 61 and Chapter 65	WQ, AQ, Scenic	N	The BATCP amendment does not make any changes to open burning controls.
81	BMP and Revegetation Practices	WQ, AQ, Wildlife, Fish	N	See response to Compliance Measures 1 through 4.
82	Employer-based Trip Reduction Programs: <i>Code of Ordinances</i> Chapter 65	Trans	N	The BATCP amendment does not make any changes to the employer-based trip reduction programs or vehicle rental programs described in Chapter 65.
83	Vehicle rental programs: <i>Code of Ordinances</i> Chapter 65	Trans	N	
84	Parking Standards	Trans	N	The BATCP amendment does not make any changes that would impact parking standards, parking management, parking fees or facilities, traffic management, signal synchronization, aviation, waterborne transit or excursions, air quality monitoring, alternative fueled vehicle fleets or infrastructure improvements, north shore transit, or the Heavenly Ski Resort Gondola. The BATCP amendment was shown to have an insignificant impact on total daily trips and was not required to conduct a traffic analysis. Additional development associated with the amendment is within the Regional Plan's growth management system and would not generate additional demand for waterborne transit services.
85	Parking Management Areas	Trans	N	
86	Parking Fees	Trans	N	
87	Parking Facilities	Trans	N	
88	Traffic Management Program - Tahoe City	Trans	N	

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
89	US 50 Traffic Signal Synchronization - South Shore	Trans	N	
90	General Aviation, The Lake Tahoe Airport	Trans, Noise	N	
91	Waterborne excursions	WQ, Trans, Rec	N	
92	Waterborne transit services	WQ, Trans, Scenic	N	
93	Air Quality Studies and Monitoring	WQ, AQ	N	
94	Alternate Fueled Vehicle - Public/Private Fleets and Infrastructure Improvements	Trans	N	
95	Demand Responsive Transit - North Shore	Trans	N	
96	Tahoe Area Regional Transit Maintenance Facility	Trans	N	
97	Heavenly Ski Resort Gondola	Trans	N	
<b>AIR QUALITY/TRANSPORTATION - SUPPLEMENTAL</b>				
98	Demand Responsive Transit - North Shore	Trans	N	See response to Compliance Measures 62-97 and 1-4 (Road improvements, BMPs). The BATCP amendment is not expected to affect transportation or transit.
99	Coordinated Transit System - South Shore	Trans	N	
100	Transit Passenger Facilities	Trans	N	

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
101	South Shore Transit Maintenance Facility - South Shore	Trans	N	
102	Transit Service - Fallen Leaf Lake	WQ, Trans	N	
103	Transit Institutional Improvements	Trans	N	
104	Transit Capital and Operations Funding Acquisition	Trans	N	
105	Transit/Fixed Guideway Easements - South Shore	Trans	N	
106	Visitor Capture Program	Trans	N	
107	Pedestrian and Bicycle Facilities - South Shore	Trans, Rec	N	
108	Pedestrian and Bicycle Facilities - North Shore	Trans, Rec	N	
109	Parking Inventories and Studies Standards	Trans	N	
110	Parking Management Areas	Trans	N	
111	Parking Fees	Trans	N	
112	Establishment of Parking Task Force	Trans	N	
113	Construct parking facilities	Trans	N	
114	Intersection improvements-- South Shore	Trans, Scenic	N	
115	Intersection improvements-- North Shore	Trans, Scenic	N	
116	Roadway Improvements - South Shore	Trans, Scenic	N	
117	Roadway Improvements - North Shore	Trans, Scenic	N	
118	Loop Road - South Shore	Trans, Scenic	N	
119	Montreal Road Extension	Trans	N	
120	Kingsbury Connector	Trans	N	
121	Commercial Air Service: Part 132 commercial air service	Trans	N	
122	Commercial Air Service: commercial air service that does not require Part 132 certifications	Trans	N	
123	Expansion of waterborne excursion service	WQ, Trans	N	

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
124	Re-instate the oxygenated fuel program	WQ, AQ	N	
125	Management Programs	Trans	N	
126	Around the Lake Transit	Trans	N	
<b>VEGETATION - IN PLACE</b>				
127	Vegetation Protection During Construction: <i>Code of Ordinances Chapter 33</i>	WQ, AQ, Veg, Scenic	N	The BATCP amendment will not alter the provisions of Chapter 33 in the TRPA Code.
128	Tree Removal: <i>Code of Ordinances Chapter 61</i>	Veg, Wildlife, Scenic	N	The BATCP amendment does not alter tree removal, prescribed burning, vegetation management or plant protection and fire hazard reduction provisions of Chapter 61 of the Code.
129	Prescribed Burning: <i>Code of Ordinances Chapter 61</i>	WQ, AQ, Veg, Wildlife, Scenic	N	
130	Remedial Vegetation Management: <i>Code of Ordinances Chapter 61</i>	WQ, Veg, Wildlife	N	
131	Sensitive and Uncommon Plant Protection and Fire Hazard Reduction: <i>Code of Ordinances Chapter 61</i>	Veg, Wildlife, Scenic	N	
132	Revegetation: <i>Code of Ordinances Chapter 61</i>	WQ, Veg, Wildlife, Scenic	N	
133	Remedial Action Plans: <i>Code of Ordinances Chapter 5</i>	WQ, Veg	N	
134	Handbook of Best Management Practices	WQ, Soils/SEZ, Veg, Fish	N	The Handbook of Best Management Practices will continue to be used to design and construct BMPs.
135	Shorezone protection	WQ, Soils/SEZ, Veg	N	See response to Compliance Measures 43 through 50.
136	Project Review	WQ, Veg	N	The BATCP amendment will not affect project review and compliance inspection procedures.
137	Compliance inspections	Veg	N	
138	Development Standards in the Backshore	WQ, Soils/SEZ, Veg, Wildlife, Scenic	N	See response to Compliance Measures 43 through 50.
139	Land Coverage Standards: <i>Code of Ordinances Chapter 30</i>	WQ, Veg, Wildlife, Fish, Scenic	N	See response to Compliance Measure 11.
140	Grass Lake, Research Natural Area	WQ, Veg, Wildlife, Fish, Scenic	N	N/A

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
141	Conservation Element, Vegetation Subelement: Goals and Policies	Veg, Wildlife, Fish	N	The BATCP amendment is consistent with the 2012 Regional Plan, including the Conservation Element and Vegetation Subelement Goals and Policies.
142	Late Successional Old Growth (LSOG): <i>Code of Ordinances</i> Chapter 61	Veg, Wildlife, Fish	N	The BATCP amendment does not make any changes to provisions of Lake Successional Old Growth and Stream Environment Zone Vegetation.
143	Stream Environment Zone Vegetation: <i>Code of Ordinances</i> Chapter 61	WQ, Veg, Wildlife, Fish	N	
144	Tahoe Yellow Cress Conservation Strategy	Veg	N	The BATCP amendment will not impact efforts to conserve the Tahoe Yellow Cress.
145	Control and/or Eliminate Noxious Weeds	Veg, Wildlife	N	The BATCP amendment will not impact efforts to control or eliminate noxious weeds.
146	Freel Peak Cushion Plant Community Protection	Veg	N	N/A
<b>VEGETATION - SUPPLEMENTAL</b>				
147	Deepwater Plant Protection	WQ, Veg	N	See response to Compliance Measures 16 and 17 and 43 through 50.
<b>WILDLIFE - IN PLACE</b>				
148	Wildlife Resources: <i>Code of Ordinances</i> Chapter 62	Wildlife, Noise	N	See response to Compliance Measures 16 and 17.
149	Stream Restoration Program	WQ, Soils/SEZ, Veg, Wildlife, Fish, Rec, Scenic	N	The BATCP amendment does not include any changes to the Stream Restoration Program.
150	BMP and revegetation practices	WQ, Veg, Wildlife, Fish, Scenic	N	The BATCP amendment does not include any changes to existing BMP and revegetation requirements.
151	OHV limitations	WQ, Soils/SEZ, AQ, Wildlife, Noise, Rec	N	The BATCP amendment does not include any changes to OHV limitations.
152	Remedial Action Plans: <i>Code of Ordinances</i> Chapter 5	Wildlife	N	See response to Compliance Measure 133.
153	Project Review	Wildlife	N	See response to Compliance Measure 136 and 137.
<b>FISHERIES - IN PLACE</b>				
156	Fish Resources: <i>Code of Ordinances</i> Chapter 63	WQ, Fish	N	See response to Compliance Measures 16 and 17.
157	Tree Removal: <i>Code of Ordinances</i> Chapter 61	Wildlife, Fish	N	The BATCP amendment does not change tree removal provisions of Chapter 61.
158	Shorezone BMPs	WQ, Fish	N	See response to Compliance Measures 43 through 50.
159	Filling and Dredging: <i>Code of Ordinances</i> Chapter 84	WQ, Fish	N	
160	Location standards for structures in the shorezone: <i>Code of Ordinances</i> Chapter 84	WQ, Fish	N	

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
161	Restrictions on SEZ encroachment and vegetation alteration	WQ, Soils/SEZ, Fish	N	See response to Compliance Measures 16 and 17.
162	SEZ Restoration Program	WQ, Soils/SEZ, Fish	N	See response to Compliance Measure 14.
163	Stream restoration program	WQ, Soils/SEZ, Fish	N	See response to Compliance Measures 16 and 17.
164	Riparian restoration	WQ, Soils/SEZ, Fish	N	
165	Livestock: <i>Code of Ordinances</i> Chapter 64	WQ, Soils/SEZ, Fish	N	
166	BMP and revegetation practices	WQ, Fish	N	See response to Compliance Measures 1 through 4.
167	Fish habitat study	Fish	N	See response to Compliance Measures 16 and 17.
168	Remedial Action Plans: <i>Code of Ordinances</i> Chapter 5	Fish	N	See response to Compliance Measure 133.
169	Mitigation Fee Requirements: <i>Code of Ordinances</i> Chapter 86	Fish	N	The mitigation fee requirements formerly in Chapter 86 of the TRPA Code of Ordinances (now in the Rules of Procedure) are not being modified with the BATCP amendment.
170	Compliance inspection	Fish	N	The BATCP amendment is not modifying existing compliance or inspection programs or provisions.
171	Public Education Program	Wildlife, Fish	N	The BATCP amendment does not make any changes to the city's education and outreach efforts.
<b>NOISE - IN PLACE</b>				
172	Airport noise enforcement program	Wildlife, Fish	N	The BATCP amendment is not modifying existing enforcement programs.
173	Boat noise enforcement program	Wildlife, Fish, Rec	N	
174	Motor vehicle/motorcycle noise enforcement program: <i>Code of Ordinances</i> Chapters 5 and 23	Wildlife, Fish	N	
175	ORV restrictions	AQ, Wildlife, Noise, Rec	N	The BATCP amendment is not modifying existing ORV or snowmobile conditions.
176	Snowmobile Restrictions	WQ, Wildlife, Noise, Rec	N	
177	Land use planning and controls	Wildlife, Noise	N	See response to Compliance Measure 9.
178	Vehicle trip reduction programs	Trans, Noise	N	The BATCP amendment does not make any changes to vehicle trip reduction programs.
179	Transportation corridor design criteria	Trans, Noise	N	The BATCP amendment does not affect transportation corridor design.



## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
180	Airport Master Plan South Lake Tahoe	Trans, Noise	N	N/A
181	Loudspeaker restrictions	Wildlife, Noise	N	The BATCP is not modifying loudspeaker restrictions.
182	Project Review	Noise	N	See response to Compliance Measures 136 and 137.
183	Complaint system: <i>Code of Ordinances</i> Chapters 5 and 68	Noise	N	Existing compliant systems are not being modified.
184	Transportation corridor compliance program	Trans, Noise	N	The BATCP amendment does contain policies specific to transportation corridor compliance.
185	Exemptions to noise limitations	Noise	N	Exemptions to noise limitations are not being modified.
186	TRPA's Environmental Improvement Program (EIP)	Noise	N	The BATCP amendment does not affect the Environmental Improvement Program.
187	Personal watercraft noise controls	Wildlife, Noise	N	Watercraft noise controls are not modified by the BATCP amendment
<b>NOISE - SUPPLEMENTAL</b>				
188	Create an interagency noise enforcement MOU for the Tahoe Region.	Noise	N	An interagency noise enforcement MOU for the Tahoe Region is not being proposed as part of the BATCP amendment.
<b>RECREATION - IN PLACE</b>				
189	Allocation of Development: <i>Code of Ordinances</i> Chapter 50	Rec	N	The BATCP amendment is not proposing any changes to the Basin's allocation of development system, or to directly draw from any allocation pools.
190	Master Plan Guidelines: <i>Code of Ordinances</i> Chapter 14	Rec, Scenic	N	TRPA, in coordination with the city, will continue to process Specific and Master Plans pursuant to Chapter 14 of the TRPA <i>Code of Ordinances</i> .
191	Permissible recreation uses in the shorezone and lake zone: <i>Code of Ordinances</i> Chapter 81	WQ, Noise, Rec	N	The BATCP amendment does not alter provisions related to permissible uses in the shorezone and lake zone.
192	Public Outdoor recreation facilities in sensitive lands	WQ, Rec, Scenic	N	The BATCP amendment is not altering provisions regarding public outdoor recreation in sensitive lands.
193	Hiking and riding facilities	Rec	N	The BATCP amendment does not alter where hiking and riding facilities are permissible. See also Compliance Measure 40.

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
194	Scenic quality of recreation facilities	Rec, Scenic	Y	The 56-Acres project area is located near a scenic recreational amenity (Lakeview Commons) and the BATCP amendment will allow greater building heights potentially within view of the Commons. The recreation facility is located across US Highway 50 from the subject area. Scenic impacts to the recreation facility will be mitigated by existing citywide design standards and guidelines and the TRPA Code of Ordinances Chapter 37:Height, Chapter 66: Scenic Quality. Specifically, the following standards will serve as mitigation: (1) setback of 20 feet for commercial or public service uses or 50 feet for recreation uses from US Highway 50; (2) preservation of the natural forest setting in the subject area by requiring future projects maintain the maximum number of trees in the project site; (3) required use of architectural treatments tht use natural materials and colors, as well as facade articulations; (4) required findings 1, 2, 3, 4, 5, 7, and 8 of TRPA Code Section 37.7 for additional height; and (5) required design standards in TRPA Code Section 66.2.4 for projects within scenic highway corridors (e.g. utilities, highway fixtures and siting standards).
195	Density standards	Rec	N	The BATCP amendment complies with all applicable density standards in Chapters 13 and 31 of the Code of Ordinances.
196	Bonus incentive program	Rec	N	The BATCP amendment does not alter existing bonus incentive programs.
197	Required Findings: <i>Code of Ordinances</i> Chapter 4	Rec	N	All projects in the BATCP must meet the applicable findings in the TRPA Code Of Ordinances.
198	Lake Tahoe Recreation Sign Guidelines	Rec, Scenic	N	The BATCP amendment will not impact the Lake Tahoe Recreation Sign Guidelines.
199	Annual user surveys	Rec	N	The BATCP amendment will not affect user surveys.
<b>RECREATION - SUPPLEMENTAL</b>				
200	Regional recreational plan	Rec	N	The BATCP does not modify any portion of the Goals and Policies in the Regional Recreation Plan.
201	Establish fair share resource capacity estimates	Rec	N	The BATCP amendment does not establish or alter fair share resource capacity estimates, alter reservations of additional resource capacity, or include economic modeling.
202	Reserve additional resource capacity	Rec	N	
203	Economic Modeling	Rec	N	
<b>SCENIC - IN PLACE</b>				
204	Project Review and Exempt Activities: <i>Code of Ordinances</i> Chapter 2	Scenic	N	See response to Compliance Measures 136 and 137.
205	Land Coverage Limitations: <i>Code of Ordinances</i> Chapter 30	WQ, Scenic	N	See response to Compliance Measure 11.

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
206	Height Standards: <i>Code of Ordinances</i> Chapter 37	Scenic	Y	The BATCP amendment would allow for maximum building height up to 42 ft which exceeds TRPA Code Chapter 37 general height standard; however, any future project would be required to meet findings 1, 2, 3, 4, 5, 7, and 8 of TRPA Code Section 37.7 for additional height. If the findings could not be made then the project would not be permitted.
207	Driveway and Parking Standards: <i>Code of Ordinances</i> Chapter 34	Trans, Scenic	N	The BATCP amendment does not make changes to current design standards and guidelines relating to parking and driveway design
208	Signs: <i>Code of Ordinances</i> Chapter 38	Scenic	N	The BATCP amendment retains existing design standards and guidelines pertaining to signage. These standards meet or exceed chapter 38 standards.
209	Historic Resources: <i>Code of Ordinances</i> Chapter 67	Scenic	N	See response to Compliance Measures 16 and 17.
210	Design Standards: <i>Code of Ordinances</i> Chapter 36	Scenic	Y	Citywide design standards and guidelines apply in substitute of TRPA Code Chapter 36 standards in the BATCP area. The BATCP amendment carries forward these existing design standards and guidelines. These standards meet or exceed Chapter 36 standards. The proposed amendment would affect some design provisions within the BATCP, but such modifications maintain consistency with the citywide design standards and guidelines. See response to Compliance Measure 194 for specific standards to mitigate impact of scenic resources and ensure future projects are compatible with the surrounding environment.
211	Shorezone Tolerance Districts and Development Standards: <i>Code of Ordinances</i> Chapter 83	Scenic	N	See response to Compliance Measures 43 through 50.
212	Development Standards Lakeward of Highwater: <i>Code of Ordinances</i> Chapter 84	WQ, Scenic	N	
213	Grading Standards: <i>Code of Ordinances</i> Chapter 33	WQ, Scenic	N	Grading and vegetation protection during construction shall continue to be required to meet the provisions of TRPA Code, Chapter 33, Grading and Construction.
214	Vegetation Protection During Construction: <i>Code of Ordinances</i> Chapter 33	AQ, Veg, Scenic	N	
215	Revegetation: <i>Code of Ordinances</i> Chapter 61	Scenic	N	See response to Compliance Measures 16 and 17.

## ATTACHMENT C: COMPLIANCE MEASURES

Tracking Number	Compliance Measure Description	Affected Threshold Categories	Affected by Action (Y/N)	Comments
216	Design Review Guidelines	Scenic	Y	The BATCP includes minor changes to the design and development standards including changes to allowable height, roof pitch and building siding. See response to Compliance Measure 194 for specific standards to mitigate impact of scenic resources and ensure future projects are compatible with the surrounding environment.
217	Scenic Quality Improvement Program(SQIP)	Scenic	Y	See response to Compliance Measure 194.
218	Project Review Information Packet	Scenic	N	
219	Scenic Quality Ratings, Features Visible from Bike Paths and Outdoor Recreation Areas Open to the General Public	Trans, Scenic	Y	
220	Nevada-side Utility Line Undergrounding Program	Scenic	N	N/A
<b>SCENIC - SUPPLEMENTAL</b>				
221	Real Time Monitoring Program	Scenic	N	No changes to the real time monitoring program are being proposed with the BATCP amendment.
222	Integrate project identified in SQIP	Scenic	Y	The BATCP amendment is anticipated to result in redevelopment on the 56-acres project area. The SQIP notes that redevelopment, remodeling, and facade improvements are the most effective strategy at improving scenic threshold compliance in Roadway Travel Unit #35, near the project area. As a result, the amendment is anticipated to improve integration with the SQIP.

Attachment D

Required Findings

## ATTACHMENT D

### REQUIRED FINDINGS FOR AMENDMENTS OF THE CITY OF SOUTH LAKE TAHOE'S BIJOU/AL TAHOE COMMUNITY PLAN

This document contains required findings per Chapter 3, 4, and 11 of the TRPA Code of Ordinances for amendments to the City of South Lake Tahoe's Tourist Core Area Plan (TCAP):

#### TRPA Code of Ordinances Section 3.3 – Determination of Need to Prepare an Environmental Impact Statement

Finding: TRPA finds that the proposed community plan amendment will not have a significant effect on the environment.

Rationale: An Initial Environmental Checklist (IEC) has been prepared to evaluate the effects of the proposed amendments to the Bijou/Al Tahoe Community Plan as provided in Attachment A, Exhibit 1. The IEC (Attachment B of this packet) found that the proposed amendments would not have a significant effect on the environment. The proposed amendments are consistent with and will implement the Regional Plan. These are not anticipated to result in environmental impacts.

#### TRPA Code of Ordinances Section 4.4 – Threshold-Related Findings

1. Finding: The project (amendment to the Bijou/Al Tahoe Community Plan) is consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, plan area statements and maps, the Code, and other TRPA plans and programs.

Rationale: The Regional Plan provides for the development of community plans to concentrate development in appropriate areas. This amendment to the Bijou/Al Tahoe Community Plan is of limited focus and is substantially consistent with the Regional Plan's goals and policies, including those identified in the Land Use Element and the Community Design Subelement. Based on the analysis in the IEC and compliance measures table (Attachment B and C), the community plan amendments will not result in environmental effects. The amendments will support the achievement and maintenance of thresholds and will support implementation of the Regional Plan (including but not limited to Land Use Policy LU-1, Community Design Policy CD-1, Recreation Policy R-7, and Public Service Policy PS-1) by allowing for the development of appropriately designed public and recreation facilities in the 56-acre project area. There are no proposed changes to allowable land use, boundaries, or the TRPA Regional Plan map.

2. Finding: The project will not cause the environmental threshold carrying capacities to be exceeded.

Rationale: The proposed amendment is consistent with the threshold attainment strategies in the Regional Plan. As demonstrated in the attached IEC and compliance measures table, the amendment to the community plan will not cause the environmental threshold carrying capacities to be exceeded. The proposed amendment is intended to support planned redevelopment in the 56-acre project area and may facilitate public service improvements consistent with the community plan and threshold attainment.

3. Finding: Wherever federal, state, or local air and water quality standards apply for the region, the strictest standards shall be attained, maintained, or exceeded pursuant to Article V(d) of the Tahoe Regional Planning Compact.

Rationale: The proposed amendments would not adversely affect any state, federal, or local standards. The amendments are intended to apply special height standards for public facilities and would not alter other standards or requirements.

TRPA Code of Ordinances Section 4. 6 – Findings Necessary to Amend or Adopt TRPA Ordinances, Rules, or Other TRPA Plans and Programs.

Finding: The Regional Plan and all of its elements, as implemented through the Code, Rules, and other TRPA plans and programs, as amended, achieves and maintains thresholds.

Rationale: Please see the rationales for the Section 4.4 findings above. The proposed amendments would not adversely affect threshold attainment and may, in fact, benefit it. All applicable standards in the Code of Ordinances and Citywide Design Standards and Guidelines would remain in place. All subsequent development that may occur because of these amendments would be subject to TRPA permitting.

TRPA Code of Ordinances Section 11.8.4 – Findings for Plan Area Amendments

Finding: The amendment to the Bijou/Al Tahoe Community Plan is substantially consistent with the plan area designation criteria in subsections 11.6.2 and 11.6.3.

Rationale: The amended height standard for public buildings is consistent with the plan area designation for the Bijou/Al Tahoe Community Plan. The plan’s vision, intent, and policies encourage concentration of public uses in District 4 and promote public redevelopment in the 56-acre project area. All subsequent development is subject to TRPA permitting and must comply with Code of Ordinance standards.

The finding of no significant effect based on the initial environmental checklist can be found within Attachment B of this packet.

Attachment E

TRPA Adopting Ordinance 2022-\_\_



TAHOE REGIONAL PLANNING AGENCY  
ORDINANCE 2022-\_\_

AN AMENDMENT TO ORDINANCE NO. 2020-04, AS PREVIOUSLY AMENDED, TO AMEND THE BIJOU/AL TAHOE COMMUNITY PLAN TO ALLOW ADDITIONAL HEIGHT UP TO 42 FEET, WITH NO MINIMUM CROSS SLOPE OR ROOF PITCH REQUIREMENTS FOR PUBLIC AND QUASI-PUBLIC FACILITIES LOCATED IN THE 56-ACRE PROJECT AREA.

The Governing Board of the Tahoe Regional Planning Agency does ordain as follows:

Section 1.00 Findings

- 1.10 It is desirable to amend TRPA Ordinance 2020-04 by amending the Bijou/Al Tahoe Community Plan to further implement the Regional Plan pursuant to Article VI(a) and other applicable provisions of the Tahoe Regional Planning Compact.
- 1.20 The Bijou/Al Tahoe Community amendment was the subject of an Initial Environmental Checklist (IEC), which was processed in accordance with Chapter 3: Environmental Documentation of the TRPA Code for Ordinances and Article VI of the Rules of Procedure. The Bijou/Al Tahoe Community Plan amendment has been determined not to have a significant effect on the environment and is therefore exempt from the requirement of an Environmental Impact Statement (EIS) pursuant to Article VII of the Compact.
- 1.30 The Advisory Planning Commission (APC) and the Governing Board have each conducted a noticed public hearing on the proposed Bijou/Al Tahoe Community Plan amendment. The APC has recommended Governing Board adoption of the necessary findings and adopting ordinance. At these hearings, oral testimony and documentary evidence were received and considered.
- 1.40 The Governing Board finds that the Bijou/Al Tahoe Community Plan amendment adopted hereby will continue to implement the Regional Plan, as amended, in a manner that achieves and maintains the adopted environmental threshold carrying capacities as required by Article V(c) of the Compact.
- 1.50 Prior to the adoption of this ordinance, the Governing Board made the findings required by Section 4.5 of the TRPA Code of Ordinances, and Article V(g) of the Compact.
- 1.60 Each of the foregoing findings is supported by substantial evidence in the record.

Section 2.00    TRPA Code of Ordinances Amendments

Ordinance 2020-04, as previously amended, is hereby amended by amending the Bijou/Al Tahoe Community Plan, as set forth in Exhibit 1 hereto.

Section 3.00    Interpretation and Severability

The provisions of this ordinance amending the TRPA Code of Ordinances adopted hereby shall be liberally construed to affect their purposes. If any section, clause, provision or portion thereof is declared unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance and the amendments to the Regional Plan Package shall not be affected thereby. For this purpose, the provisions of this ordinance and the amendments to the Regional Plan Package are hereby declared respectively severable.

Section 4.00    Effective Date

The provisions of this ordinance amending the TRPA Code of Ordinances shall become effective on\_\_\_\_\_

PASSED AND ADOPTED by the Governing Board of the Tahoe Regional Planning Agency at a regular meeting held on \_\_\_\_\_, 2022, by the following vote:

Ayes:

Nays:

Abstentions:

Absent:

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Mark Bruce, Chair  
Tahoe Regional Planning Agency,  
Governing Board

Attachment E - Exhibit 1

Proposed Amendments to the Bijou/Al Tahoe Community Plan

**EXHBIT 1: PROPOSED AMENDMENTS TO THE  
BIJOU / AL TAHOE COMMUNITY PLAN**

Amend Appendix A: *Bijou/Al Tahoe Community Plan Standards, Section Two: Public Service/Recreation Theme, Subsection B: Height, Special Standard*, as follows:

*Added language shown in red and underlined.*

**SECTION TWO – PUBLIC SERVICE/RECREATION THEME**

<b>DISTRICTS</b>	<b>MAP AND USE MATRIX IDENTIFICATION</b>
District 4	4
A. PERMITTED USES	Refer to use matrix for district uses.
B. HEIGHT	
Standard	Refer to TRPA Code of Ordinances Chapter 37.
Special Std.	<p>The following shall apply to:</p> <p>Lake Tahoe Community College and Lake Tahoe Unified School District properties:</p> <p>Height issues for these sites shall be addressed by TRPA on an individual project basis, and may be in excess of Chapter 37 based on project setback, visibility, or other design criteria.</p> <p><b><u>El Dorado County and City properties located in 56-Acre project area:</u></b></p> <p><b><u>For public and quasi-public owned buildings, the maximum height permitted is 42 feet, with no minimum cross slope or roof pitch requirements, provided TRPA makes Finding 1, Finding 3, Finding 4, Finding 5, Finding 7, and Finding 8 of Code Section 37.7.</u></b></p>
C. BULK	
Standard	Refer to Redevelopment Design Element, Sections 1 and 2
D. COVERAGE	
Standard	Refer to TRPA Code of Ordinances Chapter 30.
E. SETBACKS	
Standard	Refer to City Wide Design Manual, Section 3 of Chapter 1 & 2.
Special Std.	<p>In addition to the City Wide Design Manual, the following shall apply to specific properties located within the Town Center District, including:</p> <p>The vacant 7.5 acre parcel north of Al Tahoe and west of Johnson Boulevard (adjacent to the existing El Dorado County Government Center) shall require a minimum of a 50' setback from Johnson Boulevard and an increased interior sideyard setback of 20' in that area of the property adjoining the residentially developed district.</p>

F. SITE DESIGN

Standard

Refer to City Wide Design Manual, Section 2, Chapters 1 & 2.

Special Standard

In addition to the City Wide Design Manual, the following standards shall apply to the entire Town Center:

1. A natural forest setting shall be preserved by designing projects that maintain the maximum number of trees, shrubs, boulders, and other natural amenities at a project site. Landscaping shall be designed to blend with the native surroundings, including trees, shrubs, ground covers and flowers.
2. Sidewalks shall connect all buildings within project area.

G. ARCHITECTURAL TREATMENT

Standard

Refer to City Wide Design Standards, Section 2 of Chapters 1 & 2 and City Lighting Standards.

Special Standard

In addition to the City Design Standards, the following standards shall apply:

1. Buildings shall be designed with interest (no box forms, variations in elevation, etc.) and shall incorporate architectural features which blend with the surrounding buildings.
2. Wood siding **or natural appearing siding** shall be used on the exterior of all remodeled newly constructed buildings.
3. Roofs shall have a minimum pitch of 5:12 and a maximum roof pitch of 12:12. **Roofs may have a minimum pitch of 0:12 on public and quasi-public owned buildings within El Dorado County and City properties located in the 56-Acre project area.**
4. Real stone shall be incorporated into the building design. Manufactured stone may be used on a project only if the applicant demonstrates the application of the stone will appear "real."
5. All projects shall incorporate days use amenities, including outdoor furniture, bicycle racks and trash receptacles.

