TAHOE REGIONAL PLANNING AGENCY
ADVISORY PLANNING COMMISSION
NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that the **Advisory Planning Commission** of the Tahoe Regional Planning Agency will conduct its regular meeting at **9:30 a.m.** on **Wednesday, May 9, 2018** at the **TRPA Offices**, located at **128 Market Street, Stateline, NV**. The agenda for the meeting is attached hereto and made a part of this notice.

May 2, 2018

Joanne S. Marchetta
Executive Director

TAHOE REGIONAL PLANNING AGENCY
ADVISORY PLANNING COMMISSION

TRPA
Stateline, NV

May 9, 2018
9:30 a.m.

AGENDA

I. CALL TO ORDER AND DETERMINATION OF QUORUM

II. APPROVAL OF AGENDA

III. PUBLIC INTEREST COMMENTS

Any member of the public wishing to address the Advisory Planning Commission on any item listed or not listed on the agenda 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.

All public comments should be as brief and concise as possible so that all who wish to speak may do so; testimony should not be repeated. The Chair shall have the discretion to set appropriate time allotments for individual speakers (3 minutes for individuals and 5 minutes for group representatives as well as for the total time allotted to oral public comment for a specific agenda item). No extra time for speakers will be permitted by the ceding of time to others. Written comments of any length are always welcome. So that names may be accurately recorded in the minutes, persons who wish to comment are requested to sign in by Agenda Item on the sheets available at each meeting. In the interest of efficient meeting management, the Chair reserves the right to limit the duration of each public comment period to a total of 2 hours. In such an instance, names will be selected from the available sign-in sheet. Any individual or organization that is not selected or otherwise unable to present public comments during this period is encouraged to submit comments in writing to the Advisory Planning Commission. All such comments will be included as part of the public record.

NOTE: THE ADVISORY PLANNING COMMISSION IS PROHIBITED BY LAW FROM TAKING IMMEDIATE ACTION ON, OR DISCUSSING ISSUES RAISED BY THE PUBLIC THAT ARE NOT LISTED ON THIS AGENDA.

IV. DISPOSITION OF MINUTES

V. PUBLIC HEARINGS

A. Amendment of Resolution 82-11 for the proposed technical corrections to the Environmental Threshold Carrying Capacities — **Recommendation** — **Page 1**

VI. PLANNING MATTERS

A. 2017 TRPA Monitoring Report Update **Informational Only** **Page 125**

B. LakeTahoeInfo.org Briefing **Informational Only** **Page 127**

VII. REPORTS

A. Executive Director **Informational Only**

1) Quarterly Report: January – March 2018 **Informational Only** **Page 129**

B. General Counsel **Informational Only**

C. APC Members **Informational Only**

VIII. PUBLIC COMMENT

IX. ADJOURNMENT

TAHOE REGIONAL PLANNING AGENCY
ADVISORY PLANNING COMMISSION

TRPA
Stateline, NV

April 11, 2018

Meeting Minutes

I. CALL TO ORDER AND DETERMINATION OF QUORUM

Chair Mr. Teshara called the meeting to order at 9:31 a.m.

Members present: Mr. Alling, Mr. Buelna, Ms. Carr, Mr. Ferry, Ms. Ferris, Mr. Schafer for Mr. Guevin, Ms. Hill, Mr. Young for Ms. Krause, Mr. Larsen, Mr. Plemel, Mr. Teshara

Members absent: Mr. Donohue, Mr. Drew, Mr. Esswein, Mr. Hitchcock, Mr. Hymanson, Ms. McClung, Washoe Tribe, Mr. Weavil

II. APPROVAL OF AGENDA

Mr. Larsen moved approval.
Mr. Buelna seconded the motion.
Motion carried unanimously.

III. PUBLIC INTEREST COMMENTS

None.

IV. DISPOSITION OF MINUTES

Mr. Teshara provided Ms. Ambler one minor edit.
Mr. Young moved approval of the January 10, 2018 minutes as amended.
Ms. Hill seconded the motion.
Mr. Buelna and Mr. Schafer abstained.
Motion carried.

V. PLANNING MATTERS

A. Critical TRPA Priorities and Advisory Planning Commission Involvement

TRPA team member Mr. Hester provided the presentation.

Development Rights Strategic Initiative:

Mr. Hester said the Development Rights Working Group (DRWG) has two

representatives that were appointed from the Advisory Planning Commission; Roger Trout or his alternate Melanie Shasha and Jennifer Merchant, former APC member.

National expert, Rick Pruetz, Planning & Implementation Strategies, assisted the working group with best practices to develop various aspects of the program to be modified such as creating a conversion rate for commercial floor area, tourist accommodation units, and residential units. They are also working on the removal of the local government approval transfers (local government veto), and removal of the requirement for a project before it could be converted. The Technical Code Committee of the DRWG is represented by John Marshall, TRPA, Marissa Fox, League to Save Lake Tahoe, Nicole Rinke, California Attorney General's Office, and Lew Feldman had their first meeting to work on code amendments for the first three items. The Technical Code Committee will report back to the Development Rights Working Group at their May 22nd meeting. The Code Committee will also work on developing a plan on how they can help the land banks help implement the Regional Plan better and when income criteria for bonus housing units are available. Currently, the bonus units and allocations are allowed at 50 percent of area median income and at 80 percent someone would receive bonus units. The committee has discussed moving that up to 195 percent, a lot of that is contributed to the good work that the Mountain Housing Council has done in the North Tahoe and Truckee area.

Commission Comments & Questions

Ms. Hill asked why land coverage is not included.

Mr. Hester said the Development Rights Working Group was responsible for defining the scope and land coverage were not included. Exchanges between housing units, hotel rooms, and commercial floor area if the ratios are environmentally neutral, typically mirrors what goes on in other places outside of Lake Tahoe. Coverage related to pervious and impervious percentages on parcels, is different. It is not about development rights so much as protecting the environment and is probably why it didn't get included.

Mr. Marshall said units of use are what is being converted and coverage is not a unit of use. The problem being addressed is the ability to get the correct unit of use. That does mean is that is the only issue that development and redevelopment have in the Basin, but that was the charge of the Development Rights Working Group. There are some areas in the Basin that are short on coverage and will need to be dealt with. But this is distinct from moving these units of use development rights and being able to exchange those and provide less friction in the system regarding that part of the puzzle.

Mr. Hester said out of the amendments to the 2012 Regional Plan, several working tasks evolved in which one was to look at coverage and how it could be transferred between hydrographic basins. There was a working group that developed a process that was completed around 2014/15. Another mitigation measures that came out of that was to look at housing. The housing report completed for the region by BAE Urban Economics had five policy recommendations. One was to create the ability for tourist accommodation units and commercial floor area to be converted to housing units to help with the housing shortage and affordability.

There will be a public hearing at the Advisory Planning Commission on plan and Code of Ordinances amendments as well as the environmental analysis later this year.

Shoreline Plan:

Mr. Hester said the plan is to update policies and regulations on piers, moorings, and other shoreline structures such as marinas. The draft environmental impact statement is scheduled to be released in May. The draft code will go before the Regional Plan Implementation Committee in April.

Commission Comments & Questions

Mr. Larsen said it has been a robust stakeholder process and is confident given that process, it will be successful. It has been an extraordinary series of meetings and negotiations regarding every nuance detail of shoreline policy and structures.

Mr. Teshara asked if there is a preferred alternative or is there a menu of items to pick from.

Ms. Marchetta said this round a neutral third-party mediator was brought in to facilitate. In the 1980s, the shoreline element of the Regional Plan was the only element that wasn't updated. When the 1987 Regional Plan was updated, the shoreline element was moved out to the future awaiting outcomes of fish studies. Some of the issues of the 1980s was that development standards and caps were being established for all portions of developable land in the Basin. This new plan looks at the extent of development of structures along the Shorezone. When development is allowed in that narrow strip of land, how much, how many, where, and what rate these structures oriented toward recreation access (piers, buoys, moorings, and slips) will be allowed.

Mr. Marshall said there is a preferred alternative which is the shoreline plan which was vetted through the Regional Plan Implementation Committee and is what the proposed code will implement. It will be an attachment to the Draft Environmental Impact Statement that analyzes a total of four alternatives; the no project/existing plan, the proposed plan, a lower development option, and a reduced development options. It will go before the Advisory Planning Commission in June for a public hearing and will go back to the Commission for consideration around September or October.

Mr. Hester said the State of Washington has a mandatory shoreline planning requirement for all their water bodies. They've received some of the best practices from consultant Dan Nickel of the Watershed Company in Washington who will be presenting some of these code amendments as this moves forward.

Mr. Young suggested as this moves forward, that the presentations on the substance include something on the upcoming process to give the Commission awareness at what point they should be cautious about proposing too many changes.

Ms. Marchetta said the Advisory Planning Commission role in the shoreline program review is the adequacy of the environmental document.

Mr. Marshall said the Advisory Planning Commission will have code and probably one plan amendment go before them. It is true, that this has been worked through the Regional Plan Implementation Committee as the public forum in getting us to this point. This is a draft plan and it's anticipated that there will be adjustments to getting to the final product.

Mr. Hester said there were many workshops where public comment was solicited. Information can also be found at http://shorelineplan.org.

Ms. Carr asked how these threshold updates are going to affect the Environmental Improvement Program. We are going to need to navigate the moving parts at different points in time, because there is significant work being done based on thresholds but there is also the updating of thresholds.

Mr. Hester said the thresholds impact policy, regulations and how projects are reviewed, and how we invest all the partners in the Environmental Improvement Program. They will be working simultaneously on everything and it is a delicate balance.

Mr. Teshara said a key was getting all the stakeholder groups together to help scope and participate in the process. It was important to get the third-party facilitator.

Transportation Strategic Initiative:

Mr. Hester said there is a lot more than just updating the Regional Transportation Plan. A lot of it was measures, and that measures world is changing. Now that we are in the larger Metropolitan Planning Organization category, there are additional measures we need to have in place. About one year ago, the Advisory Planning Commission with staff developed a transportation measures report which is now being used for transportation performance management project for congestion management. The Regional Plan has components that are functional elements such as active transportation, intelligent transportation systems, and transit that are region wide and then there are sub-regional areas such as corridors. They are building upon the work that the Tahoe Transportation District did leading them through the State Route 28 Corridor and are now embarking on the Emerald Bay, Highway 89 Corridor. The corridor plans also represent part of the Regional Transportation Plan. The implementation activities are a challenge and will be a focus of the Governing Board retreat. There are a number of efforts happening, along with the Bi-State consultation process similar to the process that was used for the 2012 Regional Plan Update. In addition, TRPA has recently hired a new Travel Management Coordinator. Some of the work that will come from this is will relate to standards. The Threshold Update Initiative Stakeholders Working Group (TUISWG) is chaired by APC Vice chair, Mr. Larsen and other APC members are Mr. Ferry, Ms. McClung, Ms. Carr, and Mr. Drew as the business community member, Governing Board members, Mr. Lawrence and Mr. Yeates, and Mr. Patterson, League to Save Lake Tahoe as the environmental community member. A lot of the transportation measures work will also go through that process as well.

<u>Commission Comments & Questions</u>

Mr. Teshara said he is gratified that there is this collective group of agencies and partners in the community to grapple with the transportation issues including transit.

Forest Ecosystem Health Strategic Initiative:

Mr. Hester said this large-scale pilot project is primarily on the west shore of the Basin, it is taking forestry and looking at things in a more ecosystem level. The focus is to increase fire resistance and resilience related to drought. The resilience assessment is completed and will identify the gaps in the strategy for addressing the west shore and will then be used as a pilot for the entire Basin. It may include measures related to vegetation that address items such as the growth process for vegetation, fire resistance, and what the impacts are on air and water quality and wildlife habitat.

Commission Comments & Questions

Mr. Schafer said he is involved in the Lake Tahoe West and some of the processes its developing. The end product is not just the resilience assessment or restoration strategy but converting that into projects that restore the resilience of the west shore landscape. Last year, the Multi-Agency Coordinating Group of the Tahoe Fire and Fuels Team, signatory agencies signed an update to pursue large landscape scale planning as the future for basin forest management. They are looking at how they can apply the work being done under Lake Tahoe West to the rest of the Basin, especially in terms of some of the science work being produced, and also a high-level stakeholder engagement in developing strategies that span both agencies and other interested organizations and the public.

Mr. Teshara said it's small compared to the large landscapes but is large for Lake Tahoe and represents a fundamental shift in how we look at forest resiliency and watershed restoration. It was precipitated in part by the alarming scale of fires that we've seen.

Mr. Hester said the Advisory Planning Commission will see some of the vegetation standards work in the Threshold Update Initiative Stakeholders Working Group and will have a staff presentation in the next few months.

Stormwater Operations & Maintenance Strategic Initiative:

Mr. Hester said in addition to doing projects such as BMPs, area wide BMPs and other water quality projects, the ongoing stormwater management programs in the local governments didn't have sustainable funding. There is enabling legislation between California and Nevada, where Nevada has a Memorandum of Understanding and California has the National Pollutant Discharge Elimination System **(**NPDES**)** permits. Primarily focused on the California side, there was an initiative called Road to Blue that TRPA played a role in but did not lead. The question was, how is this set up for sustainable funding for stormwater operations and maintenance for all. The California Legislature passed a bill in the last session that allows the local governments to create stormwater utilities much like the Nevada governments already can. That changed the direction of the initiative. There is a California jurisdiction outside of the Basin that is planning to be the first one to try and set up the stormwater utility. If it withstands the legal challenges, that will give the California side of the Basin, the same tools that the Nevada has. In the interim TRPA is addressing grant funding for their program which will be done by the end of 2018. One of the potential funding sources may be adding a BMP fee to the project review service. Most of the local governments are taking credit for the BMP program work done by staff and the Lake Clarity

credits. These concepts have been presented to both water quality agencies, the BMP working group and eventually will be brought forward as a strategic funding proposal.

Commission Comments & Questions

Mr. Larsen said the water quality emphasis has shifted and prioritized a differing area within the Basin to achieve the greatest water quality outcomes associated with limited resources. Some of the biggest strides made with the BMP Working Group are TRPA's efforts working with local government to target those areas where local government is focusing its actions on achieving Lake Clarity credits and associated water quality benefits. It's focused on commercial areas and those that are directly connected to surface waters. How to fund the ongoing implementation, tracking, and maintenance of the entire system is the question. The political appetite for levying new fees and assessments is a challenge. Although, the Nevada jurisdictions have that capability, none have chosen to exercise it. The idea of linking TRPA fees to that service is a clear solution for a lot of these things but doesn't meet the entire need.

Mr. Ferry said at the BMP Working Group meeting, the local jurisdictions did put forth some willingness to entertain a proposal from TRPA for those services where the local jurisdictions can take credit through the Total Maximum Daily Load (TMDL) for private property BMPs. They do get a service from TRPA staff and could possibly put forth some sustainable funding towards that program. Even if Senate Bill 231 prevails in court, there is still work that needs to be done to encourage the elected officials to take that on and potentially enact a fee on all properties in their jurisdictions. Operations and maintenance is a big deal for the local jurisdictions, they've been building infrastructure for 25 years, but haven't had operations and maintenance as part of the grant agreement. It's always been the locals cost share, particularly with the California Tahoe Conservancy, and the 20-year maintenance that they agreed to. The 20 years is coming to an end and with the large winters and other priorities that have arose, it has taken a toll on their infrastructure. In order to continue to receive water quality benefits, they need to be more creative on how to fund their operations and maintenance.

Threshold Update Strategic Initiative:

Mr. Hester said the work program recommended by the Advisory Planning Commission and approved by the Governing Board included the work group; Threshold Update Initiative Stakeholders Working Group that includes three members of the APC, two members of the Governing Board, and one community member. One of the first task is to clean up overlaps that was recommended by the Bi-State Science Council. Additional tasks over the next one to two years will be to look at the vegetation update that will come from the Forest Ecosystem Health Initiative and there will be changes to recreation through Sustainable Recreation. Air quality will include discussion of vehicle miles traveled and lastly, soils and stream environment zones. Staff will bring forward the technical cleanup of the Threshold Carrying Capacities to the APC in May.

Commission Comments & Questions

Mr. Ferry said there is a lot of low hanging fruit to address on this initiative and it will bring

improvements.

Mr. Larsen agreed that there is a lot that can be done right now. The overlap discussion has initiated some of those findings in terms of what can be done. By putting the thresholds in a user-friendly format, it is going to open up a lot of discussion as to what can be done readily to clean up the thresholds.

Sustainable Recreation Working Group:

Mr. Hester said this was an item wasn't identified as a strategic initiative but has come up as something to work on that brings together recreation and transportation.

Commission Comments & Questions

None.

Major Public and Private Projects:

TRPA staff is on schedule to process about 1,000 permits, most of which will be done at the staff level. Some of the major projects will be the Kings Beach State Recreation Area Master Plan, US 50 South Shore Revitalization Project, the Tahoe South Events Center, and Placer County Kings Beach Center Project.

Commission Comments & Questions

None.

Housing Support:

Mr. Hester said this is also an item that was not identified as one of the strategic priorities but has come up as something that needs to be addressed. TRPA's direction is to support locally generated efforts. On the South Shore, Supervisor Novasel hosted a series of meetings for the South Shore Housing Task Force. At the end of that, the Tahoe Prosperity Center took on the putting together a demonstration project. On the North Shore the Tahoe Truckee Foundation created the Mountain Housing Council that has about 24 funding partners and $750,000 over three years to achieve a number of objectives from changing policy such as income eligibility, educational programs with the special districts to develop site inventory for developers, etc. TRPA is a funding partner and provides staff support.

Commission Comments & Questions

Mr. Teshara said the Tahoe Transportation District can't find enough people to work and if they do, housing is an issue. The Tahoe Chamber is planning a chamber trek to Vail, Colorado in June.

Mr. Buelna said Placer County have seen a few new projects submitted for housing projects. One is a conversion of a hotel and the other is an unused section above the maintenance building at the Tahoe City Marina.

Mr. Hester said the Placer County Area Plan has accessory dwelling units allowed as a housing solution. Two businesses in Placer County have also secured housing for their employees.

Mr. Ferry said this also ties into the vacation home rental issue.

Mr. Young said the Advisory Planning Commission has a lot coming to them in the near future and was concerned that they will have enough bandwidth for all of this.

Public Comments & Questions

Jennifer Quashnick, Friends of the West Shore suggested these updates be more often so there is coordination between the initiatives. She said the vacation rental issues must be tied in, because there are environmental impacts to be considered.

Presentation can be viewed at:
http://www.trpa.org/wp-content/uploads/Agenda-Item-No.-V.A-Critical-TRPA-Priorities-and-APC-Involvement-4.10.18.pdf

B. Sustainable Recreation Working Group Status Report

TRPA team member Mr. Middlebrook provided the presentation.

Mr. Middlebrook said sustainable recreation is the range of settings, opportunities, and access that can be sustained overtime. TRPA is a co-lead with the US Forest Service. The Bi-State Compact mandates that there is a recreation plan for the development, utilization, and management of the recreational resources of the region. This goes to the implementation of the Regional Plan and elements of the Regional Transportation Plan, where land management and transportation meet with the users. There is a recreation threshold category, a recreation focused area of the environmental improvement program, and are a suite of ecological, social, and economic issues that recreation touches on. This effort started about one year ago when the Tahoe Interagency Executives (TIE) Steering Committee had the US Forest Service do a scoping project which included interviews with 15 executives from public and private entities. The key feedback was a need for stronger coordination and collective recreation vision for the Tahoe Basin. It's a complex issue that needs holistic solutions and touches on five primary focus areas; visitor use management, transportation, stewardship, better data collection and monitoring, and funding. The Sustainable Recreation Working Group has representation from State, Local, and Federal partners, public and private stakeholders.

Funding is an issue, there is an increase demand for recreation with a decrease in funding to management recreation. There are increases in peak visitation, Tahoe is busy all four seasons of the year and we are having to address the impacts on the environment and infrastructure. There are five objectives in addressing the issues; increase in coordination amongst recreation managers, address ongoing sustainable recreation topics, integrate recreation management into planning and implementation, work on the recreation threshold and monitoring protocols across the Basin, and a strategic plan. These objectives will be achieved through understanding and organizing, early connections, and the strategic

plan.

There will be a stakeholder workshop on May 15, 2018 to discuss what is sustainable recreation for the Tahoe Basin, and what desired conditions should be achieved. That will be discussed broadly with a focus on the Highway 89 corridor. The Advisory Planning Commission will be engaged through threshold update recommendations, and potentially a Regional Plan amendment and Code of Ordinances updates.

Presentation can be viewed at:
http://www.trpa.org/wp-content/uploads/Agenda-Item-No.-V.A-Critical-TRPA-Priorities-and-APC-Involvement-4.10.18.pdf

Commission Comments & Questions

Mr. Ferry asked what outreach has been done to get the private sector recreation providers to the May 15 workshop.

Mr. Middlebrook said a save the date invite has been sent out which identified a number of concessionaires, private businesses, and user groups. In addition, he will be doing individual outreach.

Mr. Teshara asked to coordinate with Mr. Middlebrook on information that can be pushed out through the Tahoe Chamber, Lake Tahoe Visitors Authority, and the Resort Associations to capture people that may not look at some of the other channels being used to disseminate the information.

Mr. Middlebrook said the workshop is the first engagement with stakeholders but won't be the last through this process.

Mr. Young said there has been an explosion of a demand on the resources. Almost all the places he used to visit in the Basin, have become difficult to get to anymore in what was a remarkably short period of time. He asked if there is understanding on what this explosion was as we look forward. What are the recreational needs going to be in the next 10 to 20 years?

Mr. Teshara said a couple of items they knew about but maybe didn't understand the scope and the evolution of them is population growth in the Region and social media. Even though you try to look ahead, the future changes so fast, it's hard to come to grips with it.

Ms. Hill asked if the persons at one-time (PAOTS) measurement is still used to analyze the impact on specific areas.

Mr. Middlebrook said yes, PAOTs are still being used and will be a topic of discussion as they look at the strategic plan.

Ms. Hill asked if there are records kept about the number of people in certain areas.

Mr. Middlebrook said TRPA's Research and Analysis Division tracks the PAOTs. Historically it

was meant to measure sewage capacity. The original intent is no longer necessarily relevant, and the working group will discuss what the new intent is and how do they change it.

Ms. Hill asked if they have considered using volunteers to do head counts.

Mr. Middlebrook said alternating summer and winter, TRPA does visitor intercept surveys for transportation based on mode share. They are integrating recreation questions into that survey to better capture where people are recreating, where they are coming from, and what they're doing. When the Science Counsel recommends the monitoring stategies, they could potentially engage volunteers to help conduct those surveys.

Mr. Hester said in addition to the Strava application used, they also have available cell phone data. Development and caps on development rights is only a piece of the puzzle. While the Basin has not grown that much, the population has grown significantly in Northern California and Nevada and they don't control the demand. This is a paradigm shift that will be looked at.

Mr. Buelna asked if Strava is being used as an indicator or to anticipate the amount of activity.

Mr. Middlebrook said the Strava map and their data is a great anecdotal example. They researched purchasing the underlying data from them but was very expensive and Strava limited the amount of information they would turn over.

Mr. Buelna asked if it captured all the different Strava users.

Mr. Middlebrook said yes.

Ms. Carr asked if the working group had a median age.

Mr. Middlebrook said the makeup of the working group was intentionally agency heavy because the first thing to do was to get agency alignment around what sustainable recreation is and what they're trying to achieve. Now that the agencies are aligned, they plan to bring the stakeholders more into the process.

Mr. Young said there is an increasing demand on national parks and other national outdoor opportunities and frustration amongst national leaders is the increasing desire to go to the gems, like Lake Tahoe. There are amazing alternative locations that no one is going to. To what degree is there understanding on the demand just outside our region and if there is any interest helping promote other places that are within a day's travel of Lake Tahoe.

Mr. Middlebrook said staff has had similar discussions within the transportation realm about spreading that peak and where and what time people go. The working group is engaged with the Sierra Nevada Conservancy, Eastern Sierra Division who did a sustainable recreation plan for the Inyo National Forest. There is also the California Roundtable on Recreation, Parks and Tourism that are focused on recreation issues around California and this is something that they can build into their recreation plan.

Mr. Ferry said over the past decade, the technology of the outdoor gear has improved. He suggested that we get involved with the private sector to stay up on what is coming over the next ten years, because Lake Tahoe is one of the big testing grounds for outdoor recreation.

Mr. Middlebrook said E-bikes are an emerging trend on the technology equipment side that is on their radar screen.

Public Comments & Questions

None.

C. Lake Tahoe Aquatic Invasive Species (AIS) Program Update: 2017 Achievements, and Priorities for Building Future Success

TRPA team members Mr. Zabaglo and Mr. Driscoll provided the presentation.

Mr. Zabaglo said the Aquatic Invasive Species program consists of prevention efforts which has been successful with no new invasions of Quagga mussels and controlling the existing species such as the Eurasian watermilfoil. The prevention includes monitoring to ensure the efficacy of the program and education has also been an important part of this program. The strategic initiative is about finding long-term stable funding. Over the past year, multiple partners received approximately two million dollars to do control work which equated to over 14 acres of treatment within the Lake. There is an ongoing project at the Lakeside Beach and Marina where there was an opportunity to test out the ultra violet light treatment, control work was done at the Fleur du Lac Homeowners Association Marina, and Asian clam work was done at Sand Harbor. Mats were used to treat six acres of infestation of Asian clams and during that process it was discovered that there was in increase in that infestation and treatment are being coordinated with Nevada State Lands, Nevada State Parks, and the University of California, Davis to discuss a management plan for this Location. This may be an opportunity to use the "Clamboni" clam harvester. There was localized eradication of weeds and areas now in control mode of maintenance which are Emerald Bay, Crystal Shores, Truckee River (Lake side of the dam), Tahoe Vista Boat Ramp, and Nevada Beach. Areas that are being worked on or will be this season are Lakeside Marina, Truckee River, Fleur du Lac, Meeks Bay, and Elks Point Marina. In the planning mode, are Taylor/Tallac and the Upper Truckee Marsh. The two largest infestations are the Tahoe Keys and Ski Run Marina. The Tahoe Keys Property Owners Association submitted an application to do a pilot project that proposed the use of herbicides followed by mechanical methods. They are still awaiting the results of the environmental analysis for the proposed project. Recently, an agreement was signed with the Army Corp for $1.3 million and in addition, the Lake Tahoe Restoration Act will potentially provide around $3.1 million. Another innovative solution to the aquatic invasive species is called the laminar flow aeration; it is a bubbler that would aerate the sub straight to the top of the water column. By adding oxygen, it drives the decomposition of that organic layer on the bottom of the Lake that plants feed from. The boat industry has also made some accomplishments with Volvo making significant changes to facilitate decontamination. This year there is work being done on the technical information report that is an education piece designed for the boating industry. They've received funding from Lahontan Regional Water Quality Control Board's SB630 and the Nevada Division of State Lands License Plate Grant to do a survey and

develop a plan to be consistent in future efforts to conduct surveys and monitoring efforts. The Request for Proposal has been completed for that and contractor interviews will be conducted in the next few weeks. The Rapid Response Plan is five years old and will be updated to incorporate an exercise to put that into play. A strategic plan is being developed to take the Implementation Plan to the next level, designing a performance plan to provide better strategy to plan future projects and develop metrics on a lake wide scale.

Mr. Driscoll said last year, there were no new Aquatic Invasive Species detections. Regional coordination continues with western partners and others such as the boating industry. In November 2017, they attended an advanced decontamination training at Lake Mead. Last summer, they hosted a site visit to Lake Tahoe in conjunction with the California Department of Fish and Wildlife for water managers from Solano County, Santa Clara County, and the Bureau of Reclamation from Lake Berryessa. They also completed the mobile application for seal inspections. Last year, they performed almost 8,900 inspections and are about 1,000 more inspections than 2016. About two thirds of boaters arrived at the inspection stations, clean, drain, and dry. Thirty-eight vessels were intercepted with known aquatic invasive species, seven had Quagga and/or Zebra mussels on board, which most came from the lower Colorado River system. This year the program is celebrating its tenth year and will have a new outreach campaign, the program will be featured in the summer edition of the Tahoe In Depth, and at the Lake Tahoe Summit.

The 2018 priorities will be to continue to work on process improvements with funding from the California Division of Boating and Waterways for the hand-held devices at the inspection stations and will provide real time information between the inspection stations and boat ramps. They are also going to receive a new decontamination trailer with a higher water capacity and better equipment to facilitate faster change out of water at the inspection sites. They are working with the Nevada Department of Transportation, the US Forest Service, the Nevada Division of State Lands, and other partners to incorporate a permanent Spooner Summit location within the State Route 28 Corridor Management Plan.

Presentation can be viewed at:
http://www.trpa.org/wp-content/uploads/Agenda-Item-No.-V.C-2017-Year-in-Review.pdf

Commission Comments & Questions

Mr. Young asked what overlap there might be with the large landscapes forestry work being done on the West Shore and the invasive species in the watershed.

Mr. Zabaglo said the Aquatic Invasive Species program focuses on aquatic invasive species and doesn't have a lot of integration with the forestry effort, but they do keep an eye out for the terrestrial species that may be present in those locations.

Public Comments & Questions

None.

VI. REPORTS

A. Executive Director

No report.

1) 2017 Annual Report

No further report.

2) Strategic Initiatives Monthly Status Report

No further report.

B. General Counsel

Mr. Marshall said the Nevada Supreme Court issued a decision to be in line with California and most if not all federal decisions on the Freedom of Information Act (FOIA) and the use of personal cell phones and personal accounts for conducting official business.

C. APC Members

Mr. Schafer said he attended today's meeting as the alternate for Mr. Guevin, Lake Tahoe Basin Fire Chief and was also interested in hearing about some of the connections of the work he does focused on coordination of forest management and fire prevention programs within the Basin.

Mr. Teshara said Mr. Schafer is also helping coordinate with the Nevada Oversight Committee on their meeting agenda for April 17, 2018 which will be a theme of hazardous fuels reduction and forest health.

Mr. Ferry said the TRPA Governing Board adopted the Meyers Area Plan on February 28, 2018 and the El Dorado County Board of Supervisors adopted it on March 20, 2018. The zoning ordinance and general plan amendment will take effect on April 19, 2018.

Mr. Teshara said in the 2018 Omnibus Bill there was language related to the Lake Tahoe Restoration Act and a piece identified $3.088 million for aquatic invasive species. With respect to the rest of the restoration act, there is language encouraging the Forest Service to move forward and fund the restoration act to the extent possible and a report back to the Appropriations Committee's of the House and Senate within 60 days about the funding that goes through the Forest Service to fund various eligible projects and programs at Lake Tahoe. The good news is that the Forest Service does not have to borrow so much of its own money for firefighting, but the challenge is that it is half way through the Federal fiscal year. The Tahoe Transportation Board will meet on April 13 and one of their challenges will be the discussion on the dwindling money for transit services. This years Tahoe Summit will be on August 21, 2018 at Sand Harbor, hosted by Senator Heller.

VII. PUBLIC COMMENT

None.

VIII. ADJOURNMENT

Chair Mr. Teshara adjourned the meeting at 12:00 p.m.

Respectfully Submitted,

Marja Ambler

Marja Ambler
Clerk to the Board

The above meeting was taped in its entirety. Anyone wishing to listen to the tapes of the above mentioned meeting may call for an appointment at (775) 588-4547. In addition, written documents submitted at the meeting are available for review.

TAHOE REGIONAL PLANNING AGENCY

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.org

MEMORANDUM

Date: May 2, 2018

To: TRPA Advisory Planning Commission

From: TRPA Staff

Subject: Threshold Update Initiative: Reorganization and Technical Corrections to Resolution 82-11

Requested Action: Recommendation that the TRPA Governing Board adopt the reorganization and technical corrections to Exhibit A of Resolution 82-11 as presented in attachment C of the staff summary.

Staff Recommendation: Staff recommends that APC make the motions below, to recommend adoption of the reorganization and technical corrections to Exhibit A of Resolution 82-11 as presented in attachment C of the staff summary to the TRPA Governing Board.

Required Motion: A motion to recommend Governing Board adoption of Resolution 2018-__amending Exhibit A of Resolution 82-11, as shown in Attachment C of the staff summary.

Background: The threshold standards establish the Region's shared vision for environmental restoration of the Tahoe basin, guide permitting and management actions under the Regional Plan, and direct public and private investment through the Environmental Improvement Program. The majority of the current threshold standards were adopted in 1982 based on science that is now over 35 years old. The review and updating of the threshold standards is a strategic initiative for TRPA as well as the basin partnership, which supports and implements those standards. The goals of the initiative are threefold:

- Ensure a representative, relevant, and scientifically rigorous set of threshold standards,
- A cost-efficient and feasible monitoring and evaluation plan, and
- Develop a robust and repeatable process for review of standards in the future.

Following from priority recommendations made by the Tahoe Interagency Executive Steering Committee, in January of 2018 the TRPA Governing Board endorsed a work plan for the Threshold Update Initiative. The review of all standards would begin with four priority categories; 1) Vegetation Preservation, 2) Soil Conservation: Stream Environment Zones, 3) Air Quality: Vehicle Miles Travelled, and 4) Recreation. In addition to review of individual standards as identified above, the TRPA Governing Board also directed staff to: 1) address overlap in the existing standard system, and 2) consider the structure of the system more broadly. This presentation focuses on the work of TRPA and Science Advisory Council (Council) to address overlap in the system. The overarching purpose to look at overlap first is to make the existing system as clear as it can be before moving on to consider how to amend the existing system.

The evaluation of overlap in the system began with an assessment. In the conclusions and recommendations chapter of the 2015 Threshold Evaluation Report, TRPA proposed a framework to assess the threshold standards against best practices in performance measure development. The Council worked with TRPA to revise and apply the assessment methodology in the spring of 2017. The

assessment narrowly defined overlap as only those standards that were functionally equivalent from a regulatory perspective, where the protection conferred by one standard was also conferred by another standard. The assessment found that one in four current standards overlapped another standard in the system. The Council concluded that overlap can cause confusion around intent, increase monitoring costs, and erode the relative power of the system through dilution.

TRPA solicited the guidance of the Council on addressing overlap in the current system and preventing the introduction of overlap into TRPA's ongoing review and updating of the threshold standards. The Council's guidance is summarized in a memo that identified five types of overlap in the threshold standard system, outlined likely causes of overlap, and recommended approaches for addressing the overlap.

TRPA applied the Council's framework to the threshold standards and provided the findings back to the Council, to ensure the typology was applied correctly. The framework identified 51 standards as exhibiting at least one type of overlap as defined by the Council, and 44 standards as exhibiting multiple types of overlap. The most frequently identified type of overlap was "Indirect Overlap," defined by the Council as when "one standard regulates an overarching category and additional standards regulate constituents of that category" or when "two or more standards apply the same numerical target to the same constituent in different locations."

In discussing overlap with the Council and partners, it became apparent that clarifying the content of the standards should be a central goal of the first stage of the update. With the support of the Working Group, a reorganization of the standards was incorporated into the proposal. At the March 28, 2018 meeting of the Threshold Update Initiative Stakeholders Working Group (Work Group), the Tahoe Science Advisory Council presented the overlap typology, and TRPA staff presented a preliminary recommendation for reorganizing the standards to address overlap in the system and clarify intent, while maintaining an equivalent level of protection. The proposed reorganization and technical corrections are limited in scope to only those types of overlap that can be resolved without either a policy decision or additional research. This limited scope ensures that the proposal maintains an equivalent level of protection, and neither increase nor decrease the protection of the threshold standard system. In sum, it presents the existing threshold standard system more clearly without substantively changing it. The working group met again on April 18, 2018 to review the proposal, including the requested changes, and the group unanimously recommended that proposal be taken to the TRPA Advisory Planning Commission for consideration and recommendation to the TRPA Governing Board.

Summary of the proposed changes:

1. Proposed Change: Numbers added to all standards. Where multiple standards were listed as part of the same sentence, text has been added to make each standard a complete, standalone, sentence.

   Rationale: The numbering system enables easier identification of individual standards and clarifies what constitutes a standard.

2. Proposed Change: Reorganization of the Water Quality threshold category and the establishment of a subcategory for standards related to "pollutant load."

   Rationale: Load reduction targets (standards) for individual pollutants of concern are currently distributed between five subcategories within water quality and were identified as the primary

cause of overlap in the water quality category. The proposed technical corrections consolidate all load reduction standards into a new subcategory. The reorganization clarifies intent and partially addresses overlap resulting from the establishment of multiple target for an individual.

3. Proposed change: Combine overlapping standards for non-degradation of wetlands, meadows and deciduous trees in vegetation preservation and wildlife categories.

   Rationale: The proposed reorganization of standards related to the non-degradation of stream environment zones consolidates nine standards, from the vegetation preservation and wildlife categories, into a single standard in the vegetation preservation category. Each of the standards consolidated is wholly encompassed by the proposed standard. Non-degradation of wetlands, meadows, and deciduous trees protects a range of qualities beyond the stated threshold categories of vegetation communities and wildlife. Wetlands need not be named because all wetlands are protected from degradation by the non-degradation standard named above and the TRPA Code of Ordinances. The naming of specific wetlands caused unnecessary overlap and raised questions about areas not named. This interpretation is consistent with the protections for SEZ in chapter 30 the TRPA Code of Ordinances

4. Proposed change: Include all tables referenced in Resolution 82-11 as attachments to the resolution.

   Rationale: The proposed changes establish Resolution 82-11 as a stand-alone document that includes all adopted standards and incorporated references. The change ensures stakeholders don't have to dig through a suite of historic documents to identify all of the adopted standards.

5. Proposed change: Replaced references to "Prime Fish Habitat Overlay Map" and "Stream Habitat Quality Overlay Map," with "Prime Fish Habitat GIS Layer" and "Stream Habitat Quality GIS data" respectively.

   Rationale: TRPA discontinued use of the referenced mylar overlays for management of spatial data pursuant to Governing Board action on December 14, 2016. The action established the maps and GIS data layers listed in Code Section 10.3.1 as the official TRPA Regional Plan maps and GIS data layers. This change updates the threshold standard to reference the current and officially adopted GIS data layer.

6. Proposed change: Corrected typos in the headers that identify standard type (Numerical, Management, Policy Statement) to ensure consistency between headers and the number of standards listed below the header.

   Rationale: The singular form, "standard," should be used when a single standard is listed beneath the identification header. The plural form, "standards," should be used when multiple standards are listed beneath the header.

7. Proposed change: Removed footnotes that only provide a date when the standards were updated or modified.

Rationale: Footnotes were inconsistently used and provided only a partial record of standard modifications. The footnotes captured neither standards adopted since initial adoption of Resolution 82-11, nor a record of standards removed after adoption. Tracking standard genealogy is a larger challenge that will be addressed separately by the Threshold Update Initiative. Footnotes containing additional information beyond the modification date are retained.

In aggregate, the proposed reorganization and non-policy technical corrections consolidate the 173 currently adopted standards to 151 standards without substantively changing existing standards. In this respect, the reorganization and technical cleanup makes the existing system clear to users and the public in advance of considering any substantive changes. The proposed reorganization and technical corrections maintain the same level of protection afforded by the system and will not affect TRPA's Regional Plan, Code, project review or analysis.

Contact Information: If you have any questions regarding this agenda item please contact Dan Segan, Principal Natural Resource Analyst, at dsegan@trpa.org, (775) 589-5233.

Attachments:

A. Resolution 82-11 as amended December 12, 2012.
B. Table of threshold standards adopted in Resolution 82-11 as amended December 12, 2012.
C. Proposed technical corrections to Exhibit A of Resolution 82-11.
D. Bridge between Resolution 82-11 as amended December 12, 2012 and the proposed technical corrections.
E. Tahoe Science Advisory Council memo entitled "Guidance on Technical Clean Up of Existing Threshold Standards"
F. Science Advisory Council overlap framework applied to the standards adopted in Resolution 82-11 as amended December 12, 2012.

Attachment A.
Resolution 82-11 as amended December 12, 2012.

RESOLUTION NO. 82-11

TABLE OF AMENDMENTS

August 26, 1992, Resolution 92-27;	Amends the footnote (1), to the single event noise threshold for aircraft
September 22, 1993, Resolution 93-16;	Deletion of the Management Standard and the addition of a Numerical Standard
May 28, 1997, Resolution 97-08;	Amends Exhibit A to revise the Noise, Fisheries, and Vegetation Thresholds
March 22, 2000, Resolution 00-05	Amends Exhibit A to revise the Air Quality Thresholds
May 23, 2001, Resolution 01-13	Amends Exhibit A to add Numerical Standard for Late Seral and Old Growth Forest Ecosystems
April 24, 2002, Resolution 02-07	Amends Exhibit A to revise the Vegetation Thresholds
July 23, 2003, Resolution 03-16	Additional Noise Measurement Standards for Watercraft
December 12, 2012, Resolution 12-18	Amends Exhibit A to revise certain Threshold Standards for Water Quality, Air Quality, Wildlife and Fisheries.

ATTACHMENT 1
RESOLUTION NO. 82-11

RESOLUTION OF THE GOVERNING BODY OF THE TAHOE REGIONAL PLANNING AGENCY ADOPTING ENVIRONMENTAL THRESHOLD CARRYING CAPACITIES FOR THE LAKE TAHOE REGION

WHEREAS, the Governing Body of the Tahoe Regional Planning Agency ("TRPA") finds:

1. On December 19, 1980 the Tahoe Regional Planning Compact ("Compact") was amended, requiring, among other things, that the TRPA adopt Environmental Threshold Carrying Capacities for the Lake Tahoe Region. The Compact further requires that, within one (1) year after the adoption of the Environmental Threshold Carrying Capacities TRPA shall amend its regional plan so that, at a minimum, the plan and all of its elements, as implemented through Agency ordinances, rules and regulations, achieves and maintains the adopted Environmental Threshold Carrying Capacities.

2. The Compact finds, among other things, that: (a) the waters of Lake Tahoe and other resources of the Lake Tahoe Region are threatened with deterioration or degeneration; (b) said region exhibits unique environmental and ecological values; (c) said region is experiencing problems of resource use and deficiencies of environmental control; (d) increasing urbanization is threatening the ecological values of said region; (e) maintenance of the social and economic health of the region depends on maintaining the significant scenic, recreational, educational, scientific, natural and public health values provided by said region; (f) there is a public interest in protecting, preserving and enhancing said values for the residents of and visitors to said region; (g) in order to preserve the scenic beauty and outdoor recreational opportunities of said region, there is a need to insure an equilibrium between said region's natural endowment and its man-made environment; and (h) it is imperative that there be established a TRPA with the powers, among others, to establish Environmental Threshold Carrying Capacities and to adopt and enforce a regional plan and implementing ordinances which will achieve and maintain such capacities while providing opportunities for orderly growth and development consistent therewith.

3. The Compact defines "environmental threshold carrying capacity" as "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".

4. Although not required to do so by the Compact, the Governing Body and Advisory Planning Commission of the TRPA, prior to the adoption of this resolution, conducted duly-noticed public hearings, at which hearings considerable oral testimony and documentary evidence were received and considered by the Governing Body and Advisory Planning Commission. Evidence in the record of said hearings, which evidence is hereby determined substantial, established that each of the Environmental Threshold Carrying Capacities adopted by this resolution is necessary to maintain significant scenic, recreational, educational, scientific or natural value of the Lake Tahoe region or to maintain public health and safety within the region.

5. The Environmental Threshold Carrying Capacities adopted hereby comply in all respects, procedural and substantive, with the Compact, as amended, and are necessary to effectuate and implement the same.

6. In addition to other evidence received at said public hearings, the Governing Body of the TRPA, prior to the adoption of this resolution, has received for the administrative record and had opportunity to review, a lengthy detailed study report concerning the Environmental Threshold Carrying Capacities, which report was prepared by TRPA staff and consultants and substantiates the Environmental Threshold Carrying Capacities adopted hereby.

7. The Environmental Threshold Carrying Capacities adopted by this resolution were the subject of an environmental impact statement ("EIS"), which was prepared, considered, circulated, certified and otherwise processed, reviewed and approved by the TRPA in accordance with the substantive and procedural provisions of Article VII of the Compact. Without limiting the generality of the foregoing, the Governing Body further finds that the said EIS contained the information required by Article VII (a)(2) of the Compact and provided the Governing Body substantial information upon which it could base a reasoned review and evaluation of the environmental impacts of the Environmental Threshold Carrying Capacities adopted by this resolution. The Governing Body further finds that, prior to approving this resolution, it made the alternative written findings required by Article VII (d) of the Compact, a separate written finding having been made for each significant effect identified in the EIS as resulting from the Environmental Threshold Carrying Capacities adopted hereby. The Governing Body further finds that said written findings are supported by substantial evidence in the record.

8. Pursuant to Article II (I) of the Compact, Environmental Threshold Carrying Capacities are to include, but not be limited to, standards for air quality, water quality, soil conservation, vegetation preservation and noise, thus permitting, if not requiring, the adoption of standards for other elements necessary to maintain a significant scenic, recreational, educational, scientific or natural value of the Lake Tahoe Region or to maintain public health and safety within the region.

9. In certain instances it was not reasonably possible or feasible to set forth Environmental Threshold Carrying Capacities as numerical standards, requiring in such instances that standards be set forth as management standards. The Governing Body further finds that the inability to set forth a numerical standard for a particular Environmental Threshold Carrying Capacity does not render such Environmental Threshold Carrying Capacity improper or inappropriate for adoption under the Compact. In association with adoption of Environmental Threshold Carrying Capacities, the Governing Body is adopting policy statements that will provide specific direction for Agency staff in development of the regional plan. It is the intent of the Governing Body that amendment or repeal of the Policy Statements shall be subject to the dual-majority voting provisions of Article III (g)(1) of the Compact.

10. The definition of "environmental threshold carrying capacity" set forth in Article II (i) of the Compact requires an exercise of discretion by the Governing Body in setting a 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." In approving this resolution, the Governing Body of the TRPA recognizes that it must amend the TRPA regional plan so that, at a minimum, the plan and all of its elements, as implemented through TRPA ordinances, rules and regulations, achieves and maintains the adopted Environmental Threshold Carrying Capacities. The Governing Body further recognizes that it is required under Article V (d) of the Compact to adopt a regional plan attaining and maintaining federal, state, or local air and water quality standards, whichever are strictest, in the respective portions of the Lake Tahoe Region for which such standards are applicable.

11. The Environmental Threshold Carrying Capacities adopted by this resolution are to be achieved and maintained through implementation of TRPA's regional plan, may be achieved and maintained pursuant to an orderly time schedule adopted for that purpose.

12. In adopting this resolution, the TRPA Governing Body expressly recognizes that there is a distinction between adoption of Environmental Threshold Carrying Capacities and the subsequent planning process resulting in an amended regional plan so that, at a minimum, the plan and all of its elements achieves and maintains the adopted Environmental Threshold Carrying Capacities.

13. Inasmuch as the Compact specifies no particular method for the adoption of Environmental Threshold Carrying Capacities, this resolution is a proper method for the adoption thereof.

14. The Governing Body recognizes that, in adoption of Environmental Threshold Carrying Capacities, it is establishing standards for the Lake Tahoe Region which must be carried out through the regional plan and that its jurisdiction to achieve and maintain those standards is limited to the Lake Tahoe Region.

15. The Governing Body recognizes that, in establishing Environmental Threshold Carrying Capacities for the Lake Tahoe Region, it is establishing the basis for a long-term program which will protect and enhance the significant environmental values of the region, which program will be reviewed from time to time to ensure its consistency with the currently available scientific evidence and technical and other information. Attainment of the Environmental Threshold Carrying Capacities prior to the dates scheduled in the regional plan, while beneficial, is not required.

16. The Governing Body recognizes that the Tahoe Regional Planning Compact, as amended, provides for the adoption of an orderly program to attain the environmental standards through the development of its regional plan, including time schedules for implementation of specific measures necessary to attain those standards and that an immediate or short-range demonstration of attainment of some standards is physically impossible.

17. The Governing Body recognizes and respects the legislative intent of the States of Nevada and California and the United States Congress in entering into and approving the Tahoe Regional Planning Compact, as amended.

18. The Governing Body recognizes that the degree of success in attaining and maintaining the Environmental Threshold Carrying Capacities depends upon a program of mutual cooperation among the two states, local governmental entities, the Federal Government and the private sector in implementing its regional plan.

NOW, THEREFORE, BE IT RESOLVED by the Governing Body of the Tahoe Regional Planning Agency as follows:

1. That the Governing Body will develop its regional plan, recognizing that out-of-basin sources of air pollution may affect its ability to achieve and maintain environmental standards. The cooperation of the States of California and Nevada and the Federal Government will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.

2. That the Governing Body hereby recognizes the long-term nature of the

planning process established by the Compact and further recognizes that attainment and maintenance of the Environmental Threshold Carrying Capacities is a continuing process requiring establishment of time schedules by which the environmental standards will be attained, and the Governing Body intends to amend its regional plan to meet such requirements with realistic time schedules and the best available means.

3. That the Governing Body hereby recognizes the long-term nature of the planning process established by the Compact and further recognizes that some of the Environmental Threshold Carrying Capacities for water quality are currently being, and will likely continue to be, exceeded until some time after the full implementation of the loading reductions prescribed by the thresholds.

4. The Environmental Threshold Carrying Capacities shall be reviewed by staff and the Governing Body at the time of adoption of the regional plan to assure that said plan and the Environmental Threshold Carrying Capacities are consistent, and shall be reviewed at least every five years thereafter by the most appropriate means. After such review, the pertinent environmental threshold standards shall be amended where the scientific evidence and technical information indicate:

(a) two or more threshold standards are mutually exclusive; or

(b) substantial evidence to provide a basis for a threshold standard does not exist; or

(c) a threshold standard cannot be achieved; or

(d) a threshold standard is not sufficient to maintain a significant value of the Region or additional threshold standards are required to maintain a significant value.

The Agency shall maintain a monitoring program to determine progress towards attainment of threshold standards and to provide the basis for such review and amendment of the threshold standards pursuant to the foregoing criteria.

5. That the Governing Body hereby recognizes the long-term nature of establishing, planning for and actually achieving the Environmental Threshold Carrying Capacities and will diligently pursue the attainment of those environmental standards through the regional plan and its schedule for implementation. The Governing Body further recognizes that the environmental standards adopted hereby may be considered as part of the environmental review process on projects reviewed pursuant to Article VI (b) of the Compact during the period of time prior to adoption of the regional plan envisioned by Article V(c) of the Compact and adoption of the ordinances required by Article V (g), and that no provision of this resolution or the environmental standards adopted hereby shall affect the maximum number of building permits authorized under the provisions of Article VI(c) of the Compact.

6. That the Governing Body hereby adopts the following as a statement of intent, which will guide the development of the regional plan and actions subsequent to the adoption of that plan:

(a) The Governing Board hereby finds and declares that in adopting these Environmental Threshold Carrying Capacities it does not intend, and it shall not be construed as authorizing the Agency, to exercise its power to grant or deny a

permit in a manner which shall take or damage private property for public use without payment of just compensation.

(b) Nothing in the adoption of these Environmental Threshold Carrying Capacities is intended to increase or decrease the rights of any property owner under the Constitution of California, Nevada or the United States.

(c) It is the intent of the Governing Body that the Environmental Threshold Carrying Capacities will provide the basis for the adoption and enforcement of a regional plan and implementing ordinances which will achieve and maintain such capacities while at the same time providing opportunities for orderly growth and development consistent with such capacities. It is further the intent of the Governing Body that the regional plan will provide for carrying out all of the policies expressed in Article I of the compact.

7. That the Governing Body directs that the regional plan be so structured as to require a fair share of the financial resources required to implement the plan be borne by each of the entities or groups with interests in the region, including the State of California, the State of Nevada, the United States Government, entities of local government with jurisdiction within the Lake Tahoe Region, and the private sector; and

8. That the Environmental Threshold Carrying Capacities set forth in Exhibit "A", attached hereto and incorporated herein by this reference, be, and the same hereby are, adopted pursuant to Article V (b) of the Compact.

PASSED AND ADOPTED by the Governing Body of the Tahoe Regional Planning Agency this twenty-sixth day of August, 1982, by the following vote:

Ayes: Mr. Heikka, Mr. Hsieh, Mr. Meder, Mr. Stewart, Mr. Kjer, Mr. Steele, Mr. Swackhamer, Mr. Sevison, Mr. Weise, Mr. Reed, Mr. Jacobsen, Mr. Hall, Mr. Woods, Mr. Ferrari

Nays: None

Abstain: None

Absent: None

EXHIBIT A
TO RESOLUTION NO. 82-11
AS AMENDED

RESOLUTION OF THE GOVERNING BODY OF THE TAHOE REGIONAL PLANNING AGENCY ADOPTING ENVIRONMENTAL THRESHOLD CARRYING CAPACITIES FOR THE LAKE TAHOE REGION

WATER QUALITY

Deep Water (Pelagic) Lake Tahoe

NUMERICAL STANDARDS
Reduce fine sediment particles (inorganic particle size < 16 micrometers in diameter), total phosphorus, and total nitrogen in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe:

- The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis.
- Maintain annual mean phytoplankton primary productivity at or below 52gmC/m^2/yr.

POLICY
These numeric threshold standards for Pelagic Lake Tahoe are currently being exceeded and will likely continue to be exceeded until full implementation of the pollutant loading reductions prescribed by the Lake Tahoe Total Maximum Daily Load program and implemented by the State of California and Nevada. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.

MANAGEMENT STANDARD
Reduce the loading of dissolved phosphorus, iron, and other algal nutrients from all sources as required to achieve ambient standards for primary productivity and transparency.

Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, from groundwater approximately 30 percent, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.

Littoral Lake Tahoe

NUMERICAL STANDARD
Reduce dissolved inorganic nitrogen loading to Lake Tahoe from all sources by 25 percent of the 1973-81 annual average.

MANAGEMENT STANDARD
Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, from groundwater approximately 30 percent, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain

environmental standards, even though the Agency has no direct control over out of Basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.

NUMERICAL STANDARD
Decrease sediment load as required to attain turbidity values not to exceed three NTU. In addition, turbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.

Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.

Nearshore Attached Algae
MANAGEMENT STANDARD
Support actions to reduce the extent and distribution of excessive periphyton (attached) algae in the nearshore (littoral zone) of Lake Tahoe.

Aquatic Invasive Species
MANAGEMENT STANDARD
Prevent the introduction of new aquatic invasive species into the region's waters 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.

Tributaries

NUMERICAL STANDARD
Attain applicable state standards for concentrations of dissolved in organic nitrogen, dissolved phosphorus, and dissolved iron. Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.

MANAGEMENT STANDARD
Reduce total annual nutrient and suspended sediment load to achieve loading thresholds for littoral and pelagic Lake Tahoe.

Surface Runoff

NUMERICAL STANDARD
Achieve a 90 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1, for dissolved phosphorus of 0.1 mg/1, and for dissolved iron of 0.5 mg/1 in surface runoff directly discharged to a surface water body in the Basin.

Achieve a 90 percentile concentration value for suspended sediment of 250 mg/1.

MANAGEMENT STANDARD
Reduce total annual nutrient and suspended sediment loads as necessary to achieve loading thresholds for tributaries and littoral and pelagic Lake Tahoe.

Groundwater

MANAGEMENT STANDARD
Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982.

Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly.

Other Lakes

NUMERICAL STANDARD
Attain existing water quality standards.

SOIL CONSERVATION

Impervious Cover

MANAGEMENT STANDARD
Impervious cover shall comply with the Land-Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide For Planning, Bailey, 1974.

Stream Environment Zones

NUMERICAL STANDARD
Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, to attain a 5 percent total increase in the area of naturally functioning SEZ lands.

AIR QUALITY

Carbon Monoxide

NUMERICAL STANDARD
Maintain carbon monoxide concentrations at or below 6 parts per million (7 mg/m^3) averaged over 8 hours.

MANAGEMENT STANDARD
Reduce traffic volumes on the U.S. 50 Corridor by 7 percent during the winter from the 1981 base year between 4:00 p.m. and 12:00 midnight, provided that those traffic volumes shall be amended as necessary to meet the respective state standards.

Ozone

NUMERICAL STANDARD
Maintain ozone concentrations at or below 0.08 parts per million averaged over 1 hour.

Maintain oxides of nitrogen (NOx) emissions at or below the 1981 level.

Regional Visibility[§]

NUMERICAL STANDARDS
Achieve an extinction coefficient of 25 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 156 kilometer, 97 miles); and

Achieve an extinction coefficient of 34 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 115 kilometers, 71 miles).

[§](Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.)

Subregional Visibility

NUMERICAL STANDARD[§]
Achieve an extinction coefficient of 50 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 78 kilometers, 48 miles); and

Achieve an extinction coefficient of 125 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 31 kilometers, 19 miles); and

Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.)

Respirable and Fine Particulate Matter
NUMERICAL STANDARD
Particulate $Matter_{10}$ 24-hour Standard: Maintain Particulate $Matter_{10}$ at or below 50µg/m^3 measured over a 24-hour period in the portion of the Region within California, and maintain Particulate $Matter_{10}$ at or below 150 µg/m^3 measured over a 24-hour period in the portion of the Region within Nevada. Particulate $Matter_{10}$ measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

NUMERICAL STANDARD
Particulate $Matter_{10}$ Annual Arithmetic Average - Maintain Particulate $Matter_{10}$ at or below annual arithmetic average of 20µg/m^3 in the portion of the Region within California, and maintain Particulate $Matter_{10}$ at or below annual arithmetic average of 50µg/m^3 in the portion of the Region within Nevada. Particulate $Matter_{10}$ measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

NUMERICAL STANDARD
Particulate $Matter_{2.5}$ 24-hour Standard - Maintain Particulate $Matter_{2.5}$ at or below 35µg/m^3 measured over a 24-hour period using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

[§] Amended 03/22/00
[§] Amended 03/22/00

NUMERICAL STANDARD
Particulate Matter$_{2.5}$ Annual Arithmetic Average - Maintain Particulate Matter$_{2.5}$ at or below annual arithmetic average of 12µg/m^3 in the portion of the Region within California and maintain Particulate Matter$_{2.5}$ at or below annual arithmetic average of 15µg/m^3 in the portion of the Region within Nevada. Particulate Matter$_{2.5}$ measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

Nitrate Deposition

MANAGEMENT STANDARD
Reduce the transport of nitrates into the Basin and reduce oxides of nitrogen (NOx) produced in the Basin consistent with the water quality thresholds.

Reduce vehicle miles of travel in the Basin by 10 percent of the 1981 base year values.

Odor

POLICY STATEMENT
It is the policy of the TRPA Governing Board in the development of the Regional Plan to reduce fumes from diesel engines to the extent possible.

VEGETATION PRESERVATION

Common Vegetation

MANAGEMENT STANDARD
Increase plant and structural diversity of forest communities through appropriate management practices as measured by diversity indices of species richness, relative abundance, and pattern.

- Maintain the existing species richness of the Basin by providing for the perpetuation of the following plant associations:

  Yellow Pine Forest: Jeffrey pine, White fir, Incense cedar, Sugar pine.

  Red Fir Forest: Red fir, Jeffrey pine, Lodgepole pine, Western white pine, Mountain hemlock, Western juniper.

  Subalpine Forest: Whitebark pine, Mountain hemlock, Mountain mahogany.

  Shrub Association: Greenleaf and Pinemat manzanita, Tobacco brush, Sierra chinquapin, Huckleberry oak, Mountain whitethorn.

  Sagebrush Scrub Vegetation: Basin sagebrush, Bitterbrush, Douglas chaenactis.

  Deciduous Riparian: Quaking aspen, Mountain alder, Black cotton-wood, Willow.

  Meadow Associations (Wet and Dry Meadow): Mountain squirrel tail, Alpine gentian, Whorled penstemon, Asters, Fescues, Mountain brome, Corn lilies, Mountain bentgrass, Hairgrass, Marsh marigold, Elephant heads, Tinker's penney, Mountain Timothy, Sedges, Rushes, Buttercups.

  Wetland Associations (Marsh Vegetation): Pond lilies, Buckbean, Mare's tail, Pondweed, Common bladderwort, Bottle sedge, Common spikerush.

  Cushion Plant Association (Alpine Scrub): Alpine phlox, Dwarf ragwort, Draba.

- Relative Abundance - of the total amount of undisturbed vegetation in the Tahoe Basin;

1. Maintain at least four percent meadow and wetland vegetation.
2. Maintain at least four percent deciduous riparian vegetation.
3. Maintain no more than 25 percent dominant shrub association vegetation.
4. Maintain 15-25 percent of the Yellow Pine Forest in seral stages other than mature.
5. Maintain 15-25 percent of the Red Fir Forest in seral stages other than mature.

- Pattern - Provide for the proper juxtaposition of vegetation communities and age classes by;
    1. Limiting acreage size of new forest openings to no more than eight acres.
    2. Adjacent openings shall not be of the same relative age class or successional stage to avoid uniformity in stand composition and age.

A nondegradation standard to preserve plant communities shall apply to native deciduous trees, wetlands, and meadows while providing for opportunities to increase the acreage of such riparian associations to be consistent with the SEZ threshold.

Native vegetation shall be maintained at a maximum level to be consistent with the limits defined in the *Land Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide For Planning, Bailey, 1974,* for allowable impervious cover and permanent site disturbance.

POLICY STATEMENT
It shall be a policy of the TRPA Governing Board that a nondegradation standard shall permit appropriate management practices.

Late Seral and Old Growth Forest Ecosystems

NUMERICAL STANDARD

Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows:

- The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands;
- The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands;
- The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands.

Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation.

Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold:

- 61 percent of the Subalpine zone must be in a late seral or old growth condition;
- 60 percent of the Upper Montane zone must be in a late seral or old growth condition;
- 48 percent of the Montane zone must be in a late seral or old growth condition;

Uncommon Plant Communities

NUMERICAL STANDARD[§§]
Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.

Sensitive Plants

NUMERICAL STANDARD
Maintain a minimum number of population sites for each of five sensitive plant species.

Species[§§]	Number of Population Sites
Lewisia pygmaea longipetala	2
Draba asterophora v. macrocarpa	2
Draba asterophora v. asterophora	5
Rorippa subumbellata	26
Arabis rigidissima v. demote	7

WILDLIFE

Special Interest Species

NUMERICAL STANDARD
Provide a minimum number of population sites and disturbance zones for the following species:

Species of interest	Population sites	Disturbance zone (mi.)	Influence zone (mi.)
Goshawk	12	Most suitable 500 acres surrounding nest site including a 0.25 mile buffer centered on nest sites	3.50
Osprey	4	0.25	0.60
Bald Eagle (Winter)	2	Mapped areas	Mapped areas
Bald Eagle (Nesting)	1	0.50	Variable
Golden Eagle	4	0.25	9.0
Peregrine	2	0.25	7.6
Waterfowl	18	Mapped areas	Mapped areas
Deer	-	Mapped areas	Meadows

[§§] Amended 04/24/02

Habitats of Special Significance

MANAGEMENT STANDARD
A nondegradation standard shall apply to significant wildlife habitat consisting of deciduous trees, wetlands, and meadows while providing for opportunities to increase the acreage of such riparian associations.

FISHERIES

Stream Habitat

NUMERICAL STANDARD

Maintain the 75 miles of excellent, 105 miles of good, and 38 miles of marginal stream habitat as indicated by the [§]Stream Habitat Quality Overlay map, amended May 1997, based upon the re-rated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.

Instream Flows

MANAGEMENT STANDARD

Until instream flow standards are established in the Regional Plan to protect fishery values, a nondegradation standard shall apply to instream flows.

POLICY STATEMENT

It shall be a policy of the TRPA Governing Board to seek transfers of existing points of water diversion from streams to Lake Tahoe.

Lahontan Cutthroat Trout

POLICY STATEMENT

It shall be the policy of the TRPA Governing Board to support, in response to justifiable evidence, state and federal efforts to reintroduce Lahontan cutthroat trout.

Lake Habitat

MANAGEMENT STANDARD

A nondegradation standard shall apply to fish habitat in Lake Tahoe. Achieve the equivalent of 5,948 total acres of excellent habitat [§]as indicated by the Prime Fish Habitat Overlay Map as may be amended based on best available science.

[§] Amended 5/28/97

Appendix B: Resolution 82-11

NOISE

Single Noise Events

NUMERICAL STANDARD
The following maximum noise levels are allowed: All values are in decibels)

Source	Threshold – dBA Overall	Less Than 35 MPH	Greater Than 35 MPH	Monitoring Distances
Aircraft	80[1]	--	--	6,500 m-start of takeoff roll 2,000 m-runway threshold approach
	77.1[2]	--	--	6,500 m-start of takeoff roll 2,000 m-runway threshold approach
Watercraft[3§]				
1. Pass-By Test	82 L_{max}	--	--	50 ft.-engine at 3,000 rpm
2. Shoreline Test	75 L_{max}	--	--	Microphone 5 ft. above water, 2 ft., above curve of shore, dock or platform. Watercraft in Lake, no minimum distance.
3. Stationary Test	88 dBA L_{max} for boats manufactured before January 1, 1993;	--	--	Microphone 3.3 feet from exhaust outlet - 5 feet above water.
	90 dBA L_{max} for boats manufactured after January 1, 1993	--	--	
Motor Vehicles Less Than 6,000 GVW	--	76	82	50 ft.
Motor Vehicles Greater Than 6,000 GVW	--	82	86	50 ft.
Motorcycles	--	77	86	50 ft.
Off-Road Vehicles	--	72	86	50 ft.
Snowmobiles	--	82	--	50 ft.

1. [§§]The single event noise standard of 80 dBA L_{max} for aircraft departures at Lake Tahoe Airport shall be effective immediately. The single event noise standard of 80 dBA L_{max} for aircraft arrivals at Lake Tahoe Airport is not to be effective until ten years after the adoption of an airport master plan by TRPA. The schedule for phasing in the 80 dBA arrival standard shall be based on a review and consideration of the relevant factors, including best available technology and environmental concerns, and shall maximize the reduction in noise impacts caused by aircraft arrivals while allowing for the continuation of general aviation and commercial service. The beginning arrival standard shall not exceed 84 dBA for general aviation and commuter aircraft, and 86 dBA for transport category aircraft.
2. Between the hours of 8 p.m. and 8 a.m.
3. Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.

[§] Amended 7/23/03
[§§] Amended 08/26/92

Appendix B: Resolution 82-11

Cumulative Noise Events[§]

NUMERICAL STANDARD
Background noise levels shall not exceed the following levels:

Land Use Category	Average Noise Level Or CNEL range (dBA)
High Density Residential Areas	55
Low Density Residential Areas	50
Hotel/Motel Areas	60
Commercial Areas	60
Industrial Areas	65
Urban Outdoor Recreation Areas	55
Rural Outdoor Recreation Areas	50
Wilderness and Roadless Areas	45
Critical Wildlife Habitat Areas	45

POLICY STATEMENT
It shall be the policy of the TRPA Governing Body in development of the Regional Plan to define, locate, and establish CNEL levels for transportation corridors

RECREATION

POLICY STATEMENT
It shall be the policy of the TRPA Governing Body in development of the Regional Plan to preserve and enhance the high quality recreational experience including preservation of high-quality undeveloped shorezone and other natural areas. In developing the Regional Plan, the staff and Governing Body shall consider provisions for additional access, where lawful and feasible, to the shorezone and high quality undeveloped areas for low density recreational uses.

It shall be the policy of the TRPA Governing Body in development of the Regional Plan to establish and ensure a fair share of the total Basin capacity for outdoor recreation is available to the general public.

SCENIC RESOURCES

Roadway and Shoreline Units

NUMERICAL STANDARD
Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, 13-5, 13-8 and 13-9 of the Draft Study Report.

Maintain the 1982 ratings for all roadway and shoreline units as shown in Tables 13-6 and 13-7 of the Draft Study Report.

Restore scenic quality in roadway units rated 15 or below and shoreline units rated 7 or below.

[§] Amended 5/28/97

Other Areas[§]

NUMERICAL STANDARD
Maintain or improve the numerical rating assigned to each identified scenic resource, including individual subcomponent numerical ratings, for views from bike paths and other recreation areas open to the general public as recorded in the 1993 Lake Tahoe Basin Scenic Resource Evaluation.

Built Environment

POLICY STATEMENT
It shall be the policy of the TRPA Governing Body in development of the Regional Plan, in cooperation with local jurisdictions, to insure the height, bulk, texture, form, materials, colors, lighting, signing and other design elements of new, remodeled and redeveloped buildings be compatible with the natural, scenic, and recreational values of the region.

[§] Amended 09/22/93

Attachment B.
Table of threshold standards adopted in Resolution 82-11 as amended December 12, 2012.

Attachment B. Table of threshold standards adopted in Resolution 82-11 as amended December 12, 2012.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
1	Reduce fine sediment particles	Water Quality	Deep Water (Pelagic) Lake Tahoe	**Reduce fine sediment particles** (inorganic particle size < 16 micrometers in diameter), total phosphorus, and total nitrogen in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe: The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis. Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.
2	Total phosphorus	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce fine sediment particles (inorganic particle size < 16 micrometers in diameter), **total phosphorus**, and total nitrogen in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe: The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis. Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.
3	Total nitrogen	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce fine sediment particles (inorganic particle size < 16 micrometers in diameter), total phosphorus, and **total nitrogen** in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe: The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis. Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.
4	Secchi disk	Water Quality	Deep Water (Pelagic) Lake Tahoe	The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis
5	Phytoplankton primary productivity	Water Quality	Deep Water (Pelagic) Lake Tahoe	Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.
6	Recognition of threshold standard exceedance	Water Quality	Deep Water (Pelagic) Lake Tahoe	These numeric threshold standards for Pelagic Lake Tahoe are currently being exceeded and will likely continue to be exceeded until full implementation of the pollutant loading reductions prescribed by the Lake Tahoe Total Maximum Daily Load program and implemented by the State of California and Nevada. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region
7	Dissolved phosphorus	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce the loading of **dissolved phosphorus**, iron, and other algal nutrients from all sources as required to achieve ambient standards for primary productivity and transparency.
8	Iron	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce the loading of dissolved phosphorus, **iron**, and other algal nutrients from all sources as required to achieve ambient standards for primary productivity and transparency.
9	Other algal nutrients	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce the loading of dissolved phosphorus, iron, and other **algal nutrients** from all sources as required to achieve ambient standards for primary productivity and transparency.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
10	Pelagic nitrogen loading surface runoff	Water Quality	Deep Water (Pelagic) Lake Tahoe	**Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent**, from groundwater approximately 30 percent, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.
11	Pelagic nitrogen loading groundwater	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, **from groundwater approximately 30 percent**, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.
12	Pelagic nitrogen loading atmospheric sources	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, from groundwater approximately 30 percent, a**nd from atmospheric sources approximately 20 percent of the 1973-81 annual average**. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.
13	Littoral total dissolved inorganic nitrogen (DIN) loading	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce dissolved inorganic nitrogen loading to Lake Tahoe from all sources by 25 percent of the 1973-81 annual average.
14	Littoral nitrogen loading surface runoff	Water Quality	Nearshore (Littoral) Lake Tahoe	**Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent**, from groundwater approximately 30 percent, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.
15	Littoral nitrogen loading groundwater	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, **from groundwater approximately 30 percent**, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
16	Littoral nitrogen loading atmospheric sources	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, from groundwater approximately 30 percent, a**nd from atmospheric sources approximately 20 percent of the 1973-81 annual average**. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.
17	Decrease sediment load	Water Quality	Nearshore (Littoral) Lake Tahoe	**Decrease sediment load as required** to attain turbidity values not to exceed three NTU. In addition, turbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.
18	Nearshore turbidity (stream influence)	Water Quality	Nearshore (Littoral) Lake Tahoe	Decrease sediment load as required to **attain turbidity values not to exceed three NTU**. In addition, turbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.
19	Nearshore turbidity (no stream influence)	Water Quality	Nearshore (Littoral) Lake Tahoe	Decrease sediment load as required to attain turbidity values not to exceed three NTU. In addition, t**urbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.**
20	Littoral nitrogen loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	**Reduce the loading of dissolved inorganic nitrogen**, dissolved phosphorus, iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.
21	Littoral phosphorus loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, **dissolved phosphorus,** iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.
22	Littoral iron loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, **iron**, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.
23	Littoral other algal nutrients loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and **other algal nutrients** from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.
24	Nearshore phytoplankton primary productivity	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and other algal nutrients from all sources to meet the 1967-71 mean values for **phytoplankton primary productivity** and periphyton biomass in the littoral zone.
25	Nearshore periphyton biomass	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and **periphyton biomass in the littoral zone.**
26	Nearshore attached algae	Water Quality	Nearshore (Littoral) Lake Tahoe	Support actions to reduce the extent and distribution of excessive periphyton (attached) algae in the nearshore (littoral zone) of Lake Tahoe.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
27	Aquatic invasive species prevention	Water Quality	Aquatic Invasive Species	**Prevent the introduction of new aquatic invasive species into the region's waters** 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.
28	Aquatic invasive species abundance	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.
29	Aquatic invasive species distribution	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.
30	Aquatic invasive species ecological impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.
31	Aquatic invasive species social impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.
32	Aquatic invasive species economic impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.
33	Aquatic invasive species public health impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.
34	Nitrogen concentration (tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of **dissolved in organic nitrogen**, dissolved phosphorus, and dissolved iron. Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.
35	Phosphorus concentration (tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of dissolved in organic nitrogen, **dissolved phosphorus**, and dissolved iron. Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.
36	Iron concentration (tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of dissolved in organic nitrogen, dissolved phosphorus, and **dissolved iron.** Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.
37	Suspended sediment concentration (tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of dissolved in organic nitrogen, dissolved phosphorus, and dissolved iron. **Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.**
38	Nutrient load (tributaries)	Water Quality	Tributaries	**Reduce total annual nutrient** and suspended sediment load to achieve loading thresholds for littoral and pelagic Lake Tahoe.
39	Suspended sediment load (tributaries)	Water Quality	Tributaries	Reduce total annual nutrient **and suspended sediment load** to achieve loading thresholds for littoral and pelagic Lake Tahoe.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
40	Nitrogen concentration (surface runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for **dissolved inorganic nitrogen** of 0.5 mg/1, for dissolved phosphorus of 0.1 mg/1, and for dissolved iron of 0.5 mg/1 in surface runoff directly discharged to a surface water body in the Basin.
41	Phosphorus concentration (surface runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1, for **dissolved phosphorus** of 0.1 mg/1, and for dissolved iron of 0.5 mg/1 in surface runoff directly discharged to a surface water body in the Basin.
42	Iron concentration (surface runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1, for dissolved phosphorus of 0.1 mg/1, and for **dissolved iron** of 0.5 mg/1 **i**n surface runoff directly discharged to a surface water body in the Basin.
43	Suspended sediment concentration (surface runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for suspended sediment of 250 mg/1.
44	Total nutrients (surface runoff)	Water Quality	Surface Runoff	**Reduce total annual nutrient** and suspended sediment loads as necessary to achieve loading thresholds for tributaries and littoral and pelagic Lake Tahoe.
45	Suspended sediment (surface runoff)	Water Quality	Surface Runoff	Reduce total annual nutrient and **suspended sediment loads** as necessary to achieve loading thresholds for tributaries and littoral and pelagic Lake Tahoe.
46	Surface discharge - total nitrogen	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Total Nitrogen Maximum concentration 0.5 mg/l
47	Surface discharge - total phosphate	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Total phosphate Maximum concentration 0.1 mg/l
48	Surface discharger - iron	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Total iron Maximum concentration 0.5 mg/l

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
49	Surface discharge - turbidity	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Turbidity Maximum concentration 20 JTU
50	Surface discharge - grease and oil	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Grease and Oil Maximum concentration 2.0 mg/l
51	Discharge to groundwater - total nitrogen	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Total Nitrogen Maximum concentration 0.5 mg/l
52	Discharge to groundwater - total phosphate	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Total Phosphate Maximum concentration 1 mg/l
53	Discharge to groundwater - iron	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Total iron Maximum concentration 4.0 mg/l
54	Discharge to groundwater - turbidity	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Turbidity Maximum concentration 200 JTU
55	Discharge to groundwater- grease and oil	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Grease and Oil Maximum concentration 40.0 mg/l

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
56	Attain existing water quality standards.	Water Quality	Other Lakes	Attain existing water quality standards.
57	Percent of land coverage within land capability class 1a (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage – Class 1a (1%)
58	Percent of land coverage within land capability class 1b (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 1b (1%)
59	Percent of land coverage within land capability class 1c (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 1c (1%)
60	Percent of land coverage within land capability class 2 (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 2 (1%)
61	Percent of land coverage within land capability class 3 (allow up to 5% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 3 (5%)
62	Percent of land coverage within land capability class 4 (allow up to 20% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 4 (20%)
63	Percent of land coverage within land capability class 5 (allow up to 25% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 5 (25%)

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
64	Percent of land coverage within land capability class 6 (allow up to 30% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 6 (30%)
65	Percent of land coverage within land capability class 7 (allow up to 30% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 7 (30%)
66	Preserve stream environment zone (SEZ) function	Soil Conservation	Stream Environment Zone	**Preserve existing naturally functioning SEZ lands in their natural hydrologic condition**, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, to attain a 5 percent total increase in the area of naturally functioning SEZ lands.
67	Restore undeveloped SEZ	Soil Conservation	Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, **restore all disturbed SEZ lands in undeveloped, unsubdivided lands**, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, to attain a 5 percent total increase in the area of naturally functioning SEZ lands.
68	Restore 25% disturbed SEZ	Soil Conservation	Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and **restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided,** to attain a 5 percent total increase in the area of naturally functioning SEZ lands.
69	5% increase SEZ function	Soil Conservation	Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, **to attain a 5 percent total increase in the area of naturally functioning SEZ lands.**
70	Highest 8-hour average concentration of carbon monoxide	Air Quality	Carbon Monoxide (CO)	Maintain carbon monoxide concentrations at or below 6 parts per million (7 mg/m3) averaged over 8 hours.
71	Average daily winter traffic volume, Presidents' Weekend	Air Quality	Carbon Monoxide (CO)	Reduce traffic volumes on the U.S. 50 Corridor by 7 percent during the winter from the 1981 base year between 4:00 p.m. and 12:00 midnight, provided that those traffic volumes shall be amended as necessary to meet the respective state standards.
72	Highest 1-hour average concentration of ozone	Air Quality	Ozone (O_3)	Maintain ozone concentrations at or below 0.08 parts per million averaged over 1 hour.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
73	Oxides of nitrogen emissions	Air Quality	Ozone (O_3)	Maintain oxides of nitrogen (NO_x) emissions at or below the 1981 level.
74	Regional visibility 50th percentile ("average visibility days") Bliss State Park	Air Quality	Regional Visibility	Achieve an extinction coefficient of 25 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 156 km, 97 miles); Calculations will be made on three year running periods using the existing 1991-1993 monitoring data as the performance standards to be met or exceeded.
75	Regional visibility 90th percentile ("worst visibility days") Bliss State Park	Air Quality	Regional Visibility	Achieve an extinction coefficient of 34 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 115 km, 71 miles). Calculations will be made on three year running periods using the existing 1991-1993 monitoring data as the performance standards to be met or exceeded.
76	Sub-regional visibility 50th percentile ("average visibility days") South Lake	Air Quality	Sub-Regional Visibility	Achieve an extinction coefficient of 50 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 78 km, 48 miles); Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.)
77	Sub-regional visibility 90th percentile ("worst visibility days") South Lake	Air Quality	Sub-Regional Visibility	Achieve an extinction coefficient of 125 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 31 km, 19 miles). Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.)
78	Highest 24-hour average PM10 concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter10 at or below 50µg/m3measured over a 24-hour period in the portion of the Region within California, and maintain Particulate Matter10 at or below 150 µg/m3 measured over a 24-hour period in the portion of the Region within Nevada. Particulate Matter10 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.
79	Annual average PM10 concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter10 at or below annual arithmetic average of 20µg/m3 in the portion of the Region within California, and maintain Particulate Matter10 at or below annual arithmetic average of 50µg/m3 in the portion of the Region within Nevada. Particulate Matter10 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.
80	24-hour PM2.5 concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter2.5 at or below 35µg/m3 measured over a 24-hour period using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.
81	Annual average PM2.5 concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter2.5 at or below annual arithmetic average of 12µg/m3 in the portion of the Region within California and maintain Particulate Matter2.5 at or below annual arithmetic average of 15µg/m3 in the portion of the Region within Nevada. Particulate Matter2.5 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
82	Reduce generation and transport of nitrate to achieve water quality standards	Air Quality	Nitrate Deposition	Reduce the transport of nitrates into the Basin and reduce oxides of nitrogen (NOx) produced in the Basin consistent with the water quality thresholds.
83	Vehicle miles traveled	Air Quality	Nitrate Deposition	Reduce vehicle miles of travel in the Basin by 10% of the 1981 base year values
84	Odor - reduce diesel engine fumes	Air Quality	Odor	It is the policy of the TRPA Governing Board in the development of the Regional Plan to reduce fumes from diesel engines to the extent possible.
85	Increase plant and structural diversity	Vegetation	Common Vegetation	Increase plant and structural diversity of forest communities through appropriate management practices as measured by diversity indices of species richness, relative abundance, and pattern.
86	Vegetation community richness	Vegetation	Common Vegetation	Maintain the existing species richness of the Basin by providing for the perpetuation of the following plant associations: • Yellow Pine Forest: Jeffrey pine, White fir, Incense cedar, Sugar pine. • Red Fir Forest: Red fir, Jeffrey pine, Lodgepole pine, Western white pine, Mountain hemlock, Western juniper. • Subalpine Forest: Whitebark pine, Mountain hemlock, Mountain mahogany. • Shrub Association: Greenleaf and Pinemat manzanita, Tobacco brush, Sierra chinquapin, Huckleberry oak, Mountain whitethorn. • Sagebrush Scrub Vegetation: Basin sagebrush, Bitterbrush, Douglas chaenactis. • Deciduous Riparian: Quaking aspen, Mountain alder, Black cotton-wood, Willow. • Meadow Associations (Wet and Dry Meadow): Mountain squirrel tail, Alpine gentian, Whorled penstemon, Asters, Fescues, Mountain brome, Corn lilies, Mountain bentgrass, Hairgrass, Marsh marigold, Elephant heads, Tinker's penney, Mountain Timothy, Sedges, Rushes, Buttercups. • Wetland Associations (Marsh Vegetation): Pond lilies, Buckbean, Mare's tail, Pondweed, Common bladderwort, Bottle sedge, Common spikerush. • Cushion Plant Association (Alpine Scrub): Alpine phlox, Dwarf ragwort, Draba.
87	Relative abundance of meadows and wetland vegetation types	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain at least four percent meadow and wetland vegetation.
88	Relative abundance of deciduous riparian vegetation	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain at least four percent deciduous riparian vegetation.
89	Relative abundance of shrub vegetation type	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain no more than 25 percent dominant shrub association vegetation.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
90	Relative abundance of Yellow Pine Forest in seral stages other than mature	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain 15-25 percent of the Yellow Pine Forest in seral stages other than mature.
91	Relative abundance of Red Fir Forest in seral stages other than mature	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain 15-25 percent of the Red Fir Forest in seral stages other than mature.
92	Pattern: limit size of new forest openings	Vegetation	Common Vegetation	Pattern - Provide for the proper juxtaposition of vegetation communities and age classes by; 1. Limiting acreage size of new forest openings to no more than eight acres
93	Pattern: stand composition and age	Vegetation	Common Vegetation	Pattern - Provide for the proper juxtaposition of vegetation communities and age classes by; 2. Adjacent openings shall not be of the same relative age class or successional stage to avoid uniformity in stand composition and age.
94	Non-degradation of stream environment zones	Vegetation	Common Vegetation	A nondegradation standard to preserve plant communities shall apply to native deciduous trees, wetlands, and meadows while providing for opportunities to increase the acreage of such riparian associations to be consistent with the SEZ threshold.
95	Consistency with Bailey land capability system	Vegetation	Common Vegetation	Native vegetation shall be maintained at a maximum level to be consistent with the limits defined in the Land Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide for Planning, Bailey, 1974, for allowable impervious cover and permanent site disturbance.
96	Appropriate management practices	Vegetation	Common Vegetation	It shall be a policy of the TRPA Governing Board that a nondegradation standard shall permit appropriate management practices.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
97	Total old growth	Vegetation	Late Seral/ Old growth Ecosystems	**Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition**, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: • The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands; • The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands; • The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands. Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: • 61 percent of the Subalpine zone must be in a late seral or old growth condition; • 60 percent of the Upper Montane zone must be in a late seral or old growth condition; • 48 percent of the Montane zone must be in a late seral or old growth condition;
98	Subalpine old growth	Vegetation	Late Seral/ Old growth Ecosystems	Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: • **The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands;** • The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands; • The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands. Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: • **61 percent of the Subalpine zone must be in a late seral or old growth condition;** • 60 percent of the Upper Montane zone must be in a late seral or old growth condition; • 48 percent of the Montane zone must be in a late seral or old growth condition;

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
99	Upper Montane old growth	Vegetation	Late Seral/ Old growth Ecosystems	Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: • The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands; • **The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands;** • The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands. Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: • 61 percent of the Subalpine zone must be in a late seral or old growth condition; • **60 percent of the Upper Montane zone must be in a late seral or old growth condition;** • 48 percent of the Montane zone must be in a late seral or old growth condition;
100	Montane old growth	Vegetation	Late Seral/ Old growth Ecosystems	Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: • The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands; • The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands; • **The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands.** Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: • 61 percent of the Subalpine zone must be in a late seral or old growth condition; • 60 percent of the Upper Montane zone must be in a late seral or old growth condition; • **48 percent of the Montane zone must be in a late seral or old growth condition;**
101	Deepwater plants of Lake Tahoe	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (**1) the deepwater plants of Lake Tahoe**, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
102	Grass Lake (sphagnum fen)	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, **(2) Grass Lake (sphagnum bog)**, (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.
103	Osgood Swamp	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), **(3) Osgood swamp**, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.
104	Freel Peak Cushion Plant Community	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, **(4) the Freel Peak Cushion Plant community**, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.
105	Taylor Creek Marsh	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, **(5) Taylor Creek Marsh**, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.
106	Pope Marsh	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (**6) Pope Marsh**, (7) Upper Truckee Marsh, and (8) Hell Hole.
107	Upper Truckee Marsh	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, **(7) Upper Truckee Marsh**, and (8) Hell Hole.
108	Hell Hole (sphagnum fen)	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and **(8) Hell Hole**.
109	Long-Petaled Lewisia (Lewisia pygmaea longipetala)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Lewisia pygmaea longipetala - 2
110	Cup Lake Draba (Draba	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Draba asterophora v. macrocarpa - 2

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
	asterophora var. macrocarpa)			
111	Tahoe Draba (Draba asterophora var. asterophora)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Draba asterophora v. asterophora - 5
112	Tahoe Yellow Cress (Rorippa Subumbellata)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Rorippa subumbellata - 5
113	Galena Rock Cress - Arabis Rigidissima V. Demote	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Arabis rigidissima v. demote - 7
114	Northern Goshawk Population Sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Goshawk (12 population sites)
115	Osprey population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Osprey (4 population sites)
116	Wintering Bald Eagle population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Wintering (2 population sites)
117	Nesting Bald Eagle population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Nesting (1 population site)
118	Golden Eagle population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Golden Eagle (4 population sites)
119	Peregrine Falcon population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Peregrine (2 population sites)
120	Waterfowl population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Waterfowl (18 population sites)
121	Northern Goshawk disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Goshawk Disturbance zone (mi.): (Most suitable 500 acres surrounding nest site including a 0.25 mile buffer centered on nest sites), Influence zone (mi.): 3.5
122	Osprey disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Osprey Disturbance zone (mi.): (0.25), Influence zone (mi.): 0.6
123	Wintering Bald Eagle disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Wintering Disturbance zone (mi.): mapped areas), Influence zone (mi.): Mapped areas
124	Nesting Bald Eagle disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Nesting -Disturbance zone (mi.): (0.5) Influence zone (mi.): Variable

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
125	Golden Eagle disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Golden Eagle- Disturbance zone (mi.): (0.25), Influence zone (mi.): 9.0
126	Peregrine Falcon disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Peregrine- Disturbance zone (mi.): (0.25), Influence zone (mi.): 7.6
127	Waterfowl disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Waterfowl- Disturbance zone (mi.): (mapped areas), Influence zone (mi.): Mapped areas
128	Deer disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Deer Disturbance zone (mi.): (mapped areas), Influence zone (mi.): Mapped areas
129	Riparian habitat	Wildlife	Habitats of Special Significance	A nondegradation standard shall apply to significant wildlife habitat consisting of deciduous trees, wetlands, and meadows while providing for opportunities to increase the acreage of such riparian associations.
130	Miles of stream habitat in excellent stream condition	Fisheries	Stream Habitat	**Maintain the 75 miles of excellen**t, 105 miles of good, and 38 miles of marginal stream habitat as indicated by the Stream Habitat Quality Overlay map, amended May 1997, based upon the rerated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.
131	Miles of stream habitat in good condition	Fisheries	Stream Habitat	Maintain the 75 miles of excellent, **105 miles of good**, and 38 miles of marginal stream habitat as indicated by the Stream Habitat Quality Overlay map, amended May 1997, based upon the rerated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.
132	Miles of stream habitat in marginal condition	Fisheries	Stream Habitat	Maintain the 75 miles of excellent, 105 miles of good, and **38 miles of marginal stream habita**t as indicated by the Stream Habitat Quality Overlay map, amended May 1997, based upon the rerated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.
133	Non-degradation standard for instream flow	Fisheries	Instream Flow	Until instream flow standards are established in the Regional Plan to protect fishery values, a nondegradation standard shall apply to instream flows.
134	Divert stream intakes to lake sources	Fisheries	Instream Flow	It shall be a policy of the TRPA Governing Board to seek transfers of existing points of water diversion from streams to Lake Tahoe.
135	Lahontan Cutthroat Trout	Fisheries	Lahontan Cutthroat Trout	It shall be the policy of the TRPA Governing Board to support, in response to justifiable evidence, state and federal efforts to reintroduce Lahontan cutthroat trout.
136	Acres of "prime" fish habitat	Fisheries	Lake Habitat	A nondegradation standard shall apply to fish habitat in Lake Tahoe. Achieve the equivalent of 5,948 total acres of excellent habitat as indicated by the Prime Fish Habitat Overlay Map as may be amended based on best available science.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
137	Aircraft noise departure/arrival (8am to 8pm)	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Overall 80 dBA. The single event noise standard of 80 dBA Lmax for aircraft departures at Lake Tahoe Airport shall be effective immediately. The single event noise standard of 80 dBA Lmax for aircraft arrivals at Lake Tahoe Airport is not to be effective until ten years after the adoption of an airport master plan by TRPA. The schedule for phasing in the 80 dBA arrival standard shall be based on a review and consideration of the relevant factors, including best available technology and environmental concerns, and shall maximize the reduction in noise impacts caused by aircraft arrivals while allowing for the continuation of general aviation and commercial service. The beginning arrival standard shall not exceed 84 dBA for general aviation and commuter aircraft, and 86 dBA for transport category aircraft.
138	Aircraft noise departure/arrival (8pm to 8am)	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. 77.1 dBA. Between the hours of 8 p.m. and 8 a.m.
139	Watercraft-pass by test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Watercraft Pass-By Test 82. Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.
140	Watercraft-shoreline test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Shoreline Test 75 Lmax. Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.
141	Pre-1993 watercraft-stationary test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Stationary Test 88 dBA Lmax for boats manufactured before January 1, 1993; Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.
142	Post 1992 watercraft-stationary test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Stationary Test 90 dBA Lmax for boats manufactured after January 1, 1993; Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.
143	Motor vehicles less than 6,000 GV for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Motor Vehicles Less Than 6,000 GVW, Less Than 35 MPH: 76 dBa
144	Motor vehicles less than 6,000 GVW for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Motor Vehicles Less Than 6,000 GVW, Greater Than 35 MPH: 82 dBa
145	Motor vehicles greater than 6,000 GVW for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Motor Vehicles Greater Than 6,000 GVW, Less Than 35 MPH: 82 dBa
146	Motor vehicles greater than 6,000 GVW for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Motor Vehicles Greater Than 6,000 GVW, Greater Than 35 MPH: 86 dBa

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
147	Motorcycles for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Motorcycles, Greater Than 35 MPH: 77 dBa
148	Motorcycles for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Motorcycles, Greater Than 35 MPH: 86 dBa
149	Off-road vehicles for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Off-Road Vehicles, Greater Than 35 MPH: 72 dBa
150	Off-road vehicles for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Off-Road Vehicles, Greater Than 35 MPH: 86 dBa
151	Snowmobiles	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Snowmobiles, Greater Than 35 MPH: 82 dBa
152	High density residential areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: High Density Residential Areas, Average Noise Level or CNEL range (dBA): 55
153	Low density residential areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Low Density Residential Areas, Average Noise Level or CNEL range (dBA): 50
154	Hotel/motel areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Hotel/Motel Areas, Average Noise Level or CNEL range (dBA): 60
155	Commercial areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Commercial Areas, Average Noise Level or CNEL range (dBA): 60
156	Industrial areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Industrial Areas, Average Noise Level or CNEL range (dBA): 65
157	Urban outdoor recreation areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Urban Outdoor Recreation Areas, Average Noise Level or CNEL range (dBA): 55
158	Rural outdoor recreation areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Rural Outdoor Recreation Areas, Average Noise Level or CNEL range (dBA): 50
159	Wilderness and roadless areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Wilderness and Roadless Areas, Average Noise Level or CNEL range (dBA): 45
160	Critical wildlife habitat areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Critical Wildlife Habitat Areas, Average Noise Level or CNEL range (dBA): 45
161	Transportation corridors	Noise	Cumulative Noise Events	It shall be the policy of the TRPA Governing Body in development of the Regional Plan to define, locate, and establish CNEL levels for transportation corridors
162	Quality of recreation experience & access to recreational opportunities	Recreation	Quality of Recreation Experience and Access to Recreational Opportunities	It shall be the policy of the TRPA Governing Body in development of the Regional Plan to preserve and enhance the high quality recreational experience including preservation of high quality undeveloped shorezone and other natural areas. In developing the Regional Plan, the staff and Governing Body shall consider provisions for additional access, where lawful and feasible, to the shorezone and high quality undeveloped areas for low density recreational uses.

82-11 Appearance	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)
163	Fair share distribution of recreation capacity	Recreation	Fair Share Distribution of Recreation Capacity	It shall be the policy of the TRPA Governing Body in development of the Regional Plan to establish and ensure a fair share of the total Basin capacity for outdoor recreation is available to the general public.
164	Scenic quality ratings for roadway units	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in **Tables 13-3**, 13-5, 13-8 and 13-9 of the Draft Study Report.
165	Travel route ratings for shoreline travel units	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, **13-5**, 13-8 and 13-9 of the Draft Study Report.
166	Travel route ratings for roadway units (scenic resources)	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, 13-5, **13-8** and 13-9 of the Draft Study Report.
167	Scenic quality ratings for shoreline units (scenic resources)	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, 13-5, 13-8 and **13-9** of the Draft Study Report.
168	Roadway travel routes	Scenic Resources	Roadway and Shoreline Units	Maintain the 1982 ratings for all roadway and shoreline units as shown in Tables **13-6** and 13-7 of the Draft Study Report.
169	Shoreline travel routes	Scenic Resources	Roadway and Shoreline Units	Maintain the 1982 ratings for all roadway and shoreline units as shown in Tables 13-6 and **13-7** of the Draft Study Report.
170	Restore roadway units	Scenic Resources	Roadway and Shoreline Units	**Restore scenic quality in roadway units rated 15** or below and shoreline units rated 7 or below.
171	Restore shoreline units	Scenic Resources	Roadway and Shoreline Units	Restore scenic quality in roadway units rated 15 or below and **shoreline units rated 7 or below**.
172	Scenic quality of other areas (recreation sites and bike trails)	Scenic Resources	Other Areas	Maintain or improve the numerical rating assigned to each identified scenic resource, including individual subcomponent numerical ratings, for views from bike paths and other recreation areas open to the general public as recorded in the 1993 Lake Tahoe Basin Scenic Resource Evaluation.
173	Built environment (community design)	Scenic Resources	Built Environment	It shall be the policy of the TRPA Governing Body in development of the Regional Plan, in cooperation with local jurisdictions, to insure the height, bulk, texture, form, materials, colors, lighting, signing and other design elements of new, remodeled and redeveloped buildings be compatible with the natural, scenic, and recreational values of the region.

Attachment C.
Proposed reorganization and non-policy technical corrections to Exhibit A of Resolution 82-11.

Attachment C: Proposed reorganization and non-policy technical corrections to Resolution 82-11.

WATER QUALITY

DEEP WATER (PELAGIC) LAKE TAHOE

NUMERICAL STANDARDS

WQ1) The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis.
WQ2) Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.

LITTORAL LAKE TAHOE

NUMERICAL STANDARDS

WQ3) Attain turbidity values not to exceed three NTU.
WQ4) Turbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.
WQ5) Attain 1967-71 mean values for phytoplankton primary productivity in the littoral zone.
WQ6) Attain 1967-71 mean values for periphyton biomass in the littoral zone.

MANAGEMENT STANDARD

WQ7) Support actions to reduce the extent and distribution of excessive periphyton (attached) algae in the nearshore (littoral zone) of Lake Tahoe.

AQUATIC INVASIVE SPECIES

MANAGEMENT STANDARDS

WQ8) Prevent the introduction of new aquatic invasive species into the region's waters.
WQ9) Reduce the abundance of known aquatic invasive species.
WQ10) Reduce the distribution of known aquatic invasive species.
WQ11) Abate harmful ecological impacts resulting from aquatic invasive species.
WQ12) Abate harmful economic impacts resulting from aquatic invasive species.
WQ13) Abate harmful social impacts resulting from aquatic invasive species.
WQ14) Abate harmful public health impacts resulting from aquatic invasive species.

TRIBUTARIES

NUMERICAL STANDARDS

WQ15) Attain applicable state standards for concentrations of dissolved inorganic nitrogen.
WQ16) Attain applicable state standards for concentrations of dissolved phosphorus.
WQ17) Attain applicable state standards for dissolved iron.
WQ18) Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.

SURFACE RUNOFF

NUMERICAL STANDARDS

WQ19) Achieve a 90 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1 in surface runoff directly discharged to a surface water body in the Basin.

WQ20) Achieve a 90 percentile concentration value for dissolved phosphorus of 0.1 mg/1 in surface runoff directly discharged to a surface water body in the Basin.

WQ21) Achieve a 90 percentile concentration value for dissolved iron of 0.5 mg/1 in surface runoff directly discharged to a surface water body in the Basin.

WQ22) Achieve a 90 percentile concentration value for suspended sediment of 250 mg/1 in surface runoff directly discharged to a surface water body in the Basin.

GROUNDWATER

MANAGEMENT STANDARDS

WQ23 - WQ32) Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly.[1]

OTHER LAKES

NUMERICAL STANDARD

WQ33) Attain existing water quality standards.

LOAD REDUCTIONS

MANAGEMENT STANDARDS

WQ34) Reduce fine sediment particle (inorganic particle size < 16 micrometers in diameter) load to achieve long-term pelagic water quality standards (WQ1 and WQ2).

WQ35) Reduce total annual phosphorus load to achieve long-term pelagic water quality standards (WQ1 and WQ2) and littoral quality standards (WQ5 and WQ6).

WQ36) Reduce total annual nitrogen load to achieve long-term pelagic water quality standards (WQ1 and WQ2) and littoral quality standards (WQ5 and WQ6).

WQ37) Decrease total annual suspended sediment load to achieve littoral turbidity standards (WQ3 and WQ4).

WQ38) Reduce the loading of dissolved phosphorus to achieve pelagic water standards (WQ1 and WQ2) and littoral quality standards (WQ5 and WQ6).

WQ39) Reduce the loading of iron to achieve pelagic water standards (WQ1 and WQ2) and littoral quality standards (WQ5 and WQ6).

WQ40) Reduce the loading of other algal nutrients to achieve pelagic water standards (WQ1 and WQ2) and littoral quality standards (WQ5 and WQ6).

WQ41) The most stringent of the three dissolved inorganic nitrogen load reduction targets shall apply:

i. Reduce dissolved inorganic nitrogen loads to pelagic and littoral Lake Tahoe from[2]:

a) surface runoff by approximately 50 percent of the 1973-81 annual average,

[1] See attachment A

[2] This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region

b) groundwater approximately 30 percent of the 1973-81 annual average, and
c) atmospheric sources approximately 20 percent of the 1973-81 annual average.

ii. Reduce dissolved inorganic nitrogen loading to Lake Tahoe from all sources by 25 percent of the 1973-81 annual average.

iii. To achieve littoral water quality standards (WQ5 and WQ6).

POLICY STATEMENT

WQ42) These numeric threshold standards for Pelagic Lake Tahoe are currently being exceeded and will likely continue to be exceeded until full implementation of the pollutant loading reductions prescribed by the Lake Tahoe Total Maximum Daily Load program and implemented by the State of California and Nevada. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.

SOIL CONSERVATION

IMPERVIOUS COVER

MANAGEMENT STANDARDS

SC1-SC9) Impervious cover shall comply with the Land-Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide For Planning, Bailey, 1974[3].

STREAM ENVIRONMENT ZONES

NUMERICAL STANDARDS

SC10) Preserve existing naturally functioning SEZ lands in their natural hydrologic condition.

SC11) Restore all disturbed SEZ lands in undeveloped, unsubdivided lands.

SC12) Restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided.

SC13) Attain a 5 percent total increase in the area of naturally functioning SEZ lands.

AIR QUALITY

CARBON MONOXIDE

NUMERICAL STANDARD

AQ1) Maintain carbon monoxide concentrations at or below 6 parts per million (7 mg/m^3) averaged over 8 hours.

MANAGEMENT STANDARD

AQ2) Reduce traffic volumes on the U.S. 50 Corridor by 7 percent during the winter from the 1981 base year between 4:00 p.m. and 12:00 midnight, provided that those traffic volumes shall be amended as necessary to meet the respective state standards.

OZONE

[3] See attachment B

NUMERICAL STANDARDS

AQ3) Maintain ozone concentrations at or below 0.08 parts per million averaged over 1 hour.

AQ4) Maintain oxides of nitrogen (NOx) emissions at or below the 1981 level.

REGIONAL VISIBILITY[4]

NUMERICAL STANDARDS

AQ5) Achieve an extinction coefficient of 25 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 156 kilometer, 97 miles).

AQ6) Achieve an extinction coefficient of 34 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 115 kilometers, 71 miles).

SUBREGIONAL VISIBILITY[5]

NUMERICAL STANDARDS

AQ7) Achieve an extinction coefficient of 50 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 78 kilometers, 48 miles).

AQ8) Achieve an extinction coefficient of 125 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 31 kilometers, 19 miles).

RESPIRABLE AND FINE PARTICULATE MATTER

NUMERICAL STANDARDS

AQ9) Particulate $Matter_{10}$ 24-hour Standard: Maintain Particulate $Matter_{10}$ at or below 50µg/m^3 measured over a 24-hour period in the portion of the Region within California, and maintain Particulate $Matter_{10}$ at or below 150 µg/m^3 measured over a 24-hour period in the portion of the Region within Nevada. Particulate $Matter_{10}$ measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

AQ10) Particulate $Matter_{10}$ Annual Arithmetic Average - Maintain Particulate $Matter_{10}$ at or below annual arithmetic average of 20µg/m^3 in the portion of the Region within California, and maintain Particulate $Matter_{10}$ at or below annual arithmetic average of 50µg/m^3 in the portion of the Region within Nevada. Particulate $Matter_{10}$ measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

AQ11) Particulate $Matter_{2.5}$ 24-hour Standard - Maintain Particulate $Matter_{2.5}$ at or below 35µg/m^3 measured over a 24-hour period using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

[4] Amended 03/22/00. Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.

[5] Amended 03/22/00. Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.

AQ12) Particulate Matter$_{2.5}$ Annual Arithmetic Average - Maintain Particulate Matter$_{2.5}$ at or below annual arithmetic average of 12µg/m^3 in the portion of the Region within California and maintain Particulate Matter$_{2.5}$ at or below annual arithmetic average of 15µg/m^3 in the portion of the Region within Nevada. Particulate Matter$_{2.5}$ measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

NITRATE DEPOSITION

MANAGEMENT STANDARDS

AQ13) Reduce the transport of nitrates into the Basin and reduce oxides of nitrogen (NOx) produced in the Basin consistent with the water quality thresholds.

AQ14) Reduce vehicle miles of travel in the Basin by 10 percent of the 1981 base year values.

ODOR

POLICY STATEMENT

AQ15) It is the policy of the TRPA Governing Board in the development of the Regional Plan to reduce fumes from diesel engines to the extent possible.

VEGETATION PRESERVATION

COMMON VEGETATION

MANAGEMENT STANDARDS

VP1) A non-degradation standard shall apply to native deciduous trees, wetlands, and meadows to preserve plant communities and significant wildlife habitat, while providing for opportunities to increase the acreage of such riparian associations to be consistent with the SEZ threshold.

VP2) Increase plant and structural diversity of forest communities through appropriate management practices as measured by diversity indices of species richness, relative abundance, and pattern.

VP3) Maintain the existing species richness of the Basin by providing for the perpetuation of the following plant associations:

Yellow Pine Forest: Jeffrey pine, White fir, Incense cedar, Sugar pine.
Red Fir Forest: Red fir, Jeffrey pine, Lodgepole pine, Western white pine, Mountain hemlock, Western juniper.
Subalpine Forest: Whitebark pine, Mountain hemlock, Mountain mahogany.
Shrub Association: Greenleaf and Pinemat manzanita, Tobacco brush, Sierra chinquapin, Huckleberry oak, Mountain whitethorn.
Sagebrush Scrub Vegetation: Basin sagebrush, Bitterbrush, Douglas chaenactis.
Deciduous Riparian: Quaking aspen, Mountain alder, Black cotton-wood, Willow.
Meadow Associations (Wet and Dry Meadow): Mountain squirrel tail, Alpine gentian, Whorled penstemon, Asters, Fescues, Mountain brome, Corn lilies, Mountain bentgrass, Hairgrass, Marsh marigold, Elephant heads, Tinker's penney, Mountain Timothy, Sedges, Rushes, Buttercups.
Wetland Associations (Marsh Vegetation): Pond lilies, Buckbean, Mare's tail, Pondweed, Common bladderwort, Bottle sedge, Common spikerush.
Cushion Plant Association (Alpine Scrub): Alpine phlox, Dwarf ragwort, Draba.

VP4) Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain at least four percent meadow and wetland vegetation.

VP5) Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain at least four percent deciduous riparian vegetation.

VP6) Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain no more than 25 percent dominant shrub association vegetation.

VP7) Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain 15-25 percent of the Yellow Pine Forest in seral stages other than mature.

VP8) Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin: Maintain 15-25 percent of the Red Fir Forest in seral stages other than mature.

VP9) Pattern - Provide for the proper juxtaposition of vegetation communities and age classes by; 1. Limiting acreage size of new forest openings to no more than eight acres

VP10) Pattern –Provide for the proper juxtaposition of vegetation communities and age classes by; 2. Adjacent openings shall not be of the same relative age class or successional stage to avoid uniformity in stand composition and age.

VP11) Native vegetation shall be maintained at a maximum level to be consistent with the limits defined in the Land-Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide For Planning, Bailey, 1974[6], for allowable impervious cover and permanent site disturbance.

POLICY STATEMENT

VP12) It shall be a policy of the TRPA Governing Board that a non-degradation standard shall permit appropriate management practices.

LATE SERAL AND OLD GROWTH FOREST ECOSYSTEMS[7]

NUMERICAL STANDARDS

VP13) Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. Standards VP 14, VP15, and VP16 must be attained to achieve this threshold.

VP14) 61 percent of the Subalpine zone (greater than 8,500 feet elevation) must be in a late seral or old growth condition. The Subalpine zone will contribute 5 percent (7,600 acres) of forested lands towards VP13.

VP15) 60 percent of the Upper Montane zone (between 7,000 and 8,500 feet elevation) must be in a late seral or old growth condition. The Upper Montane zone will contribute 30 percent (45,900 acres) of forested lands towards VP13.

VP16) 48 percent of the Montane zone (lower than 7,000 feet elevation) must be in a late seral or old growth condition; the Montane zone will contribute 20 percent (30,600 acres) of forested lands towards VP13.

UNCOMMON PLANT COMMUNITIES

NUMERICAL STANDARDS

[6] See attachment B

[7] For standards VP13 - VP16: Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation.

VP17-VP18) Provide for the non-degradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to:

VP17) The deep-water plants of Lake Tahoe.
VP18) The Freel Peak Cushion Plant community.

SENSITIVE PLANTS

NUMERICAL STANDARDS

Maintain a minimum number of population sites for each of five sensitive plant species.

VP19) Maintain a minimum of 2 Lewisia pygmaea longipetala population sites.
VP20) Maintain a minimum of 2 Draba asterophora v. macrocarpa population sites.
VP21) Maintain a minimum of 5 Draba asterophora v. asterophora macrocarpa population sites.
VP22) Maintain a minimum of 26 Rorippa subumbellata population sites.
VP23) Maintain a minimum of 7 Arabis rigidissima v. demote population sites.

WILDLIFE

SPECIAL INTEREST SPECIES

NUMERICAL STANDARDS

Provide a minimum number of population sites and disturbance zones for the following species:

Population sites:

W1) Provide a minimum of 12 Goshawk population sites.
W2) Provide a minimum of 4 Osprey population sites.
W3) Provide a minimum of 2 Bald Eagle (Winter) population sites.
W4) Provide a minimum of 1 Bald Eagle (Nesting) population sites.
W5) Provide a minimum of 4 Golden Eagle population sites.
W6) Provide a minimum of 2 Peregrine population sites.
W7) Provide a minimum of 18 Waterfowl population sites.

Disturbance Zones:

W8) Provide disturbance zones in the most suitable 500 acres surrounding nest site including a 0.25 mile buffer centered on nest sites, and influence zones in 3.5 mi for Goshawk.
W9) Provide 0.25 mi disturbance zones and 0.6 mi influence zones for Osprey.
W10) Provide disturbance zones in mapped areas and influence zones in mapped areas for Bald Eagle (Winter).
W11) Provide 0.5 mi disturbance zones and variable influence zones for Bald Eagle (Nesting).
W12) Provide 0.25 mi disturbance zones and 9.0 mi influence zones for Golden Eagle.
W13) Provide 0.25 mi disturbance zones and 7.6 mi influence zones for Peregrine.
W14) Provide disturbance zones in mapped areas and influence zones in mapped areas for Waterfowl.

FISHERIES

STREAM HABITAT

NUMERICAL STANDARDS

F1 -F3) As indicated by the Stream Habitat Quality GIS data, amended May 1997, based upon the re-rated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report, maintain:

F1) 75 miles of excellent stream habitat.
F2) 105 miles of good stream habitat.
F3) 38 miles of marginal stream habitat.

INSTREAM FLOWS

MANAGEMENT STANDARD

F4) Until instream flow standards are established in the Regional Plan to protect fishery values, a non-degradation standard shall apply to instream flows.

POLICY STATEMENT

F5) It shall be a policy of the TRPA Governing Board to seek transfers of existing points of water diversion from streams to Lake Tahoe.

LAHONTAN CUTTHROAT TROUT

POLICY STATEMENT

F6) It shall be the policy of the TRPA Governing Board to support, in response to justifiable evidence, state and federal efforts to reintroduce Lahontan cutthroat trout.

LAKE HABITAT

MANAGEMENT STANDARD

F7) A non-degradation standard shall apply to fish habitat in Lake Tahoe. Achieve the equivalent of 5,948 total acres of excellent habitat as indicated by the Prime Fish Habitat GIS Layer as may be amended based on best available science.

NOISE

SINGLE NOISE EVENTS

NUMERICAL STANDARDS
The following maximum noise levels are allowed. All values are in decibels.

Aircraft measured 6,500 m-start of takeoff roll 2,000 m-runway threshold approach:

N1) 80 dBA - between the hours of 8am and 8pm[8]
N2) 77.1 dBA - between the hours of 8pm and 8am

Watercraft:

[8] The single event noise standard of 80 dBA L_{max} for aircraft departures at Lake Tahoe Airport shall be effective immediately. The single event noise standard of 80 dBA L_{max} for aircraft arrivals at Lake Tahoe Airport is not to be effective until ten years after the adoption of an airport master plan by TRPA. The schedule for phasing in the 80 dBA arrival standard shall be based on a review and consideration of the relevant factors, including best available technology and environmental concerns, and shall maximize the reduction in noise impacts caused by aircraft arrivals while allowing for the continuation of general aviation and commercial service. The beginning arrival standard shall not exceed 84 dBA for general aviation and commuter aircraft, and 86 dBA for transport category aircraft.

N3) Pass-By Test - 82 L_{max} -measured 50ft from engine at 3,000rpm.

N4) Shoreline test - 75 L_{max} - measured with microphone 5 ft. above water, 2 ft., above curve of shore, dock or platform. Watercraft in Lake, no minimum distance.

N5) Stationary Test - 88 dBA L_{max} for boats manufactured before January 1, 1993; Microphone 3.3 feet from exhaust outlet - 5 feet above water.

N6) Stationary Test - 90 dBA L_{max} for boats manufactured after January 1, 1993; Microphone 3.3 feet from exhaust outlet - 5 feet above water.

Motor Vehicles Less Than 6,000 GVW:

N7) 76 dBA – Travelling at speeds less than 35 MPH at a monitoring distance of 50ft

N8) 82 dBA – Travelling at speeds greater than 35 MPH at a monitoring distance of 50ft.

Motor Vehicles Greater Than 6,000 GVW:

N9) 82 dBA – Travelling at speeds less than 35 MPH at a monitoring distance of 50ft.

N10) 86 dBA – Travelling at speeds greater than 35 MPH at a monitoring distance of 50ft.

Motorcycles:

N11) 77 dBA – Travelling at speeds less than 35 MPH at a monitoring distance of 50ft.

N12) 86 dBA – Travelling at speeds greater than 35 MPH at a monitoring distance of 50ft.

Off-Road Vehicles:

N13) 72 dBA – Travelling at speeds less than 35 MPH at a monitoring distance of 50ft.

N14) 86 dBA – Travelling at speeds greater than 35 MPH at a monitoring distance of 50ft.

Snowmobiles:

N15) 82 dBA – Travelling at speeds less than 35 MPH at a monitoring distance of 50ft.

CUMULATIVE NOISE EVENTS

NUMERICAL STANDARDS

Background noise levels shall not exceed the following levels:

N16) 55 dBA CNEL (Average Noise Level) in the High Density Residential Areas Land Use Category.

N17) 50 dBA CNEL (Average Noise Level) in the Low Density Residential Areas Land Use Category.

N18) 60 dBA CNEL (Average Noise Level) in the Hotel/Motel Areas Land Use Category.

N19) 60 dBA CNEL (Average Noise Level)) in the Commercial Areas Land Use Category.

N20) 65 dBA CNEL (Average Noise Level) in the Industrial Areas Land Use Category.

N21) 55 dBA CNEL (Average Noise Level) in the Urban Outdoor Recreation Areas Land Use Category.

N22) 50 dBA CNEL (Average Noise Level) in the Rural Outdoor Recreation Areas Land Use Category.

N23) 45 dBA CNEL (Average Noise Level) in the Wilderness and Roadless Areas Land Use Category.

N24) 45 dBA CNEL (Average Noise Level) in the Critical Wildlife Habitat Areas Land Use Category.

POLICY STATEMENT

N25) It shall be the policy of the TRPA Governing Body in development of the Regional Plan to define, locate, and establish CNEL levels for transportation corridors.

RECREATION

POLICY STATEMENTS

R1) It shall be the policy of the TRPA Governing Body in development of the Regional Plan to preserve and enhance the high quality recreational experience including preservation of high-quality undeveloped shorezone and other natural areas. In developing the Regional Plan, the staff and Governing Body shall consider provisions for additional access, where lawful and feasible, to the shorezone and high quality undeveloped areas for low density recreational uses.

R2) It shall be the policy of the TRPA Governing Body in development of the Regional Plan to establish and ensure a fair share of the total Basin capacity for outdoor recreation is available to the general public.

SCENIC RESOURCES

ROADWAY AND SHORELINE UNITS

NUMERICAL STANDARDS

SR1-SR4) Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in:

SR1) Table 13-3 of the Draft Study Report[9].
SR2) Table 13-5 of the Draft Study Report[10].
SR3) Table 13-8 of the Draft Study Report[11].
SR4) Table 13-9 of the Draft Study Report[12].

SR5-SR8) Maintain the 1982 ratings for all roadway and shoreline units as shown in:

SR5) Table 13-6 of the Draft Study Report[13].
SR6) Table 13-7 of the Draft Study Report[14].
SR7) Restore scenic quality in roadway units rated 15 or below.
SR8) Restore scenic quality in shoreline units rated 7 or below.

OTHER AREAS

NUMERICAL STANDARD

SR9) Maintain or improve the numerical rating assigned to each identified scenic resource, including individual subcomponent numerical ratings, for views from bike paths and other recreation areas open to the general public as recorded in the 1993 Lake Tahoe Basin Scenic Resource Evaluation.

BUILT ENVIRONMENT

[9] See attachment C
[10] See attachment D
[11] See attachment E
[12] See attachment F
[13] See attachment G
[14] See attachment H

POLICY STATEMENT

SR10) It shall be the policy of the TRPA Governing Body in development of the Regional Plan, in cooperation with local jurisdictions, to insure the height, bulk, texture, form, materials, colors, lighting, signing and other design elements of new, remodeled and redeveloped buildings be compatible with the natural, scenic, and recreational values of the region.

82-11 Attachment A. Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982.

WQ23) Surface Discharge: Total Nitrogen Maximum concentration 0.5 mg/l.

WQ24) Surface Discharge: Total phosphate Maximum concentration 0.1 mg/l.

WQ25) Surface Discharge: Total iron Maximum concentration 0.5 mg/l.

WQ26) Surface Discharge: Turbidity Maximum concentration 20 JTU.

WQ27) Surface Discharge: Grease and Oil Maximum concentration 2.0 mg/l.

WQ28) Runoff Discharged to Groundwater: Total Nitrogen Maximum concentration 0.5 mg/l.

WQ29) Runoff Discharged to Groundwater: Total Phosphate Maximum concentration 1 mg/l.

WQ30) Runoff Discharged to Groundwater: Total iron Maximum concentration 4.0 mg/l.

WQ31) Runoff Discharged to Groundwater: Turbidity Maximum concentration 200 JTU.

WQ32) Runoff Discharged to Groundwater: Grease and Oil Maximum concentration 40.0 mg/l.

82-11 Attachment B. Impervious cover shall comply with the Land-Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide For Planning, Bailey, 1974.

SC1) Allowable percent of impervious cover in Land Capability subclass 1a - 1%.

SC2) Allowable percent of impervious cover in Land Capability subclass 1b - 1%.

SC3) Allowable percent of impervious cover in Land Capability subclass 1c - 1%.

SC4) Allowable percent of impervious cover in Land Capability class 2 - 1%.

SC5) Allowable percent of impervious cover in Land Capability class 3 - 5%.

SC6) Allowable percent of impervious cover in Land Capability class 4 - 20%.

SC7) Allowable percent of impervious cover in Land Capability class 5 - 25%.

SC8) Allowable percent of impervious cover in Land Capability class 6 - 30%.

SC9) Allowable percent of impervious cover in Land Capability class 7 - 30%.

82-11 Attachment C. Scenic Resources Inventory Table 13-3 of the Draft Study Report. Criteria and Composite Scenic Quality Ratings for Roadways Units.

Table 13-3. Criteria and Composite Scenic Quality Ratings for Roadway Units

Roadway Unit No.	Roadway Unit Name	Criteria					Composite Total[a]
		Unity	Variety	Vividness	Intactness	Total	
1	Tahoe Valley	2	2	2	1	8	2
2	Camp Richardson	3	3	2	2	10	3
3	Emerald Bay	3+	3+	3	3	12	3+
4	Bliss State Park	3	2	2	3	10	3
5	Rubicon Bay	2	2	2	1	7	2
6	Lonely Gulch	2	2	2	1	7	2
7	Meeks Bay	3	2	3	2	10	3
8	Sugar Pine Point	3	2	3	3	11	3
9	Tahoma	1	1	1	1	4	1
10	Quail Creek	1	2	2	1	6	2
11	Homewood	1	2	2	1	6	2
12	Tahoe Pines	2	3	3	2	10	3
13	Sunnyside	2	3	3	2	10	3
14	Tahoe Tavern	2	1	1	1	5	1
15	Tahoe City	1	2	1	0	4	1
16	Lake Forest	2	2	1	1	6	2
17	Cedar Flat	1	2	2	1	6	2
18	Carnelian Bay	1	2	2	1	6	2
19	Flick Point	2	3	2	1	7	2
20	Tahoe Vista	1	2	2	1	6	2
21	Stateline	2	2	2	0	6	2
22	Crystal Bay	0	2	2	0	4	1
23	Mt. Rose Highway	2	3	3	2	10	3
24	Tahoe Meadow	2	3	3	2	10	3
25	Ponderosa Area	0	2	2	0	4	1
26	Sand Harbor	3+	3+	3	3	12	3+
27	Prey Meadow	3	3	2	3	11	3
28	Spooner Summit	2	2	3	2	9	2
29	Cave Rock	2	3	3	2	10	3
30	Zephyr Cove-Lincoln Park	2	3	3	2	10	3
31	Meadow	2	2	3	0	7	2
32	Casino Area	1	1	1	0	3	1
33	The Strip	0	1	1	0	3	1
34	El Dorado Beach	1	2	2	1	6	2
35	Al Tahoe	0	2	1	0	3	1
36	Airport Area	1	3	2	1	7	2
37	Echo Summit	2	3	3	2	10	3
38	Upper Truckee River	2	3	2	2	9	2
39	Alpine Summit	3+	3	3+	3	12	3+
40	Brockway Cutoff	2	3	2	2	9	2
41	Brockway Summit	2	2	3	2	9	2
42	Outlet	3	3	3	1	10	3
43	Lower Truckee River	3	3	2	2	10	3
44	Kingsbury Grade	2	3	3	1	9	2
45	Pioneer Trail, North	1	2	1	0	4	1
46	Pioneer Trail, South	2	3	2	2	9	2

[a]Total Scores Composite Score
10 – 12 High = 3 High
6 – 9 Moderate = 2 Moderate
1 – 5 Low = 1 Low

82-11 Attachment D. Scenic Resources Inventory Table 13-5 of the Draft Study Report. Criteria and Composite Scenic Quality Ratings for Shoreline Units.

Table 13-5. Criteria and Composite Scenic Quality Ratings for Shoreline Units

Shoreline[a] Unit No.	Shoreline[a] Unit Name	Criteria					Composite Total [b]
		Unity	Variety	Vividness	Intactness	Total	
1	Tahoe Keys	1	2	2	0	5	1
2	Pope Beach	3	2	2	1	9	2
3	Jameson Beach	2	2	2	2	8	3
4	Taylor Creek Meadow	3	2	2	2	10	3
5	Ebrite	2	2	2	2	8	2
6	Emerald Bay	3+	3	3+	3	12	3+
7	Bliss State Park	3	2	3	3	11	3
8	Rubicon Point	3	2	2	3	10	3
9	Rubicon Bay	1	2	1	0	4	1
10	Meeks Bay	3	3	2	2	10	3
11	Sugar Pine Point	2	2	2	3	9	2
12	McKinney Bay	2	3	2	2	9	2
13	Eagle Rock	2	2	2	2	8	2
14	Ward Creek	2	2	2	2	8	2
15	Tahoe City	1	2	1	0	4	1
16	Lake Forest	2	2	2	1	7	2
17	Dollar Point	2	2	2	1	7	2
18	Cedar Flat	2	2	2	1	7	2
19	Carnelian Bay	2	2	2	1	7	2
20	Flick Point	2	3	2	1	8	2
21	Agate Bay	1	3	2	1	7	2
22	Brockway	2	3	2	2	9	2
23	Crystal Bay	2	3	2	2	9	2
24	Sand Harbor	3	3	2	2	10	3
25	Skunk Harbor	2	2	3	2	9	2
26	Cave Rock	2	2	2	2	8	2
27	Lincoln Park	1	2	1	1	5	1
28	Tahoe School	2	2	2	2	8	2
29	Zephyr Cove	2	2	2	2	8	2
30	Edgewood	2	2	2	2	8	2
31	Bijou	2	2	2	1	7	2
32	Al Tahoe	1	1	2	0	4	1
33	Truckee Marsh	2	3	2	3	10	3

[a]Original table incorrectly labeled these columns as "Roadway" units. These have been corrected to be labeled as "Shoreline" units.

[b]Total Scores — Composite Score

10 – 12 High = 3 High

6 – 9 Moderate = 2 Moderate

1 – 5 Low = 1 Low

82-11 Attachment E. Scenic Resources Inventory Table 13-8 of the Draft Study Report. Recommended Scenic Resource Threshold, Roadway Units.

Table 13-8. Recommended Scenic Resource Threshold, Roadway Units

Roadway Unit No.	Roadway Unit Name	Scenic Quality Rating	Sensitivity to Change Rating	Recommended Threshold
1	Tahoe Valley	2	1	3
2	Camp Richardson	3	2	5
3	Emerald Bay	3+	3	6+
4	Bliss State Park	3	1	4
5	Rubicon Bay	2	2	4
6	Lonely Gulch	2	2	4
7	Meeks Bay	3	3	6
8	Sugar Pine Point	3	3	6
9	Tahoma	1	2	3
10	Quail Creek	2	2	4
11	Homewood	2	1	3
12	Tahoe Pines	3	2	5
13	Sunnyside	3	3	6
14	Tahoe Tavern	1	2	3
15	Tahoe City	1	2	3
16	Lake Forest	2	2	4
17	Cedar Flat	2	2	4
18	Carnelian Bay	2	2	4
19	Flick Point	2	2	4
20	Tahoe Vista	2	2	4
21	Stateline	2	3	5
22	Crystal Bay	1	2	3
23	Mt. Rose Highway	3	3	6
24	Tahoe Meadow	3	2	5
25	Ponderosa Area	1	2	3
26	Sand Harbor	3+	3	6+
27	Prey Meadow	3	2	5
28	Spooner Summit	2	2	4
29	Cave Rock	3	3	6
30	Zephyr Cove-Lincoln Park	3	2	5
31	Meadow	2	1	3
32	Casino Area	1	1	2
33	The Strip	1	1	2
34	El Dorado Beach	2	2	4
35	Al Tahoe	1	1	2
36	Airport Area	2	1	3
37	Echo Summit	3	2	5
38	Upper Truckee River	2	2	4
39	Alpine Summit	3+	3	6+
40	Brockway Cutoff	2	1	3
41	Brockway Summit	2	1	3
42	Outlet	3	2	5
43	Lower Truckee River	3	2	5
44	Kingsbury Grade	2	3	5
45	Pioneer Trail, North	1	1	2
46	Pioneer Trail, South	2	2	4

82-11 Attachment F. Scenic Resources Inventory Table 13-9 of the Draft Study Report. Recommended Scenic Resource Threshold, Shoreline Units.

Table 13-9. Recommended Scenic Resource Threshold, Shoreline Units

Shoreline Unit No.	Shoreline Unit Name	Scenic Quality Rating	Sensitivity to Change Rating	Recommended Threshold
1	Tahoe Keys	1	1	2
2	Pope Beach	2	2	4
3	Jameson Beach	3	1	4
4	Taylor Creek Meadow	2	3	6
5	Ebrite	3+	3	5
6	Emerald Bay	3	3+	6+
7	Bliss State Park	3	3+	6+
8	Rubicon Point	1	2	5
9	Rubicon Bay	3	2	3
10	Meeks Bay	2	2	5
11	Sugar Pine Point	2	2	4
12	McKinney Bay	2	1	3
13	Eagle Rock	2	1	3
14	Ward Creek	1	1	3
15	Tahoe City	2	1	2
16	Lake Forest	2	2	4
17	Dollar Point	2	3	5
18	Cedar Flat	2	2	4
19	Carnelian Bay	2	2	4
20	Flick Point	2	2	4
21	Agate Bay	2	1	3
22	Brockway	2	3	5
23	Crystal Bay	3	3	5
24	Sand Harbor	3	3	6
25	Skunk Harbor	2	3	5
26	Cave Rock	2	2	4
27	Lincoln Park	1	2	3
28	Tahoe School	2	1	3
29	Zephyr Cove	2	2	4
30	Edgewood	2	2	4
31	Bijou	2	1	3
32	Al Tahoe	1	1	2
33	Truckee Marsh	3	3	6

82-11 Attachment G. Scenic Resources Inventory Table 13-6 of the Draft Study Report. Roadway Travel Route Ratings, 1971, 1978, and 1982.

Table 13-6. Roadway Travel Route Ratings, 1971, 1978, and 1982

Unit Number	Unit Name	Ratings		
		1971	1978	1982
1	Tahoe Valley	14	11	11
2	Camp Richardson	20	20	20
3	Emerald Bay	27	27	26
4	Bliss State Park	22	22	21
5	Rubicon Bay	23	17	17
6	Lonely Gulch	21	17	17
7	Meeks Bay	12	12	13[a]
8	Sugar Pine Point	23	23	23
9	Tahoma	15	13	13
10	Quail Creek	18	14	14
11	Homewood	14	14	13
12	Tahoe Pines	19	19	17
13	Sunnyside	14	14	14
14	Tahoe Tavern	17	15	13
15	Tahoe City	12	12	12
16	Lake Forest	18	15	13
17	Cedar Flat	18	17	17
18	Carnelian Bay	16	14	14
19	Flick Point	14	14	14
20	Tahoe Vista	14	11	10
21	Stateline	21	21	20
22	Crystal Bay	21	15	12
23	Mt. Rose Highway	27	27	25
24	Tahoe Meadow	26	26	26
25	Ponderosa Area	12	12	12
26	Sand Harbor	27	27	26
27	Prey Meadow	27	27	27
28	Spooner Summit	16	16	16
29	Cave Rock	24	24	23
30	Zephyr Cove-Lincoln Park	19	19	18
31	Meadow	18	14	14
32	Casino Area	15	10	13[a]
33	The Strip	9	6	6
34	El Dorado Beach	16	16	16
35	Al Tahoe	10	6	7[a]
36	Airport Area	15	15	15
37	Echo Summit	26	26	26
38	Upper Truckee River	18	18	18
39	Alpine Summit	24	24	24
40	Brockway Cutoff	15	15	15
41	Brockway Summit	21	21	21
42	Outlet	10	10	10
43	Lower Truckee River	20	20	20
44	Kingsbury Grade	-	-	13
45	Pioneer Trail, North	-	-	10
46	Pioneer Trail, South	-	-	20

[a]Indicates Improvement

82-11 Attachment H. Scenic Resources Inventory Table 13-7 of the Draft Study Report. Shoreline Travel Route Ratings, 1971 and 1982.

Table 13-7. Shoreline Travel Route Ratings, 1971 and 1982

Shoreline Unit No.	Shoreline Unit Name	Ratings	
		1971	1982
1	Tahoe Keys	11	9
2	Pope Beach	9	8
3	Jameson Beach	8	8
4	Taylor Creek Meadow	13	13
5	Ebrite	9	9
6	Emerald Bay	13	12
7	Bliss State Park	12	12
8	Rubicon Point	13	12
9	Rubicon Bay	6	6
10	Meeks Bay	9	9
11	Sugar Pine Point	11	11
12	McKinney Bay	9	9
13	Eagle Rock	12	11
14	Ward Creek	10	10
15	Tahoe City	5	5
16	Lake Forest	6	5
17	Dollar Point	11	10
18	Cedar Flat	9	8
19	Carnelian Bay	5	5
20	Flick Point	9	8
21	Agate Bay	8	8
22	Brockway	11	10
23	Crystal Bay	12	11
24	Sand Harbor	12	12
25	Skunk Harbor	13	13
26	Cave Rock	12	10
27	Lincoln Park	10	8
28	Tahoe School	12	11
29	Zephyr Cove	10	9
30	Edgewood	11	11
31	Bijou	9	9
32	Al Tahoe	10	9
33	Truckee Marsh	14	14

Attachment D.
Bridge between Resolution 82-11 as amended December 12, 2012 and the proposed technical corrections.

Attachment D: Bridge between all threshold standards adopted in Resolution 82-11 as amended December 12, 2012, and the proposed reorganization with technical corrections found in attachment C.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
1	WQ34	Reduce fine sediment particles	Water Quality	Deep Water (Pelagic) Lake Tahoe	**Reduce fine sediment particles** (inorganic particle size < 16 micrometers in diameter), total phosphorus, and total nitrogen in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe: · The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis. · Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.	No proposed change.
2	WQ35	Total phosphorus	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce fine sediment particles (inorganic particle size < 16 micrometers in diameter), **total phosphorus**, and total nitrogen in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe: · The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis. · Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.	Combined to address competing target and indirect overlap.
3	WQ36	Total nitrogen	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce fine sediment particles (inorganic particle size < 16 micrometers in diameter), total phosphorus, and **total nitrogen** in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe: · The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis. · Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.	Combined to address competing target and indirect overlap.
4	WQ1	Secchi disk	Water Quality	Deep Water (Pelagic) Lake Tahoe	The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis	No proposed change.
5	WQ2	Phytoplankton primary productivity	Water Quality	Deep Water (Pelagic) Lake Tahoe	Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.	No proposed change.
6	WQ42	Recognition of Threshold Standard Exceedance	Water Quality	Deep Water (Pelagic) Lake Tahoe	These numeric threshold standards for Pelagic Lake Tahoe are currently being exceeded and will likely continue to be exceeded until full implementation of the pollutant loading reductions prescribed by the Lake Tahoe Total Maximum Daily Load program and implemented by the State of California and Nevada. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region	No proposed change.
7	WQ38	Dissolved phosphorus	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce the loading of **dissolved phosphorus**, iron, and other algal nutrients from all sources as required to achieve ambient standards for primary productivity and transparency.	Combined to address competing target and indirect overlap.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
8	WQ39	Iron	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce the loading of dissolved phosphorus, **iron**, and other algal nutrients from all sources as required to achieve ambient standards for primary productivity and transparency.	Combined to address competing target and indirect overlap.
9	WQ40	Other algal nutrients	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce the loading of dissolved phosphorus, iron, and other **algal nutrients** from all sources as required to achieve ambient standards for primary productivity and transparency.	Combined to address competing target.
10	WQ41	Pelagic nitrogen loading surface runoff	Water Quality	Deep Water (Pelagic) Lake Tahoe	**Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent**, from groundwater approximately 30 percent, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Combined to address competing target and complete overlap.
11	WQ41	Pelagic nitrogen loading groundwater	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, **from groundwater approximately 30 percent**, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Combined to address competing target and complete overlap.
12	WQ41	Pelagic nitrogen loading atmospheric sources	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, from groundwater approximately 30 percent, a**nd from atmospheric sources approximately 20 percent of the 1973-81 annual average**. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Combined to address competing target and complete overlap.
13	WQ41	Littoral total dissolved inorganic nitrogen (DIN) loading	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce dissolved inorganic nitrogen loading to Lake Tahoe from all sources by 25 percent of the 1973-81 annual average.	Combined to address competing overlap and indirect overlap.
14	WQ41	Littoral nitrogen loading surface runoff	Water Quality	Nearshore (Littoral) Lake Tahoe	**Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent**, from groundwater approximately 30 percent, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Combined to address competing target and complete overlap.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
15	WQ41	Littoral nitrogen loading groundwater	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, **from groundwater approximately 30 percent**, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Combined to address competing target and complete overlap.
16	WQ41	Littoral nitrogen loading atmospheric sources	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, from groundwater approximately 30 percent, a**nd from atmospheric sources approximately 20 percent of the 1973-81 annual average**. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Combined to address competing target and complete overlap.
17	WQ37	Decrease sediment load	Water Quality	Nearshore (Littoral) Lake Tahoe	**Decrease sediment load as required** to attain turbidity values not to exceed three NTU. In addition, turbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.	No proposed change.
18	WQ3	Nearshore Turbidity (Stream Influence)	Water Quality	Nearshore (Littoral) Lake Tahoe	Decrease sediment load as required to **attain turbidity values not to exceed three NTU**. In addition, turbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.	No proposed change.
19	WQ4	Nearshore Turbidity (No Stream Influence)	Water Quality	Nearshore (Littoral) Lake Tahoe	Decrease sediment load as required to attain turbidity values not to exceed three NTU. In addition, t**urbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.**	No proposed change.
20	WQ41	Littoral nitrogen loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	**Reduce the loading of dissolved inorganic nitrogen**, dissolved phosphorus, iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.	Combined to address competing target and complete overlap.
21	WQ38	Littoral phosphorus loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, **dissolved phosphorus,** iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.	Combined to address competing target and complete overlap.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
22	WQ39	Littoral iron loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, **iron**, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.	Combined to address competing target and complete overlap.
23	WQ40	Littoral other algal nutrients loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and **other algal nutrients** from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.	Combined to address competing target and complete overlap.
24	WQ5	nearshore phytoplankton primary productivity	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and other algal nutrients from all sources to m**eet the 1967-71 mean values for phytoplankton primary productivity** and periphyton biomass in the littoral zone.	No proposed change.
25	WQ6	nearshore periphyton biomass	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and **periphyton biomass in the littoral zone.**	No proposed change.
26	WQ7	Nearshore Attached Algae	Water Quality	Nearshore (Littoral) Lake Tahoe	Support actions to reduce the extent and distribution of excessive periphyton (attached) algae in the nearshore (littoral zone) of Lake Tahoe.	No proposed change.
27	WQ8	Aquatic Invasive Species Prevention	Water Quality	Aquatic Invasive Species	**Prevent the introduction of new aquatic invasive species into the region's waters** 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.	No proposed change.
28	WQ9	Aquatic Invasive Species Abundance	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.	No proposed change.
29	WQ10	Aquatic Invasive Species Distribution	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.	No proposed change.
30	WQ11	Aquatic Invasive Species Ecological Impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.	No proposed change.
31	WQ12	Aquatic Invasive Species Social Impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
32	WQ13	Aquatic Invasive Species Economic Impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.	No proposed change.
33	WQ14	Aquatic Invasive Species Public Health Impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.	No proposed change.
34	WQ15	Nitrogen Concentration (Tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of **dissolved in organic nitrogen**, dissolved phosphorus, and dissolved iron. Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.	No proposed change.
35	WQ16	Phosphorus Concentration (Tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of dissolved in organic nitrogen, **dissolved phosphorus**, and dissolved iron. Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.	No proposed change.
36	WQ17	Iron Concentration (Tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of dissolved in organic nitrogen, dissolved phosphorus, and **dissolved iron.** Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.	No proposed change.
37	WQ18	Suspended Sediment Concentration (Tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of dissolved in organic nitrogen, dissolved phosphorus, and dissolved iron. **Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.**	No proposed change.
38	WQ35,WQ36,WQ38,WQ39, WQ40,WQ41	Nutrient load (tributaries)	Water Quality	Tributaries	**Reduce total annual nutrient** and suspended sediment load to achieve loading thresholds for littoral and pelagic Lake Tahoe.	Combined to address competing target and complete overlap.
39	WQ37	Suspended sediment Load (tributaries)	Water Quality	Tributaries	Reduce total annual nutrient **and suspended sediment load** to achieve loading thresholds for littoral and pelagic Lake Tahoe.	Combined to address competing target and complete overlap.
40	WQ19	Nitrogen Concentration (Surface Runoff)	Water Quality	Surface Runoff	Achieve a 9**0 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1**, for dissolved phosphorus of 0.1 mg/1, and for dissolved iron of 0.5 mg/1 in surface runoff directly discharged to a surface water body in the Basin.	No proposed change.
41	WQ20	Phosphorus Concentration (Surface Runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1, for **dissolved phosphorus of 0.1 mg/1**, and for dissolved iron of 0.5 mg/1 in surface runoff directly discharged to a surface water body in the Basin.	No proposed change.
42	WQ21	Iron Concentration (Surface Runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1, for dissolved phosphorus of 0.1 mg/1, and **for dissolved iron of 0.5 mg/1 i**n surface runoff directly discharged to a surface water body in the Basin.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
43	WQ22	Suspended Sediment Concentration (Surface Runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for suspended sediment of 250 mg/1.	No proposed change.
44	WQ34, WQ35,WQ36,WQ38,WQ39, WQ40,WQ41	Total nutrients (surface runoff)	Water Quality	Surface Runoff	**Reduce total annual nutrient** and suspended sediment loads as necessary to achieve loading thresholds for tributaries and littoral and pelagic Lake Tahoe.	Combined to address competing target and complete overlap.
45	WQ34,37	Suspended sediment (surface runoff)	Water Quality	Surface Runoff	Reduce total annual nutrient and **suspended sediment loads** as necessary to achieve loading thresholds for tributaries and littoral and pelagic Lake Tahoe.	Combined to address competing target and complete overlap.
46	WQ23	Surface Discharge - Total Nitrogen	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Total Nitrogen Maximum concentration 0.5 mg/l	No proposed change.
47	WQ24	Surface Discharge - Total Phosphate	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Total phosphate Maximum concentration 0.1 mg/l	No proposed change.
48	WQ25	Surface Discharge - Iron	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Total iron Maximum concentration 0.5 mg/l	No proposed change.
49	WQ26	Surface Discharge - Turbidity	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Turbidity Maximum concentration 20 JTU	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
50	WQ27	Surface Discharge - Grease And Oil	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Grease And Oil Maximum concentration 2.0 mg/l	No proposed change.
51	WQ28	Discharge To Groundwater - Total Nitrogen	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Total Nitrogen Maximum concentration 0.5 mg/l	No proposed change.
52	WQ29	Discharge To Groundwater - Total Phosphate	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Total Phosphate Maximum concentration 1 mg/l	No proposed change.
53	WQ30	Discharge To Groundwater - Iron	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Total iron Maximum concentration 4.0 mg/l	No proposed change.
54	WQ31	Discharge To Groundwater - Turbidity	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Turbidity Maximum concentration 200 JTU	No proposed change.
55	WQ32	Discharge To Groundwater- Grease And Oil	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Grease And Oil Maximum concentration 40.0 mg/l	No proposed change.
56	WQ33	Attain existing water quality standards.	Water Quality	Other Lakes	Attain existing water quality standards.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
57	SC1	Percent of Land Coverage Within Land Capability Class 1a (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage – Class 1a (1%)	No proposed change.
58	SC2	Percent of Land Coverage Within Land Capability Class 1b (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 1b (1%)	No proposed change.
59	SC3	Percent of Land Coverage Within Land Capability Class 1c (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 1c (1%)	No proposed change.
60	SC4	Percent of Land Coverage Within Land Capability Class 2 (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 2 (1%)	No proposed change.
61	SC5	Percent of Land Coverage Within Land Capability Class 3 (allow up to 5% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 3 (5%)	No proposed change.
62	SC6	Percent of Land Coverage Within Land Capability Class 4 (allow up to 20% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 4 (20%)	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
63	SC7	Percent of Land Coverage Within Land Capability Class 5 (allow up to 25% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 5 (25%)	No proposed change.
64	SC8	Percent of Land Coverage Within Land Capability Class 6 (allow up to 30% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 6 (30%)	No proposed change.
65	SC9	Percent of Land Coverage Within Land Capability Class 7 (allow up to 30% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 7 (30%)	No proposed change.
66	SC10	Preserve Stream Environment Zone (SEZ) Function	Soil Conservation	Stream Environment Zone	**Preserve existing naturally functioning SEZ lands in their natural hydrologic condition**, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, to attain a 5 percent total increase in the area of naturally functioning SEZ lands.	No proposed change.
67	SC11	Restore undeveloped SEZ	Soil Conservation	Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, **restore all disturbed SEZ lands in undeveloped, unsubdivided lands**, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, to attain a 5 percent total increase in the area of naturally functioning SEZ lands.	No proposed change.
68	SC12	Restore 25% disturbed SEZ	Soil Conservation	Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and **restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided,** to attain a 5 percent total increase in the area of naturally functioning SEZ lands.	No proposed change.
69	SC13	5% increase SEZ function	Soil Conservation	Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, **to attain a 5 percent total increase in the area of naturally functioning SEZ lands.**	No proposed change.
70	AQ1	Highest 8-Hour Average Concentration of Carbon Monoxide	Air Quality	Carbon Monoxide (CO)	Maintain carbon monoxide concentrations at or below 6 parts per million (7 mg/m3) averaged over 8 hours.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
71	AQ2	Average Daily Winter Traffic Volume, Presidents' Weekend	Air Quality	Carbon Monoxide (CO)	Reduce traffic volumes on the U.S. 50 Corridor by 7 percent during the winter from the 1981 base year between 4:00 p.m. and 12:00 midnight, provided that those traffic volumes shall be amended as necessary to meet the respective state standards.	No proposed change.
72	AQ3	Highest 1-Hour Average Concentration of Ozone	Air Quality	Ozone (O_3)	Maintain ozone concentrations at or below 0.08 parts per million averaged over 1 hour.	No proposed change.
73	AQ4	Oxides Of Nitrogen Emissions	Air Quality	Ozone (O_3)	Maintain oxides of nitrogen (NO_x) emissions at or below the 1981 level.	No proposed change.
74	AQ5	Regional Visibility 50th Percentile ("Average Visibility Days") Bliss State Park	Air Quality	Regional Visibility	Achieve an extinction coefficient of 25 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 156 km, 97 miles); Calculations will be made on three year running periods using the existing 1991-1993 monitoring data as the performance standards to be met or exceeded.	No proposed change.
75	AQ6	Regional Visibility 90th Percentile ("Worst Visibility Days") Bliss State Park	Air Quality	Regional Visibility	Achieve an extinction coefficient of 34 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 115 km, 71 miles). Calculations will be made on three year running periods using the existing 1991-1993 monitoring data as the performance standards to be met or exceeded.	No proposed change.
76	AQ7	Sub-Regional Visibility 50th Percentile ("Average Visibility Days") South Lake	Air Quality	Sub-Regional Visibility	Achieve an extinction coefficient of 50 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 78 km, 48 miles); Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.)	No proposed change.
77	AQ8	Sub-Regional Visibility 90th Percentile ("Worst Visibility Days") South Lake	Air Quality	Sub-Regional Visibility	Achieve an extinction coefficient of 125 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 31 km, 19 miles). Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.)	No proposed change.
78	AQ9	Highest 24-Hour Average PM10 Concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter10 at or below 50µg/m3measured over a 24-hour period in the portion of the Region within California, and maintain Particulate Matter10 at or below 150 µg/m3 measured over a 24-hour period in the portion of the Region within Nevada. Particulate Matter10 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
79	AQ10	Annual Average PM10 Concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter10 at or below annual arithmetic average of 20µg/m3 in the portion of the Region within California, and maintain Particulate Matter10 at or below annual arithmetic average of 50µg/m3 in the portion of the Region within Nevada. Particulate Matter10 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.	No proposed change.
80	AQ11	24-Hour PM2.5 Concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter2.5 at or below 35µg/m3 measured over a 24-hour period using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.	No proposed change.
81	AQ12	Annual Average PM2.5 Concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter2.5 at or below annual arithmetic average of 12µg/m3 in the portion of the Region within California and maintain Particulate Matter2.5 at or below annual arithmetic average of 15µg/m3 in the portion of the Region within Nevada. Particulate Matter2.5 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.	No proposed change.
82	AQ13	Reduce Generation and Transport of Nitrate to Achieve Water Quality Standards	Air Quality	Nitrate Deposition	Reduce the transport of nitrates into the Basin and reduce oxides of nitrogen (NOx) produced in the Basin consistent with the water quality thresholds.	No proposed change.
83	AQ14	Vehicle Miles Traveled	Air Quality	Nitrate Deposition	Reduce vehicle miles of travel in the Basin by 10% of the 1981 base year values	No proposed change.
84	AQ15	Odor - Reduce Diesel Engine Fumes	Air Quality	Odor	It is the policy of the TRPA Governing Board in the development of the Regional Plan to reduce fumes from diesel engines to the extent possible.	No proposed change.
85	VP2	Increase plant and structural diversity	Vegetation	Common Vegetation	Increase plant and structural diversity of forest communities through appropriate management practices as measured by diversity indices of species richness, relative abundance, and pattern.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
86	VP3	Vegetation Community Richness	Vegetation	Common Vegetation	Maintain the existing species richness of the Basin by providing for the perpetuation of the following plant associations: Yellow Pine Forest: Jeffrey pine, White fir, Incense cedar, Sugar pine. Red Fir Forest: Red fir, Jeffrey pine, Lodgepole pine, Western white pine, Mountain hemlock, Western juniper. Subalpine Forest: Whitebark pine, Mountain hemlock, Mountain mahogany. Shrub Association: Greenleaf and Pinemat manzanita, Tobacco brush, Sierra chinquapin, Huckleberry oak, Mountain whitethorn. Sagebrush Scrub Vegetation: Basin sagebrush, Bitterbrush, Douglas chaenactis. Deciduous Riparian: Quaking aspen, Mountain alder, Black cotton-wood, Willow. Meadow Associations (Wet and Dry Meadow): Mountain squirrel tail, Alpine gentian, Whorled penstemon, Asters, Fescues, Mountain brome, Corn lilies, Mountain bentgrass, Hairgrass, Marsh marigold, Elephant heads, Tinker's penney, Mountain Timothy, Sedges, Rushes, Buttercups. Wetland Associations (Marsh Vegetation): Pond lilies, Buckbean, Mare's tail, Pondweed, Common bladderwort, Bottle sedge, Common spikerush. Cushion Plant Association (Alpine Scrub): Alpine phlox, Dwarf ragwort, Draba.	No proposed change.
87	VP4	Relative Abundance of Meadows And Wetland Vegetation Types	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain at least four percent meadow and wetland vegetation.	No proposed change.
88	VP5	Relative Abundance of Deciduous Riparian Vegetation	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain at least four percent deciduous riparian vegetation.	No proposed change.
89	VP6	Relative Abundance of Shrub Vegetation Type	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain no more than 25 percent dominant shrub association vegetation.	No proposed change.
90	VP7	Relative Abundance of Yellow Pine Forest In Seral Stages Other Than Mature	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain 15-25 percent of the Yellow Pine Forest in seral stages other than mature.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
91	VP8	Relative Abundance of Red Fir Forest In Seral Stages Other Than Mature	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain 15-25 percent of the Red Fir Forest in seral stages other than mature.	No proposed change.
92	VP9	Pattern: Limit Size Of New Forest Openings	Vegetation	Common Vegetation	Pattern - Provide for the proper juxtaposition of vegetation communities and age classes by; 1. Limiting acreage size of new forest openings to no more than eight acres	No proposed change.
93	VP10	Pattern: Stand Composition And Age	Vegetation	Common Vegetation	Pattern - Provide for the proper juxtaposition of vegetation communities and age classes by; 2. Adjacent openings shall not be of the same relative age class or successional stage to avoid uniformity in stand composition and age.	No proposed change.
94	VP1	Non-degradation of stream environment zones	Vegetation	Common Vegetation	A nondegradation standard to preserve plant communities shall apply to native deciduous trees, wetlands, and meadows while providing for opportunities to increase the acreage of such riparian associations to be consistent with the SEZ threshold.	Wholly encompassed standards incorpated into single nondegredation standard for deciduous trees, wetlands, and meadows (VP1).
95	VP11	Consistency with Bailey Land Capability System	Vegetation	Common Vegetation	Native vegetation shall be maintained at a maximum level to be consistent with the limits defined in the Land Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide For Planning, Bailey, 1974, for allowable impervious cover and permanent site disturbance.	No proposed change.
96	VP12	Appropriate Management Practices	Vegetation	Common Vegetation	It shall be a policy of the TRPA Governing Board that a nondegradation standard shall permit appropriate management practices.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
97	VP13	Total Old growth	Vegetation	Late Seral/ Old growth Ecosystems	**Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition**, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: · The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands; · The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands; · The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands. Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: · 61 percent of the Subalpine zone must be in a late seral or old growth condition; · 60 percent of the Upper Montane zone must be in a late seral or old growth condition; · 48 percent of the Montane zone must be in a late seral or old growth condition;	No proposed change.
98	VP14	Sub-Alpine old growth	Vegetation	Late Seral/ Old growth Ecosystems	Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: **· The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands;** · The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands; · The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands. Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: **· 61 percent of the Subalpine zone must be in a late seral or old growth condition;** · 60 percent of the Upper Montane zone must be in a late seral or old growth condition; · 48 percent of the Montane zone must be in a late seral or old growth condition;	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
99	VP15	Upper Montane old growth	Vegetation	Late Seral/ Old growth Ecosystems	Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: · The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands; **· The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands;** · The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands. Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: · 61 percent of the Subalpine zone must be in a late seral or old growth condition; **· 60 percent of the Upper Montane zone must be in a late seral or old growth condition;** · 48 percent of the Montane zone must be in a late seral or old growth condition;	No proposed change.
100	VP16	Montane old growth	Vegetation	Late Seral/ Old growth Ecosystems	Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: · The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands; · The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands; **· The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands.** Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: · 61 percent of the Subalpine zone must be in a late seral or old growth condition; · 60 percent of the Upper Montane zone must be in a late seral or old growth condition; **· 48 percent of the Montane zone must be in a late seral or old growth condition**;	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
101	VP17	Deepwater Plants of Lake Tahoe	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (**1) the deepwater plants of Lake Tahoe**, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.	No proposed change.
102	VP1	Grass Lake (sphagnum fen)	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, **(2) Grass Lake (sphagnum bog)**, (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.	Wholly encompassed standards incorpated into single nondegredation standard for deciduous trees, wetlands, and meadows (VP1).
103	VP1	Osgood Swamp	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), **(3) Osgood swamp**, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.	Wholly encompassed standards incorpated into single nondegredation standard for deciduous trees, wetlands, and meadows (VP1).
104	VP18	Freel Peak Cushion Plant Community	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, **(4) the Freel Peak Cushion Plant community**, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.	No proposed change.
105	VP1	Taylor Creek Marsh	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, **(5) Taylor Creek Marsh**, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.	Wholly encompassed standards incorpated into single nondegredation standard for deciduous trees, wetlands, and meadows (VP1).

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
106	VP1	Pope Marsh	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (**6) Pope Marsh**, (7) Upper Truckee Marsh, and (8) Hell Hole.	Wholly encompassed standards incorpated into single nondegredation standard for deciduous trees, wetlands, and meadows (VP1).
107	VP1	Upper Truckee Marsh	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, **(7) Upper Truckee Marsh**, and (8) Hell Hole.	Wholly encompassed standards incorpated into single nondegredation standard for deciduous trees, wetlands, and meadows (VP1).
108	VP1	Hell Hole (sphagnum fen)	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and **(8) Hell Hole**.	Wholly encompassed standards incorpated into single nondegredation standard for deciduous trees, wetlands, and meadows (VP1).
109	VP19	Long-Petaled Lewisia (Lewisia pygmaea longipetala)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Lewisia pygmaea longipetala- 2	No proposed change.
110	VP20	Cup Lake Draba (Draba asterophora var. macrocarpa)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Draba asterophora v. macrocarpa - 2	No proposed change.
111	VP21	Tahoe Draba (Draba asterophora var. asterophora)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Draba asterophora v. asterophora - 5	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
112	VP22	Tahoe Yellow Cress (Rorippa Subumbellata)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Rorippa subumbellata - 5	No proposed change.
113	VP23	Galena Rock Cress - Arabis Rigidissima V. Demote	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Arabis rigidissima v. demote - 7	No proposed change.
114	W1	Northern Goshawk Population Sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Goshawk (12 population sites)	No proposed change.
115	W2	Osprey population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Osprey (4 population sites)	No proposed change.
116	W3	Wintering Bald Eagle Population Sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Wintering (2 population sites)	No proposed change.
117	W4	Nesting Bald Eagle Population Sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Nesting (1 population site)	No proposed change.
118	W5	Golden Eagle population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Golden Eagle (4 population sites)	No proposed change.
119	W6	Peregrine Falcon Population Sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Peregrine (2 population sites)	No proposed change.
120	W7	Waterfowl population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Waterfowl (18 population sites)	No proposed change.
121	W8	Northern Goshawk Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Goshawk Disturbance zone (mi.): (Most suitable 500 acres surrounding nest site including a 0.25 mile buffer centered on nestsites), Influence zone (mi.): 3.5	No proposed change.
122	W9	Osprey Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species:Osprey Disturbance zone (mi.): (0.25), Influence zone (mi.): 0.6	No proposed change.
123	W10	Wintering Bald Eagle Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species:Bald Eagle Wintering Disturbance zone (mi.): (mapped areas), Influence zone (mi.): Mapped areas	No proposed change.
124	W11	Nesting Bald Eagle Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Nesting -Disturbance zone (mi.): (0.5) Influence zone (mi.): Variable	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
125	W12	Golden Eagle Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Golden Eagle- Disturbance zone (mi.): (0.25), Influence zone (mi.): 9.0	No proposed change.
126	W13	Peregrine Falcon Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Peregrine- Disturbance zone (mi.): (0.25), Influence zone (mi.): 7.6	No proposed change.
127	W14	Waterfowl Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Waterfowl- Disturbance zone (mi.): (mapped areas), Influence zone (mi.): Mapped areas	No proposed change.
128	VP1	Deer disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Deer Disturbance zone (mi.): Meadows, Influence zone (mi.): Mapped areas	Wholly encompassed standards incorpated into single nondegredation standard for deciduous trees, wetlands, and meadows (VP1).
129	VP1	Riparian habitat	Wildlife	Habitats of Special Significance	A nondegradation standard shall apply to significant wildlife habitat consisting of deciduous trees, wetlands, and meadows while providing for opportunities to increase the acreage of such riparian associations.	Wholly encompassed standards incorpated into single nondegredation standard for deciduous trees, wetlands, and meadows (VP1).
130	F1	Miles of Stream Habitat in Excellent Stream Condition	Fisheries	Stream Habitat	**Maintain the 75 miles of excellen**t, 105 miles of good, and 38 miles of marginal stream habitat as indicated by the §Stream Habitat Quality Overlay map, amended May 1997, based upon the rerated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.	No proposed change.
131	F2	Miles of Stream Habitat in Good Condition	Fisheries	Stream Habitat	Maintain the 75 miles of excellent, **105 miles of good**, and 38 miles of marginal stream habitat as indicated by the §Stream Habitat Quality Overlay map, amended May 1997, based upon the rerated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.	No proposed change.
132	F3	Miles of Stream Habitat in Marginal Condition	Fisheries	Stream Habitat	Maintain the 75 miles of excellent, 105 miles of good, and **38 miles of marginal stream habita**t as indicated by the §Stream Habitat Quality Overlay map, amended May 1997, based upon the rerated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
133	F4	Non-Degradation Standard for Instream Flow	Fisheries	Instream Flow	Until instream flow standards are established in the Regional Plan to protect fishery values, a nondegradation standard shall apply to instream flows.	No proposed change.
134	F5	Divert Stream Intakes to Lake Sources	Fisheries	Instream Flow	It shall be a policy of the TRPA Governing Board to seek transfers of existing points of water diversion from streams to Lake Tahoe.	No proposed change.
135	F6	Lahontan Cutthroat Trout	Fisheries	Lahontan Cutthroat Trout	It shall be the policy of the TRPA Governing Board to support, in response to justifiable evidence, state and federal efforts to reintroduce Lahontan cutthroat trout.	No proposed change.
136	F7	Acres of "Prime" Fish Habitat	Fisheries	Lake Habitat	A nondegradation standard shall apply to fish habitat in Lake Tahoe. Achieve the equivalent of 5,948 total acres of excellent habitat §as indicated by the Prime Fish Habitat Overlay Map as may be amended based on best available science.	No proposed change.
137	N1	Aircraft Noise Departure/Arrival (8am to 8pm)	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Overall 80 dBA. The single event noise standard of 80 dBA Lmax for aircraft departures at Lake Tahoe Airport shall be effective immediately. The single event noise standard of 80 dBA Lmax for aircraft arrivals at Lake Tahoe Airport is not to be effective until ten years after the adoption of an airport master plan by TRPA. The schedule for phasing in the 80 dBA arrival standard shall be based on a review and consideration of the relevant factors, including best available technology and environmental concerns, and shall maximize the reduction in noise impacts caused by aircraft arrivals while allowing for the continuation of general aviation and commercial service. The beginning arrival standard shall not exceed 84 dBA for general aviation and commuter aircraft, and 86 dBA for transport category aircraft.	No proposed change.
138	N2	Aircraft Noise Departure/Arrival (8pm to 8am)	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. 77.1 dBA. Between the hours of 8 p.m. and 8 a.m.	No proposed change.
139	N3	Watercraft-Pass By Test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Watercraft Pass-By Test 82. Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.	No proposed change.
140	N4	Watercraft-Shoreline Test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Shoreline Test 75 Lmax. Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.	No proposed change.
141	N5	Pre-1993 Watercraft-Stationary Test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Stationary Test 88 dBA Lmax for boats manufactured before January 1, 1993; Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.	No proposed change.
142	N6	Post 1992 Watercraft-Stationary Test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Stationary Test 90 dBA Lmax for boats manufactured after January 1, 1993; Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.	No proposed change.
143	N7	Motor Vehicles Less than 6,000 GV for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motor Vehicles Less Than 6,000 GVW, Less Than 35 MPH: 76 dBa	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
144	N8	Motor Vehicles Less Than 6,000 GVW for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motor Vehicles Less Than 6,000 GVW, Greater Than 35 MPH: 82 dBa	No proposed change.
145	N9	Motor Vehicles Greater than 6,000 GVW for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motor Vehicles Greater Than 6,000 GVW, Less Than 35 MPH: 82 dBa	No proposed change.
146	N10	Motor Vehicles Greater than 6,000 GVW for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motor Vehicles Greater Than 6,000 GVW, Greater Than 35 MPH: 86 dBa	No proposed change.
147	N11	Motorcycles for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motorcycles, Greater Than 35 MPH: 77 dBa	No proposed change.
148	N12	Motorcycles for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motorcycles, Greater Than 35 MPH: 86 dBa	No proposed change.
149	N13	Off-Road Vehicles for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Off-Road Vehicles, Greater Than 35 MPH: 72 dBa	No proposed change.
150	N14	Off-Road Vehicles for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Off-Road Vehicles, Greater Than 35 MPH: 86 dBa	No proposed change.
151	N15	Snowmobiles	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Snowmobiles, Greater Than 35 MPH: 82 dBa	No proposed change.
152	N16	High Density Residential Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: High Density Residential Areas, Average Noise Level Or CNEL range (dBA) : 55	No proposed change.
153	N17	Low Density Residential Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Low Density Residential Areas, Average Noise Level Or CNEL range (dBA) : 50	No proposed change.
154	N18	Hotel/Motel Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Hotel/Motel Areas, Average Noise Level Or CNEL range (dBA) : 60	No proposed change.
155	N19	Commercial Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Commercial Areas, Average Noise Level Or CNEL range (dBA) : 60	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
156	N20	Industrial Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Industrial Areas, Average Noise Level Or CNEL range (dBA) : 65	No proposed change.
157	N21	Urban Outdoor Recreation Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Urban Outdoor Recreation Areas, Average Noise Level Or CNEL range (dBA) : 55	No proposed change.
158	N22	Rural Outdoor Recreation Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Rural Outdoor Recreation Areas, Average Noise Level Or CNEL range (dBA) : 50	No proposed change.
159	N23	Wilderness and Roadless Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Wilderness and Roadless Areas, Average Noise Level Or CNEL range (dBA) : 45	No proposed change.
160	N24	Critical Wildlife Habitat Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Critical Wildlife Habitat Areas, Average Noise Level Or CNEL range (dBA) : 45	No proposed change.
161	N25	Transportation corridors	Noise	Cumulative Noise Events	It shall be the policy of the TRPA Governing Body in development of the Regional Plan to define, locate, and establish CNEL levels for transportation corridors	No proposed change.
162	R1	Quality of Recreation Experience & Access to Recreational Opportunities	Recreation	Quality of Recreation Experience and Access to Recreational Opportunities	It shall be the policy of the TRPA Governing Body in development of the Regional Plan to preserve and enhance the high quality recreational experience including preservation of highquality undeveloped shorezone and other natural areas. In developing the Regional Plan, the staff and Governing Body shall consider provisions for additional access, where lawful and feasible, to the shorezone and high quality undeveloped areas for low density recreational uses.	No proposed change.
163	R2	Fair Share Distribution Of Recreation Capacity	Recreation	Fair Share Distribution of Recreation Capacity	It shall be the policy of the TRPA Governing Body in development of the Regional Plan to establish and ensure a fair share of the total Basin capacity for outdoor recreation is available to the general public.	No proposed change.
164	SR1	Scenic Quality Ratings for Roadway Units	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in **Tables 13-3**, 13-5, 13-8 and 13-9 of the Draft Study Report.	No proposed change.
165	SR2	Travel Route Ratings for Shoreline Travel Units	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, **13-5**, 13-8 and 13-9 of the Draft Study Report.	No proposed change.
166	SR3	Travel Route Ratings for Roadway Units (Scenic Resources)	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, 13-5, **13-8** and 13-9 of the Draft Study Report.	No proposed change.
167	SR4	Scenic Quality Ratings for Shoreline Units (Scenic Resources)	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, 13-5, 13-8 and **13-9** of the Draft Study Report.	No proposed change.

82-11 Sequence Number	Proposed Standard #	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Proposal Explanation
168	SR5	Roadway Travel Routes	Scenic Resources	Roadway and Shoreline Units	Maintain the 1982 ratings for all roadway and shoreline units as shown in Tables **13-6** and 13-7 of the Draft Study Report.	No proposed change.
169	SR6	Shoreline Travel Routes	Scenic Resources	Roadway and Shoreline Units	Maintain the 1982 ratings for all roadway and shoreline units as shown in Tables 13-6 and **13-7** of the Draft Study Report.	No proposed change.
170	SR7	Restore Roadway units	Scenic Resources	Roadway and Shoreline Units	**Restore scenic quality in roadway units rated 15** or below and shoreline units rated 7 or below.	No proposed change.
171	SR8	Restore Shoreline units	Scenic Resources	Roadway and Shoreline Units	Restore scenic quality in roadway units rated 15 or below and **shoreline units rated 7 or below**.	No proposed change.
172	SR9	Scenic Quality of Other Areas (Recreation Sites and Bike Trails)	Scenic Resources	Other Areas	Maintain or improve the numerical rating assigned to each identified scenic resource, including individual subcomponent numerical ratings, for views from bike paths and other recreation areas open to the general public as recorded in the 1993 Lake Tahoe Basin Scenic Resource Evaluation.	No proposed change.
173	SR10	Built Environment (Community Design)	Scenic Resources	Built Environment	It shall be the policy of the TRPA Governing Body in development of the Regional Plan, in cooperation with local jurisdictions, to insure the height, bulk, texture, form, materials, colors, lighting, signing and other design elements of new, remodeled and redeveloped buildings be compatible with the natural, scenic, and recreational values of the region.	No proposed change.

Attachment E.
Tahoe Science Advisory Council memo entitled "Guidance on Technical Clean Up of Existing Threshold Standards"

April 25, 2018

To: Dan Segan, Tahoe Regional Planning Agency (TRPA)

From: Tahoe Science Advisory Council (TSAC)

RE: Work Order #007
Guidance on Technical Clean Up of Existing Threshold Standards

The Tahoe Science Advisory Council (TSAC) was tasked (March 2018) with attending a stakeholder meeting organized by TRPA to present the guidance document, answer questions about it, and collect feedback. Based on TSAC member comments and stakeholder feedback, the TSAC was then tasked with revising the document *Guidance Document on the Administrative/Technical Clean Up of Existing Thresholds Standards* (developed under Work Order #003, November 2017).

This document is the deliverable revised Guidance Document for that work order.

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291 Country Club Dr. | Incline Village, NV 89451 | Telephone: (775) 881-7566 | Email: antoy@ucdavis.edu | www.tahoescienceadvisory.org

Executive Summary

The TRPA 2017 Assessment of 173 existing threshold standards identified 46 standards as overlapping with other standards in the threshold system (TRPA, 2017). In addition to the 46 previously identified overlapping standards, further sources of overlap may exist that were not specifically noted by the Assessment as redundant. Redundancy in threshold standards has the potential to increase the cost of enforcement and monitoring, to confuse the process of implementing standards, and to add uncertainty around the intent of threshold standards and how they contribute to meeting the overall goals of the regulations. Through examination of the existing threshold standards, the Tahoe Science Advisory Council (TSAC) identified five types of overlap: (1) complete overlap, (2) wholly encompassing standards, (3) competing targets, (4), indirect overlap, and (5) policy and management statements that overlap existing standards. This document provides a description those identified types of overlap, and for each one discusses the sources of each, the relative harm caused by the various types, and potential strategies to avoid or resolve that type of overlap.

Overlap can be caused by imprecisely written standards, unclear numerical targets or baselines, efforts to regulate the same process from different standpoints, or the adoption of more generalized policy statements as standards. In many cases, the overlap is relatively harmless – resulting in duplicative oversight or documentation, with few other problems – but in some instances, overlapping standards have the potential to cause confusion or even conflict during implementation of the regulatory system. The development and application of objective strategies to avoid and eliminate overlap among threshold standards will help TRPA achieve two of its stated goals for the Threshold Update Initiative: (1) [to identify] relevant and scientifically rigorous threshold standards, and (2) [to develop] a cost-efficient, feasible, and informative monitoring and evaluation plan. These strategies can be applied to both the existing threshold standards and proposed standards considered for implementation in the future.

It is important to understand that interconnected processes make the appearance of overlap unavoidable, even when standards are not overlapping. The same management action may be required to meet multiple standards, or a particular process may be regulated for its impact on different aspects of the basin's health. The mere appearance of overlap does not necessarily cause problems if it contributes to a holistic approach that furthers the goals of the Threshold Update Initiative.

This assessment provides a comprehensive catalogue of the characteristics of existing threshold overlap within the set of 46 thresholds previously identified as overlapping. Ultimately, the full set of 173 standards will need to be evaluated similarly to identify and categorize any additional sources of overlap that were not considered in this initial assessment. The typology presented in this assessment can be used to iteratively work through the review and updating process for all threshold standards.

The TSAC provides this typology and these potential strategies to better describe different types of overlap with the aim of improving the clarity, intent, and effectiveness of threshold standards. This document does not make recommendations about adopting, eliminating or revising any specific TRPA threshold standards from a regulatory perspective.

Introduction

The TRPA 2017 Assessment of 173 existing threshold standards identified 46 standards as overlapping with other standards in the threshold system. Additional standards were noted as partially overlapping other standards but were not included in the above tally. Overlap in standards can cause confusion about intent and can increase monitoring costs. Overlap within the standards appears to originate from a number of sources (e.g. multiple benefits of an individual standard, lack of information). A critical evaluation of areas and sources of overlap, and options for addressing overlap and redundancy in the existing standard system is recommended as a useful exercise in the overall threshold update initiative.

The purpose of this evaluation is to develop and enumerate a set of criteria, or typology, that can be applied to categorize the various types of overlap between standards, the potential impacts of those different types, and potential solutions for those types of overlap. The 46 standards previously identified by the TRPA were used as an example set to establish the framework for evaluating overlap. It is expected that the approach represented by this framework will contribute to the TRPA's administrative clean-up of all existing standards, as well as to review of proposed modifications to ensure that any modifications do not introduce unnecessary overlap or confusion.

Background

Following adoption of Public Law 96-551, the TRPA established nine environmental threshold carrying capacities (thresholds) that set environmental standards for the Lake Tahoe basin in 1982. These thresholds were defined at that time given the best available science to protect environmental degradation 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 varying degrees of quantification used in describing the standard. Whereas numerical standards are quantifiable to avoid exceedances, management standards are non-quantifiable statements that typically target a given level of environmental quality. Policy statements are specific statements committing to a chosen course of action to achieve TRPAs management goals. As more information becomes available, policy statements may become management standards, and management standards may be quantified to become numerical standards.

Environmental thresholds were loosely defined to accommodate direct interactions between atmospheric, landscape, hydrological, and biological processes. The interrelationships among thresholds were tabulated in the 1982 threshold report to outline

the importance relative to other environmental thresholds. The interconnected processes that contribute to threshold impacts must be recognized during evaluations or proposed modifications to individual standards so as to maintain the protections of existing standards that may result in environmental degradation. TRPA Resolution 82-11 directs that threshold standards shall be reviewed to insure that Regional Plan and environmental threshold carrying capacities are consistent.

A threshold evaluation is completed as part of the Agency's adaptive management cycle every four years. The re-evaluation ensures that the regional plan and projects of the Environmental Improvement Program (EIP) partners are sufficient to attain and maintain threshold standards. In the 2015 threshold evaluation, overlap was identified in 46 standards. Threshold overlap is broadly defined as functional equivalence from a regulatory perspective, where the protection conferred by one standard is also conferred by another standard. The functional equivalence is created by the type of overlap, and may result from:

- the same numerical target specified by multiple standards
- standards written such that the achievement of one standard ensures the achievement of another
- standards that call for different numerical targets to be applied to the same constituent,
- standards that regulate the same process differently in different locations, or
- policy statements that are adopted as standards.

Thresholds that overlap with non-numeric (management and policy) goals pose the greatest challenge in this typology and were not directly tabulated in the 2015 threshold evaluation. The objectives of this threshold overlap evaluation are to describe a generalized typology for the different types of overlap, provide examples of how overlap was defined, assess the relative harm that may arise from each type of overlap, and propose potential strategies to reduce or eliminate each type of overlap.

The TSAC provides this typology to better describe different types of overlap and to improve the clarity and intent of threshold standards. The TSAC does not make any recommendations about the TRPA Threshold Standards.

Approach

Following the 2015 Threshold Evaluation Report (TRPA 2016), the TRPA developed a Threshold Assessment Methodology (TAM) as part of its Threshold Update Initiative (TRPA 2017 draft document). The objective of the TAM was stated as (TRPA 2017):

> *Compare each of the existing threshold standards against best practice for the formulation of goals and standards, to highlight the aspects of the current system that are well designed and identify where improvements may be considered.*

As part of that process, TRPA examined the existing standards for redundancy and generated a list of 46 standards that were, in part or in whole, redundant. Those standards

and the specific incidences of overlap identified by the 2017 Standards Assessment were used as the basis for the typology of overlap described here.

Here we describe five different types of overlap that are encountered in the TRPA standards. Any redundancy in threshold standards will result in duplicative effort in oversight, but some types of overlap create further issues. For each identified type of overlap, we present:

1. a description of the overlap itself,
2. an example from the 46 redundant standards previously identified by TRPA
3. a brief assessment of the potential relative harm that may be caused by that type of overlap, and
4. one or more potential solutions to reduce or eliminate the type of overlap.

Typology of Overlapping Standards

1. Complete Overlap

Complete overlap occurs when two different standards regulate the same constituent with the same numerical target. This is the most obviously apparent category of overlap, with a clear link between standards. Atmospheric deposition of dissolved inorganic nitrogen, for example, is controlled by different standards in the littoral and pelagic zones of the lake, although both numeric targets are the same and it is a deposition limit that is intended, wherever it occurs. Because atmospheric deposition is not expected to vary between the pelagic and littoral zones, there is no reason to regulate the process with two separate standards.

Although this type of overlap results in little harm. There is some duplication of oversight and recordkeeping, but it is unlikely to cause conflicts between regulating and regulated parties. However, the potential for harm exists if one of the standards is revised without revising the other; maintaining completely overlapping standards requires the oversight to ensure that no conflict is created between the standards (i.e., that the overlap does not move into another type). Elimination of complete overlap involves eliminating one of the overlapping standards, or combining them into one standard statement.

2. Wholly Encompassing Standards

This occurs when the achievement of one standard (the encompassing standard) would necessarily entail the achievement of another (the encompassed standard). For example, the Deer Disturbance-Free Zone standard prohibits activity that may cause disturbances to deer in areas mapped as “meadows,” but those mapped areas are wholly contained within the defined Stream Environment Zones (SEZ) and are also protected by the existing standard to preserve SEZ function. The SEZ functions that support wildlife and plant communities are intricately linked to – and often the same as – the functions that cycle nutrients and provide the aesthetic quality of SEZ communities. Preventing the degradation of these functions (i.e.,

achieving the Non-Degradation of SEZ function standard) would necessarily achieve the Deer Disturbance-Free Zone standard.

There are two ways to reduce the overlap inherent in wholly encompassing standards. Obviously, the wholly encompassed standard could be eliminated. However, it is frequently the case that the wholly encompassed standard is regulating a different environmental threshold than the encompassing standard – in the example above, the two standards stem from the wildlife and soil conservation thresholds. In these cases, a re-evaluation of the encompassed standard may be appropriate to ensure that it is specifically regulating the appropriate target. If it is important to provide more protection than the encompassing standard does, it may be necessary to increase the level of protection in the encompassed standard.

3. Competing Targets

Competing targets occur when two or more standards address the same constituent in different ways. In addition to obviously different numerical targets (e.g., one standard to maintain NOx emissions at or below the 1981 level; and another standard to reduce NOx produced in the basin consistent with the water quality thresholds), it may also occur due to differences in the baseline (e.g., maintain NOx emissions at or below the 1981 level; reduce dissolved inorganic nitrogen (DIN) loading from all sources by 25 percent of the 1973-81 annual average; reduce DIN from atmospheric sources by 20% of the 1973-81 baseline average) or target (reduce loading of algal nutrients from all sources as required to achieve ambient standards for primary productivity and transparency).

The relative harm caused by this category of overlap is greater than any of the other categories. In addition to difficulties in oversight and recordkeeping, it is likely to cause conflict between regulating and regulated parties.

Competing targets result largely from inadequate specificity in the standards, and can be resolved by amending the competing standards to numerically specify the appropriate target(s). This target may be an annual load, a flux, a concentration, or other metric. The more specific the standard and the more direct and consistent its measurement the better.

To maintain equivalent protection in the case of standards that refer to different baselines, the amended targets should be calculated from the currently specified baselines in both standards. This calculation maintains the rationale for the baseline provided by the original threshold standard while at the same time clarifying the details of implementation. Typically, the more stringent of the competing targets should be cited as the new target.

4. Indirect Overlap

Indirect overlap occurs when one standard regulates an overarching category and additional standards regulate constituents of that category. For example, the Pelagic Nitrogen Loading standard calls for a 25% reduction in dissolved inorganic nitrogen (DIN) from all sources (1973-81 baseline), while further standards call for specified reductions in DIN loading from groundwater sources (30%), from surface runoff (50%), and from atmospheric sources (20%), as well as reductions in algal nutrients as required to achieve the ambient standards for primary productivity and transparency.

Indirect overlap can cause confusion over how to document and/or improve compliance, as well as confusion over when the target is achieved. Indirect overlap is best resolved by amending the standards to more precisely define the regulated constituent (e.g., sampling and analysis methods) and the numerical target (e.g., concentration or annual flux) of the standard.

5. Policy and Management Statements as Standards

A number of policy and management statements have been adopted by TRPA as standards. Often, these standards simply call for other standards to be achieved. For example, there are standards that simply state, "it is the policy of the TRPA Governing Board in the development of the Regional Plan to reduce fumes from diesel engines to the extent possible," and "attain existing water quality standards." While these can sometimes be considered a part of the "wholly encompassing standards" category, they are different enough to merit their own category.

The corrosive influence of policy statements as standards is in the vagueness of those statements. The statements more often describe broad and aspirational goals than they do measurable and achievable standards. The negative impact of policy statements as standards can be resolved by separating the overarching goals from the threshold standards. Management standards reflect the strategies designed to meet those goals, and can be addressed by amending those management-based standards to include both numerical targets and timeframes for the enactment of those policies.

There are two possible ways to resolve the issues that arise from management standards and policy statements without specific targets. First, the standards could be specifically identified as broad statements of a goal provided for guidance or context only, with no enforceability. Second, the ambiguity could be resolved by adding specific details to the standard that reformulate it to something that is quantifiable and measurable, and that can be objectively evaluated. For example, the standard "attain existing water quality standards" could be amended to require a numerical reduction in the incidences of water quality violations over the next five years.

Discussion

Here we discuss the areas of overlap identified above and the options that TRPA has to attempt to resolve various types of overlap and to minimize the impact of that overlap. In considering the effects of overlapping standards and the available options to address those effects, we assume that any revision would have the following priorities:

1. Must maintain equivalent levels of protection.
2. Reduce uncertainty and potential conflict during implementation of the threshold evaluation.
3. Reduce uncertainty and duplication of effort in TRPA's oversight and documentation processes.

In some cases, the identified overlap could be reduced or eliminated by revising the existing standards to better comply with the SMART (specific, measurable, achievable, relevant, and time-based) criteria. The SMART framework is designed to enable objective and informative evaluation of the effectiveness of programs and actions. Goals that are SMART enable the development of evaluation and reporting structures that:

1. Promote accountability for the achievement of objectives through the assessment of outcomes and the effectiveness of activities and policies.
2. Accelerate attainment through improved resource allocation and decision making and promotion of learning and knowledge sharing among partners.

Evaluation of redundant standards with the SMART criteria could help to clarify ambiguities in the reason for the standards, and potential revisions or updates to the standard could ensure that evaluation of the goal will provide decision makers with the information they need to track progress towards attainment. When standards are amended to resolve the types of overlap described in the typology, applying the SMART criteria can contribute significantly to the resolution of overlap. For example, a desired outcome (e.g., the attainment of existing water quality standards) may be defined to be more specific and measurable by focusing on the number of incidences in which the outcome is not achieved (e.g., reduce annual incidences of exceedance of existing water quality standards from year to year). The outcome-based standard then becomes more than a simple restatement of the existing standards, while still serving the goal it was intended to serve.

In addition to the 46 previously identified overlapping standards, some further sources of overlap may exist that were not specifically noted by the Assessment as redundant. Some standards reference one another. For example, the Phytoplankton Primary Productivity standard calls for an annual mean phytoplankton primary productivity at or below 52 $gmC/m^2/yr$ and the annual average Secchi disk transparency standard requires an annual average Secchi depth of 29.7 m. At the same time, the separate pelagic phosphorus loading standard requires a reduction in the loading of dissolved phosphorus as required to achieve the ambient standards for primary productivity and transparency. This type of overlap, which would fall into Type 4 (indirect overlap) defined above, was not consistently highlighted in the Assessment as redundant. Neither the phytoplankton primary productivity standard nor the annual average Secchi disk transparency standard was identified in the Assessment as redundant, although the pelagic phosphorus loading

standards were. Following an examination of the 46 already identified overlapping standards, it may be necessary to perform a wider-ranging assessment of redundancy in the full set of 173 existing standards with this typology as a guide.

In accordance with best practices, TSAC has recommended that TRPA move toward standards based on outcomes rather than activities or intermediate results (TSAC, 2017). The outcomes are frequently the result of a number of interconnected environmental processes, such that attaining an outcome standard (e.g., Secchi depth of 29.7 m) will necessarily depend on controlling the inputs or the intermediate products of those processes. For example, street sweeping and stormwater best management practices (inputs) can help reduce sediment and nutrient loads (intermediate products), which ultimately leads to increased lake clarity (outcome).

There is an ongoing effort to develop conceptual models for processes within the Tahoe basin for which threshold standards exist. Overlapping thresholds could be evaluated within the context of conceptual models to better understand the level of protection, identify weakness, gaps, or confusion in existing standards and guide the review and development of future standards. It is important to recognize that the interconnectedness of processes will make some level of apparent overlap unavoidable if goals are to be achieved. For example, stream restoration activities may contribute to achieving multiple standards (nutrients, suspended sediments, water temperature); stream restoration alone, though, is likely not sufficient to achieve the numerical targets of all of those standards. Multiple standards may in fact be needed to motivate a diversity of projects or types of protections that work together to achieve the goals for the Tahoe Basin.

In other cases, two competing standards may be intended to address different environmental thresholds within the basin. An example of this would be the multiple nitrogen standards identified above as competing targets (type 3). Two different oxides of nitrogen (NOx) standard were enacted to maintain air quality within the Tahoe Basin, while the DIN standard was motivated by lake clarity. In this case, these competing standards are aimed at achieving different outcomes, and the redundancy offers protection from two different sources of pollution.

A third standard, however, calls for the reduction of "[NOx] produced within the basin consistent with the water quality thresholds." This standard is aimed at reducing the impact of atmospheric deposition of nitrogen on water clarity – the same goal as the various water quality standards that call for specific reductions in DIN. The overlap of this third standard does not serve to impart any environmental protection not already offered by the other water quality standards, and is therefore unnecessarily redundant.

Summary of Findings

Overlap in standards can cause confusion about intent and can increase monitoring costs. The overlap typology presented herein provide a path forward in defining and understanding the types and sources of overlap. The resolution strategies presented here, especially in conjunction with the implementation of the SMART criteria, can provide a

path towards reducing the confusion and financial burden associated with monitoring redundant standards.

In addition to developing the typology of overlap, we discussed a number of technical and administrative issues stemming from redundancy, summarized below.

1. There are likely additional overlapping standards not identified during TRPA's initial assessment of overlap.
2. Different types of overlap result in different levels of harm, enabling TRPA to prioritize efforts to resolve overlap.
3. Application of SMART criteria to existing overlapping standards is a powerful tool to resolve overlap.
4. Because of interconnected environmental processes, some level of apparent overlap in standards is unavoidable. This apparent overlap, though, may not rise to the level of functional overlap described here.

The aim of this assessment was to document a comprehensive typology of threshold overlap to contribute to the TRPA's administrative clean-up of all existing standards. This effort provides the fundamental framework for further evaluations that will help guide the TRPA in improving existing standards and ensuring that any future modifications do not introduce unnecessary overlap or confusion.

References

Tahoe Regional Planning Agency (TRPA). 2017. Threshold Initiative Update: Threshold Assessment Methodology, Version 1.7. Stateline, NV.

Tahoe Science Advisory Council (TSAC). 2017. Natural Resource Evaluation Systems: Assessment of Best Practices for the Tahoe Regional Planning Agency. TSAC Technical Report #2017-01. Incline Village, NV.

Attachment F.
Science Advisory Council overlap framework applied to the standards adopted in Resolution 82-11 as amended December 12, 2012.

Attachment F. Science Advisory Council overlap framework applied to the standards adopted in Resolution 82-11 as amended December 12, 2012.

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
1	Reduce fine sediment particles	Water Quality	Deep Water (Pelagic) Lake Tahoe	**Reduce fine sediment particles** (inorganic particle size < 16 micrometers in diameter), total phosphorus, and total nitrogen in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe: · The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis. · Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.	Wholly Encompassing Standards, Indirect Overlap, Competing Targets	Encompassed by 4 and 5. Indirect overlap 37, 43, Competing targets 17, 39, 45.
2	Total phosphorus	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce fine sediment particles (inorganic particle size < 16 micrometers in diameter), **total phosphorus**, and total nitrogen in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe: · The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis. · Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 4 and 5. Indirect overlap 7, 21, 35, 38, 41, 44, 47, 52.
3	Total nitrogen	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce fine sediment particles (inorganic particle size < 16 micrometers in diameter), total phosphorus, and **total nitrogen** in order to achieve the following long-term water quality standards for deep water (pelagic zone) Lake Tahoe: · The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis. · Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 4 and 5. Indirect overlap with 10, 11, 12, 13, 14, 15, 16, 20, 34, 38, 40, 44, 46, 51, 73, 82.
4	Secchi disk	Water Quality	Deep Water (Pelagic) Lake Tahoe	The annual average deep water transparency as measured by Secchi disk shall not be decreased below 29.7 meters (97.4 feet), the average levels recorded between 1967 and 1971 by the University of California, Davis		
5	Phytoplankton primary productivity	Water Quality	Deep Water (Pelagic) Lake Tahoe	Maintain annual mean phytoplankton primary productivity at or below 52gmC/m2/yr.		
6	Recognition of Threshold Standard Exceedance	Water Quality	Deep Water (Pelagic) Lake Tahoe	These numeric threshold standards for Pelagic Lake Tahoe are currently being exceeded and will likely continue to be exceeded until full implementation of the pollutant loading reductions prescribed by the Lake Tahoe Total Maximum Daily Load program and implemented by the State of California and Nevada. The cooperation of the states of California and Nevada will be required	Policy Statements as Standards	Policy statement

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
				to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region		
7	Dissolved phosphorus	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce the loading of **dissolved phosphorus**, iron, and other algal nutrients from all sources as required to achieve ambient standards for primary productivity and transparency.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 4 and 5. Indirect overlap 2, 35, 41, 47, 52. Competes with 21.
8	Iron	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce the loading of dissolved phosphorus, **iron**, and other algal nutrients from all sources as required to achieve ambient standards for primary productivity and transparency.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 4 and 5. Competing Targets with 22. Indirect overlap with 22, 37, 40, 41, 42, 48, 53.
9	Other algal nutrients	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce the loading of dissolved phosphorus, iron, and other **algal nutrients** from all sources as required to achieve ambient standards for primary productivity and transparency.	Indirect Overlap, Complete Overlap, Competing Targets	Encompassed by 4 and 5. Competing Targets with 23. Indirect overlap with 7, 8, 20, 21, 22, 23, 24, 25, 44.
10	Pelagic nitrogen loading surface runoff	Water Quality	Deep Water (Pelagic) Lake Tahoe	**Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent**, from groundwater approximately 30 percent, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted eductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Indirect Overlap, Complete Overlap, Competing Targets	Complete overlap with 14, 15, 16. Competes with 13. Indirect overlap with 11, 20, 23, 24, 40, 46, 51.
11	Pelagic nitrogen loading groundwater	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, **from groundwater approximately 30 percent**, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Indirect Overlap, Complete Overlap, Competing Targets	Competes with 13. Complete overlap with 14, 15, 16.Indirect overlap with 12, 14, 15, 16, 46, 51.

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
12	Pelagic nitrogen loading atmospheric sources	Water Quality	Deep Water (Pelagic) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, from groundwater approximately 30 percent, a**nd from atmospheric sources approximately 20 percent of the 1973-81 annual average**. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Indirect Overlap, Complete Overlap, Competing Targets	Complete overlap with 14, 15, 16. Competes with 13, Indirect overlap with 3, 73, 82.
13	Littoral total dissolved inorganic nitrogen (DIN) loading	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce dissolved inorganic nitrogen loading to Lake Tahoe from all sources by 25 percent of the 1973-81 annual average.	Competing Targets, Indirect Overlap	Competes with 10, 11, 12, 14,15,16, 26, 27, 28. Indirect overlap with 3,20, 34, 40, 46, 51, 73, 82.
14	Littoral nitrogen loading surface runoff	Water Quality	Nearshore (Littoral) Lake Tahoe	**Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent**, from groundwater approximately 30 percent, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Indirect Overlap, Complete Overlap, Competing Targets	Complete overlap 10, 11, 12. Indirect overlap with 56. Competes with 13, 15, 16, 40, 46, 51.
15	Littoral nitrogen loading groundwater	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, **from groundwater approximately 30 percent**, and from atmospheric sources approximately 20 percent of the 1973-81 annual average. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Indirect Overlap, Complete Overlap, Competing Targets	Complete overlap with 10, 11, 12. Indirect overlap with 64, 69. Competes with 11, 12, 14, 16, 46, 51
16	Littoral nitrogen loading atmospheric sources	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce dissolved inorganic nitrogen loads from surface runoff by approximately 50 percent, from groundwater approximately 30 percent, a**nd from atmospheric sources approximately 20 percent of the 1973-81 annual average**. This threshold relies on predicted reductions in pollutant loadings from out-of-basin sources as part of the total pollutant loading reduction necessary to attain environmental standards, even though the Agency has no direct control over out-of-basin sources. The cooperation of the states of California and Nevada will be required to control sources of air pollution which contribute nitrogen loadings to the Lake Tahoe Region.	Indirect Overlap, Complete Overlap, Competing Targets	Complete overlap with 14-16. Competes with 8, 28. Indirect overlap with 14, 15, 73, 82.
17	Decrease sediment load	Water Quality	Nearshore (Littoral) Lake Tahoe	**Decrease sediment load as required** to attain turbidity values not to exceed three NTU. In addition, turbidity shall not exceed one NTU in shallow waters of the Lake	Wholly Encompassing Standards	Encompassed by 18, 19. Indirect overlap 1, 39, 43, 45.

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
				not directly influenced by stream discharges.		
18	Nearshore Turbidity (Stream Influence)	Water Quality	Nearshore (Littoral) Lake Tahoe	Decrease sediment load as required to **attain turbidity values not to exceed three NTU**. In addition, turbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.		
19	Nearshore Turbidity (No Stream Influence)	Water Quality	Nearshore (Littoral) Lake Tahoe	Decrease sediment load as required to attain turbidity values not to exceed three NTU. In addition, t**urbidity shall not exceed one NTU in shallow waters of the Lake not directly influenced by stream discharges.**		
20	Littoral nitrogen loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	**Reduce the loading of dissolved inorganic nitrogen**, dissolved phosphorus, iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.	Competing Targets, Indirect Overlap, Wholly Encompassing Standards	Encompassed by 24, 25. Indirect overlap with 3, 40, 46, 51, 73, 82. Competes with 10, 11, 12, 13, 14, 15, 16.
21	Littoral phosphorus loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, **dissolved phosphorus,** iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.	Competing Targets, Indirect Overlap, Wholly Encompassing Standards	Encompassed by 24, 25. Competes with 7, 20. Indirect overlap with 35, 41, 47, 52.
22	Littoral iron loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, **iron**, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.	Competing Targets, Indirect Overlap, Wholly Encompassing Standards	Encompassed by 24, 25. Competes with 26,8,28,10,11,12,13,14,15,16, 21,20,22, 53,54,39,60,61,62,63. Indirect overlap with 49-52, 56-59.
23	Littoral other algal nutrients loading - pp & periphyton	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and **other algal nutrients** from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and periphyton biomass in the littoral zone.	Competing Targets, Indirect Overlap, Wholly Encompassing Standards	Encompassed by 24, 25. Competes with 9. Indirect overlap with 35, 41, 47, 52.

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
24	nearshore phytoplankton primary productivity	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and other algal nutrients from all sources to m**eet the 1967-71 mean values for phytoplankton primary productivity** and periphyton biomass in the littoral zone.		
25	nearshore periphyton biomass	Water Quality	Nearshore (Littoral) Lake Tahoe	Reduce the loading of dissolved inorganic nitrogen, dissolved phosphorus, iron, and other algal nutrients from all sources to meet the 1967-71 mean values for phytoplankton primary productivity and **periphyton biomass in the littoral zone.**		
26	Nearshore Attached Algae	Water Quality	Nearshore (Littoral) Lake Tahoe	Support actions to reduce the extent and distribution of excessive periphyton (attached) algae in the nearshore (littoral zone) of Lake Tahoe.	Wholly Encompassing Standards	Encompassed by 25.
27	Aquatic Invasive Species Prevention	Water Quality	Aquatic Invasive Species	**Prevent the introduction of new aquatic invasive species into the region's waters** 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.		
28	Aquatic Invasive Species Abundance	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.		
29	Aquatic Invasive Species Distribution	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.		
30	Aquatic Invasive Species Ecological Impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.		
31	Aquatic Invasive Species Social Impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.		
32	Aquatic Invasive Species Economic Impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.		
33	Aquatic Invasive Species Public Health Impacts	Water Quality	Aquatic Invasive Species	Prevent the introduction of new aquatic invasive species into the region's waters 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.		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
34	Nitrogen Concentration (Tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of **dissolved in organic nitrogen**, dissolved phosphorus, and dissolved iron. Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.		
35	Phosphorus Concentration (Tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of dissolved in organic nitrogen, **dissolved phosphorus**, and dissolved iron. Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.	Indirect Overlap	Indirect overlap with 2, 7, 21.
36	Iron Concentration (Tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of dissolved in organic nitrogen, dissolved phosphorus, and **dissolved iron.** Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.		
37	Suspended Sediment Concentration (Tributaries)	Water Quality	Tributaries	Attain applicable state standards for concentrations of dissolved in organic nitrogen, dissolved phosphorus, and dissolved iron. **Attain a 90 percentile value for suspended sediment concentration of 60 mg/1.**		
38	Nutrient load (tributaries)	Water Quality	Tributaries	**Reduce total annual nutrient** and suspended sediment load to achieve loading thresholds for littoral and pelagic Lake Tahoe.	Wholly Encompassing Standards, Competing Targets, Indirect Overlap	Encompassed by 4, 5, 24, 25. Competing Targets with 2,3, 23. Indirect overlap with 7, 8, 9,20, 21, 22, 23, 24, 25, 44, 46,47,48.
39	Suspended sediment Load (tributaries)	Water Quality	Tributaries	Reduce total annual nutrient **and suspended sediment load** to achieve loading thresholds for littoral and pelagic Lake Tahoe.	Wholly Encompassing Standards, Competing Targets, Indirect Overlap	Encompassed by 4, 5,18, 19. Indirect overlap 1, 37, 43, Competing targets 17, 39, 45.
40	Nitrogen Concentration (Surface Runoff)	Water Quality	Surface Runoff	Achieve a 9**0 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1**, for dissolved phosphorus of 0.1 mg/1, and for dissolved iron of 0.5 mg/1 in surface runoff directly discharged to a surface water body in the Basin.		
41	Phosphorus Concentration (Surface Runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1, for **dissolved phosphorus of 0.1 mg/1**, and for dissolved iron of 0.5 mg/1 in surface runoff directly discharged to a surface water body in the Basin.	Indirect Overlap	Indirect overlap with 2, 7, 21.
42	Iron Concentration (Surface Runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for dissolved inorganic nitrogen of 0.5 mg/1, for dissolved phosphorus of 0.1 mg/1, and **for dissolved iron of 0.5 mg/1 i**n surface runoff directly discharged to a surface water body in the Basin.		
43	Suspended Sediment Concentration (Surface Runoff)	Water Quality	Surface Runoff	Achieve a 90 percentile concentration value for suspended sediment of 250 mg/1.	Indirect Overlap	Indirect Overlap with 45,

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
44	Total nutrients (surface runoff)	Water Quality	Surface Runoff	**Reduce total annual nutrient** and suspended sediment loads as necessary to achieve loading thresholds for tributaries and littoral and pelagic Lake Tahoe.	Wholly Encompassing Standards, Competing Targets, Indirect Overlap	Encompassed by 4, 5, 24, 25. Competing Targets with 23. Indirect overlap with 7, 8, 20, 21, 22, 23, 24, 25, 38.
45	Suspended sediment (surface runoff)	Water Quality	Surface Runoff	Reduce total annual nutrient and **suspended sediment loads** as necessary to achieve loading thresholds for tributaries and littoral and pelagic Lake Tahoe.	Wholly Encompassing Standards, Competing Targets, Indirect Overlap	Encompassed by 4, 5,18, 19. Indirect overlap 1, 37, 43, Competing targets 17, 39.
46	Surface Discharge - Total Nitrogen	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Total Nitrogen Maximum concentration 0.5 mg/l		
47	Surface Discharge - Total Phosphate	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Total phosphate Maximum concentration 0.1 mg/l		
48	Surface Discharger - Iron	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly.Surface Discharge: Total iron Maximum concentration 0.5 mg/l		
49	Surface Discharge - Turbidity	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
				be amended accordingly. Surface Discharge: Turbidity Maximum concentration 20 JTU		
50	Surface Discharge - Grease And Oil	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Surface Discharge: Grease And Oil Maximum concentration 2.0 mg/l		
51	Discharge To Groundwater - Total Nitrogen	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Total Nitrogen Maximum concentration 0.5 mg/l		
52	Discharge To Groundwater - Total Phosphate	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Total Phosphate Maximum concentration 1 mg/l		
53	Discharge To Groundwater - Iron	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Total iron Maximum concentration 4.0 mg/l		
54	Discharge To Groundwater - Turbidity	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
				be amended accordingly. Runoff Discharged to Groundwater: Turbidity Maximum concentration 200 JTU		
55	Discharge To Groundwater-Grease And Oil	Water Quality	Groundwater	Surface runoff infiltration into the groundwater shall comply with the uniform Regional Runoff Quality Guidelines as set forth in Table 4-12 of the Draft Environmental Threshold Carrying Capacity Study Report, May, 1982. Where there is a direct and immediate hydraulic connection between ground and surface waters, discharges to groundwater shall meet the guidelines for surface discharges, and the Uniform Regional Runoff Quality Guide lines shall be amended accordingly. Runoff Discharged to Groundwater: Grease And Oil Maximum concentration 40.0 mg/l		
56	Attain existing water quality standards.	Water Quality	Other Lakes	Attain existing water quality standards.	Policy Statements as Standards	Policy statement
57	Percent of Land Coverage Within Land Capability Class 1a (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage – Class 1a (1%)		
58	Percent of Land Coverage Within Land Capability Class 1b (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 1b (1%)	Competing Targets	Competing targets with 67,68, 69.
59	Percent of Land Coverage Within Land Capability Class 1c (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 1c (1%)		
60	Percent of Land Coverage Within Land Capability Class 2 (allow up to 1% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 2 (1%)		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
61	Percent of Land Coverage Within Land Capability Class 3 (allow up to 5% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 3 (5%)		
62	Percent of Land Coverage Within Land Capability Class 4 (allow up to 20% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 4 (20%)		
63	Percent of Land Coverage Within Land Capability Class 5 (allow up to 25% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 5 (25%)		
64	Percent of Land Coverage Within Land Capability Class 6 (allow up to 30% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 6 (30%)		
65	Percent of Land Coverage Within Land Capability Class 7 (allow up to 30% impervious coverage)	Soil Conservation	Impervious Cover	Bailey Land Coverage - Class 7 (30%)		
66	Preserve Stream Environment Zone (SEZ) Function	Soil Conservation	Stream Environment Zone	**Preserve existing naturally functioning SEZ lands in their natural hydrologic condition**, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, to attain a 5 percent total increase in the area of naturally functioning SEZ lands.	Indirect Overlap	Indirect Overlap with 87, 88, 94, 129.
67	Restore undeveloped SEZ	Soil Conservation	Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, **restore all disturbed SEZ lands in undeveloped, unsubdivided lands**, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, to attain a 5 percent total increase in the area of naturally functioning SEZ lands.	Competing Targets	Competing targets to 58, 68, 69

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
68	Restore 25% disturbed SEZ	Soil Conservation	Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and **restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided,** to attain a 5 percent total increase in the area of naturally functioning SEZ lands.	Competing Targets	Competing targets with 58. Indirect overlap with 69, 87, 88.
69	5% increase SEZ function	Soil Conservation	Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, restore all disturbed SEZ lands in undeveloped, unsubdivided lands, and restore 25 percent of the SEZ lands that have been identified as disturbed, developed or subdivided, **to attain a 5 percent total increase in the area of naturally functioning SEZ lands.**	Competing Targets	Competing targets to 58, 67, 68. Indirect overlap with 87, 88.
70	Highest 8-Hour Average Concentration of Carbon Monoxide	Air Quality	Carbon Monoxide (CO)	Maintain carbon monoxide concentrations at or below 6 parts per million (7 mg/m3) averaged over 8 hours.		
71	Average Daily Winter Traffic Volume, Presidents' Weekend	Air Quality	Carbon Monoxide (CO)	Reduce traffic volumes on the U.S. 50 Corridor by 7 percent during the winter from the 1981 base year between 4:00 p.m. and 12:00 midnight, provided that those traffic volumes shall be amended as necessary to meet the respective state standards.		
72	Highest 1-Hour Average Concentration of Ozone	Air Quality	Ozone (O_3)	Maintain ozone concentrations at or below 0.08 parts per million averaged over 1 hour.		
73	Oxides Of Nitrogen Emissions	Air Quality	Ozone (O_3)	Maintain oxides of nitrogen (NO_x) emissions at or below the 1981 level.	Competing targets, Indirect Overlap	Competes with 82. Indirect overlap with 8, 12, 13, 14, 16, 20.
74	Regional Visibility 50th Percentile ("Average Visibility Days") Bliss State Park	Air Quality	Regional Visibility	Achieve an extinction coefficient of 25 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 156 km, 97 miles); Calculations will be made on three year running periods using the existing 1991-1993 monitoring data as the performance standards to be met or exceeded.		
75	Regional Visibility 90th Percentile ("Worst Visibility Days") Bliss State Park	Air Quality	Regional Visibility	Achieve an extinction coefficient of 34 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the Bliss State Park monitoring site (visual range of 115 km, 71 miles). Calculations will be made on three year running periods using the existing 1991-1993 monitoring data as the performance standards to be met or exceeded.		
76	Sub-Regional Visibility 50th Percentile ("Average	Air Quality	Sub-Regional Visibility	Achieve an extinction coefficient of 50 Mm^{-1} at least 50 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 78 km, 48 miles); Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.)		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
	Visibility Days") South Lake					
77	Sub-Regional Visibility 90th Percentile ("Worst Visibility Days") South Lake	Air Quality	Sub-Regional Visibility	Achieve an extinction coefficient of 125 Mm^{-1} at least 90 percent of the time as calculated from aerosol species concentrations measured at the South Lake Tahoe monitoring site (visual range of 31 km, 19 miles). Calculations will be made on three year running periods. Beginning with the existing 1991-93 monitoring data as the performance standards to be met or exceeded.)		
78	Highest 24-Hour Average PM10 Concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter10 at or below 50µg/m3measured over a 24-hour period in the portion of the Region within California, and maintain Particulate Matter10 at or below 150 µg/m3 measured over a 24-hour period in the portion of the Region within Nevada. Particulate Matter10 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.		
79	Annual Average PM10 Concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter10 at or below annual arithmetic average of 20µg/m3 in the portion of the Region within California, and maintain Particulate Matter10 at or below annual arithmetic average of 50µg/m3 in the portion of the Region within Nevada. Particulate Matter10 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.		
80	24-Hour PM2.5 Concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter2.5 at or below 35µg/m3 measured over a 24-hour period using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.		
81	Annual Average PM2.5 Concentration	Air Quality	Respirable and Fine Particulate Matter	Maintain Particulate Matter2.5 at or below annual arithmetic average of 12µg/m3 in the portion of the Region within California and maintain Particulate Matter2.5 at or below annual arithmetic average of 15µg/m3 in the portion of the Region within Nevada. Particulate Matter2.5 measurements shall be made using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.		
82	Reduce Generation and Transport of Nitrate to Achieve Water Quality Standards	Air Quality	Nitrate Deposition	Reduce the transport of nitrates into the Basin and reduce oxides of nitrogen (NOx) produced in the Basin consistent with the water quality thresholds.	Competing targets, Indirect Overlap	Competes with 6, Indirect overlap with 8, 12, 13, 14, 16, 20.

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
83	Vehicle Miles Traveled	Air Quality	Nitrate Deposition	Reduce vehicle miles of travel in the Basin by 10% of the 1981 base year values		
84	Odor - Reduce Diesel Engine Fumes	Air Quality	Odor	It is the policy of the TRPA Governing Board in the development of the Regional Plan to reduce fumes from diesel engines to the extent possible.	Policy Statements as Standards	Policy statement
85	Increase plant and structural diversity	Vegetation	Common Vegetation	Increase plant and structural diversity of forest communities through appropriate management practices as measured by diversity indices of species richness, relative abundance, and pattern.		
86	Vegetation Community Richness	Vegetation	Common Vegetation	Maintain the existing species richness of the Basin by providing for the perpetuation of the following plant associations: Yellow Pine Forest: Jeffrey pine, White fir, Incense cedar, Sugar pine. Red Fir Forest: Red fir, Jeffrey pine, Lodgepole pine, Western white pine, Mountain hemlock, Western juniper. Subalpine Forest: Whitebark pine, Mountain hemlock, Mountain mahogany. Shrub Association: Greenleaf and Pinemat manzanita, Tobacco brush, Sierra chinquapin, Huckleberry oak, Mountain whitethorn. Sagebrush Scrub Vegetation: Basin sagebrush, Bitterbrush, Douglas chaenactis. Deciduous Riparian: Quaking aspen, Mountain alder, Black cotton-wood, Willow. Meadow Associations (Wet and Dry Meadow): Mountain squirrel tail, Alpine gentian, Whorled penstemon, Asters, Fescues, Mountain brome, Corn lilies, Mountain bentgrass, Hairgrass, Marsh marigold, Elephant heads, Tinker's penney, Mountain Timothy, Sedges, Rushes, Buttercups. Wetland Associations (Marsh Vegetation): Pond lilies, Buckbean, Mare's tail, Pondweed, Common bladderwort, Bottle sedge, Common spikerush. Cushion Plant Association (Alpine Scrub): Alpine phlox, Dwarf ragwort, Draba.		
87	Relative Abundance of Meadows And Wetland Vegetation Types	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain at least four percent meadow and wetland vegetation.	Competing Targets	Competing Targets 67,68,69.
88	Relative Abundance of Deciduous	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain at least four percent deciduous riparian vegetation.	Competing Targets	Competing Targets 67,68,69.

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
	Riparian Vegetation					
89	Relative Abundance of Shrub Vegetation Type	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain no more than 25 percent dominant shrub association vegetation.		
90	Relative Abundance of Yellow Pine Forest In Seral Stages Other Than Mature	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain 15-25 percent of the Yellow Pine Forest in seral stages other than mature.		
91	Relative Abundance of Red Fir Forest In Seral Stages Other Than Mature	Vegetation	Common Vegetation	Relative Abundance - Of the total amount of undisturbed vegetation in the Tahoe Basin:Maintain 15-25 percent of the Red Fir Forest in seral stages other than mature.		
92	Pattern: Limit Size Of New Forest Openings	Vegetation	Common Vegetation	Pattern - Provide for the proper juxtaposition of vegetation communities and age classes by; 1. Limiting acreage size of new forest openings to no more than eight acres		
93	Pattern: Stand Composition And Age	Vegetation	Common Vegetation	Pattern - Provide for the proper juxtaposition of vegetation communities and age classes by; 2. Adjacent openings shall not be of the same relative age class or successional stage to avoid uniformity in stand composition and age.		
94	Non-degradation of stream environment zones	Vegetation	Common Vegetation	A nondegradation standard to preserve plant communities shall apply to native deciduous trees, wetlands, and meadows while providing for opportunities to increase the acreage of such riparian associations to be consistent with the SEZ threshold.	Complete Overlap, Indirect overlap	Complete Overlap with 129. Indirect overlap with 66, 87, 88, 117.
95	Consistency with Bailey Land Capability System	Vegetation	Common Vegetation	Native vegetation shall be maintained at a maximum level to be consistent with the limits defined in the Land Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide For Planning, Bailey, 1974, for allowable impervious cover and permanent site disturbance.		
96	Appropriate Management Practices	Vegetation	Common Vegetation	It shall be a policy of the TRPA Governing Board that a nondegradation standard shall permit appropriate management practices.	Policy Statements as Standards	Policy statement

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
97	Total Old growth	Vegetation	Late Seral/ Old growth Ecosystems	**Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition**, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: · The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands; · The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands; · The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands. Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: · 61 percent of the Subalpine zone must be in a late seral or old growth condition; · 60 percent of the Upper Montane zone must be in a late seral or old growth condition; · 48 percent of the Montane zone must be in a late seral or old growth condition;		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
98	Sub-Alpine old growth	Vegetation	Late Seral/ Old growth Ecosystems	Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: **· The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres)** **of the forested lands;** · The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands; · The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands. Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: **· 61 percent of the Subalpine zone must be in a late seral or old growth condition;** · 60 percent of the Upper Montane zone must be in a late seral or old growth condition; · 48 percent of the Montane zone must be in a late seral or old growth condition;		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
99	Upper Montane old growth	Vegetation	Late Seral/ Old growth Ecosystems	Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: · The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands; **· The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent** **(45,900 acres) of forested lands;** · The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands. Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: · 61 percent of the Subalpine zone must be in a late seral or old growth condition; **· 60 percent of the Upper Montane zone must be in a late seral or old growth condition;** · 48 percent of the Montane zone must be in a late seral or old growth condition;		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
100	Montane old growth	Vegetation	Late Seral/ Old growth Ecosystems	Attain and maintain a minimum percentage of 55 percent by area of forested lands within the Tahoe Region in a late seral or old growth condition, and distributed across elevation zones. To achieve the 55 percent, the elevation zones shall contribute as follows: · The Subalpine zone (greater than 8,500 feet elevation) will contribute 5 percent (7,600 acres) of the forested lands; · The Upper Montane zone (between 7,000 and 8,500 feet elevation) will contribute 30 percent (45,900 acres) of forested lands; **· The Montane zone (lower than 7,000 feet elevation) will contribute 20 percent (30,600 acres) of forested lands.** Forested lands within TRPA designated urban areas are excluded in the calculation for threshold attainment. Areas of the montane zone within 1,250 feet of urban areas may be included in the calculation for threshold attainment if the area is actively being managed for late seral and old growth conditions and has been mapped by TRPA. A maximum value of 40 percent of the lands within 1,250 feet of urban areas may be included in the calculation. Because of these restrictions the following percentage of each elevation zone must be attained to achieve this threshold: · 61 percent of the Subalpine zone must be in a late seral or old growth condition; · 60 percent of the Upper Montane zone must be in a late seral or old growth condition; **· 48 percent of the Montane zone must be in a late seral or old growth condition**;		
101	Deepwater Plants of Lake Tahoe	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (**1) the deepwater plants of Lake Tahoe**, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.		
102	Grass Lake (sphagnum fen)	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, **(2) Grass Lake (sphagnum bog)**, (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 94,129. Indirect overlap with 66.

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
103	Osgood Swamp	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), **(3) Osgood swamp**, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 94,129. Indirect overlap with 66.
104	Freel Peak Cushion Plant Community	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, **(4) the Freel Peak Cushion Plant community**, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.		
105	Taylor Creek Marsh	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, **(5) Taylor Creek Marsh**, (6) Pope Marsh, (7) Upper Truckee Marsh, and (8) Hell Hole.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 94,129. Indirect overlap with 66.
106	Pope Marsh	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (**6) Pope Marsh**, (7) Upper Truckee Marsh, and (8) Hell Hole.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 94,129. Indirect overlap with 66.
107	Upper Truckee Marsh	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, **(7) Upper Truckee Marsh**, and (8) Hell Hole.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 94,129. Indirect overlap with 66.
108	Hell Hole (sphagnum fen)	Vegetation	Uncommon Plant Communities	Provide for the nondegradation of the natural qualities of any plant community that is uncommon to the Basin or of exceptional scientific, ecological, or scenic value. This threshold shall apply but not be limited to (1) the deepwater plants of Lake Tahoe, (2) Grass Lake (sphagnum bog), (3) Osgood swamp, (4) the Freel Peak Cushion Plant community, (5) Taylor Creek Marsh, (6) Pope Marsh, (7) Upper Truckee Marsh, and **(8) Hell Hole**.	Wholly Encompassing Standards, Indirect Overlap	Encompassed by 94,129. Indirect overlap with 66.
109	Long-Petaled Lewisia (Lewisia pygmaea longipetala)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Lewisia pygmaea longipetala- 2		
110	Cup Lake Draba (Draba asterophora var. macrocarpa)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Draba asterophora v. macrocarpa - 2		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
111	Tahoe Draba (Draba asterophora var. asterophora)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Draba asterophora v. asterophora - 5		
112	Tahoe Yellow Cress (Rorippa Subumbellata)	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Rorippa subumbellata - 5		
113	Galena Rock Cress - Arabis Rigidissima V. Demote	Vegetation	Sensitive Plants	Maintain a minimum number of population sites for each of five sensitive plant species. Arabis rigidissima v. demote - 7		
114	Northern Goshawk Population Sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Goshawk (12 population sites)		
115	Osprey population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Osprey (4 population sites)		
116	Wintering Bald Eagle Population Sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Wintering (2 population sites)		
117	Nesting Bald Eagle Population Sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Nesting (1 population site)		
118	Golden Eagle population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Golden Eagle (4 population sites)		
119	Peregrine Falcon Population Sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Peregrine (2 population sites)		
120	Waterfowl population sites	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Waterfowl (18 population sites)		
121	Northern Goshawk Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Goshawk Disturbance zone (mi.): (Most suitable 500 acres surrounding nest site including a 0.25 mile buffer centered on nestsites), Influence zone (mi.): 3.5		
122	Osprey Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species:Osprey Disturbance zone (mi.): (0.25), Influence zone (mi.): 0.6		
123	Wintering Bald Eagle Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species:Bald Eagle Wintering Disturbance zone (mi.): (mapped areas), Influence zone (mi.): Mapped areas		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
124	Nesting Bald Eagle Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Bald Eagle Nesting -Disturbance zone (mi.): (0.5) Influence zone (mi.): Variable		
125	Golden Eagle Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Golden Eagle- Disturbance zone (mi.): (0.25), Influence zone (mi.): 9.0		
126	Peregrine Falcon Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Peregrine- Disturbance zone (mi.): (0.25), Influence zone (mi.): 7.6		
127	Waterfowl Disturbance-Free Zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Waterfowl- Disturbance zone (mi.): (mapped areas), Influence zone (mi.): Mapped areas		
128	Deer disturbance-free zone	Wildlife	Special Interest Species	Provide a minimum number of population sites and disturbance zones for the following species: Deer Disturbance zone (mi.): (meadows), Influence zone (mi.): Mapped areas	Wholly Encompassing Standards	Encompassed by 94, 129. Indirect overlap with 66, 87.
129	Riparian habitat	Wildlife	Habitats of Special Significance	A nondegradation standard shall apply to significant wildlife habitat consisting of deciduous trees, wetlands, and meadows while providing for opportunities to increase the acreage of such riparian associations.	Complete Overlap, Indirect overlap	Complete Overlap with 94. Indirect overlap with 66, 87, 128.
130	Miles of Stream Habitat in Excellent Stream Condition	Fisheries	Stream Habitat	**Maintain the 75 miles of excellen**t, 105 miles of good, and 38 miles of marginal stream habitat as indicated by the §Stream Habitat Quality Overlay map, amended May 1997, based upon the rerated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.		
131	Miles of Stream Habitat in Good Condition	Fisheries	Stream Habitat	Maintain the 75 miles of excellent, **105 miles of good**, and 38 miles of marginal stream habitat as indicated by the §Stream Habitat Quality Overlay map, amended May 1997, based upon the rerated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.		
132	Miles of Stream Habitat in Marginal Condition	Fisheries	Stream Habitat	Maintain the 75 miles of excellent, 105 miles of good, and **38 miles of marginal stream habita**t as indicated by the §Stream Habitat Quality Overlay map, amended May 1997, based upon the rerated stream scores set forth in Appendix C-1 of the 1996 Evaluation Report.		
133	Non-Degradation Standard for Instream Flow	Fisheries	Instream Flow	Until instream flow standards are established in the Regional Plan to protect fishery values, a nondegradation standard shall apply to instream flows.		
134	Divert Stream Intakes to Lake Sources	Fisheries	Instream Flow	It shall be a policy of the TRPA Governing Board to seek transfers of existing points of water diversion from streams to Lake Tahoe.	Policy Statements as Standards	Policy statement

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
135	Lahontan Cutthroat Trout	Fisheries	Lahontan Cutthroat Trout	It shall be the policy of the TRPA Governing Board to support, in response to justifiable evidence, state and federal efforts to reintroduce Lahontan cutthroat trout.	Policy Statements as Standards	Policy statement
136	Acres of "Prime" Fish Habitat	Fisheries	Lake Habitat	A nondegradation standard shall apply to fish habitat in Lake Tahoe. Achieve the equivalent of 5,948 total acres of excellent habitat §as indicated by the Prime Fish Habitat Overlay Map as may be amended based on best available science.		
137	Aircraft Noise Departure/Arrival (8am to 8pm)	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Overall 80 dBA. The single event noise standard of 80 dBA Lmax for aircraft departures at Lake Tahoe Airport shall be effective immediately. The single event noise standard of 80 dBA Lmax for aircraft arrivals at Lake Tahoe Airport is not to be effective until ten years after the adoption of an airport master plan by TRPA. The schedule for phasing in the 80 dBA arrival standard shall be based on a review and consideration of the relevant factors, including best available technology and environmental concerns, and shall maximize the reduction in noise impacts caused by aircraft arrivals while allowing for the continuation of general aviation and commercial service. The beginning arrival standard shall not exceed 84 dBA for general aviation and commuter aircraft, and 86 dBA for transport category aircraft.		
138	Aircraft Noise Departure/Arrival (8pm to 8am)	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. 77.1 dBA. Between the hours of 8 p.m. and 8 a.m.		
139	Watercraft-Pass By Test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Watercraft Pass-By Test 82. Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.		
140	Watercraft-Shoreline Test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels. Shoreline Test 75 Lmax. Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.		
141	Pre-1993 Watercraft-Stationary Test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Stationary Test 88 dBA Lmax for boats manufactured before January 1, 1993; Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.		
142	Post 1992 Watercraft-Stationary Test	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Stationary Test 90 dBA Lmax for boats manufactured after January 1, 1993; Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.		
143	Motor Vehicles Less than 6,000 GV for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motor Vehicles Less Than 6,000 GVW, Less Than 35 MPH: 76 dBa		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
144	Motor Vehicles Less Than 6,000 GVW for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motor Vehicles Less Than 6,000 GVW, Greater Than 35 MPH: 82 dBa		
145	Motor Vehicles Greater than 6,000 GVW for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motor Vehicles Greater Than 6,000 GVW, Less Than 35 MPH: 82 dBa		
146	Motor Vehicles Greater than 6,000 GVW for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motor Vehicles Greater Than 6,000 GVW, Greater Than 35 MPH: 86 dBa		
147	Motorcycles for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motorcycles, Greater Than 35 MPH: 77 dBa		
148	Motorcycles for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Motorcycles, Greater Than 35 MPH: 86 dBa		
149	Off-Road Vehicles for speeds less than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Off-Road Vehicles, Greater Than 35 MPH: 72 dBa		
150	Off-Road Vehicles for speeds greater than 35 mph	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Off-Road Vehicles, Greater Than 35 MPH: 86 dBa		
151	Snowmobiles	Noise	Single Noise Events	The following maximum noise levels are allowed: All values are in decibels.Snowmobiles, Greater Than 35 MPH: 82 dBa		
152	High Density Residential Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: High Density Residential Areas, Average Noise Level Or CNEL range (dBA) : 55		
153	Low Density Residential Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Low Density Residential Areas, Average Noise Level Or CNEL range (dBA) : 50		
154	Hotel/Motel Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Hotel/Motel Areas, Average Noise Level Or CNEL range (dBA) : 60		
155	Commercial Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Commercial Areas, Average Noise Level Or CNEL range (dBA) : 60		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
156	Industrial Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category: Industrial Areas, Average Noise Level Or CNEL range (dBA) : 65		
157	Urban Outdoor Recreation Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Urban Outdoor Recreation Areas, Average Noise Level Or CNEL range (dBA) : 55		
158	Rural Outdoor Recreation Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Rural Outdoor Recreation Areas, Average Noise Level Or CNEL range (dBA) : 50		
159	Wilderness and Roadless Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Wilderness and Roadless Areas, Average Noise Level Or CNEL range (dBA) : 45		
160	Critical Wildlife Habitat Areas	Noise	Cumulative Noise Events	Background noise levels shall not exceed the following levels: Land Use Category:Critical Wildlife Habitat Areas, Average Noise Level Or CNEL range (dBA) : 45		
161	Transportation corridors	Noise	Cumulative Noise Events	It shall be the policy of the TRPA Governing Body in development of the Regional Plan to define, locate, and establish CNEL levels for transportation corridors	Policy Statements as Standards	Policy statement
162	Quality of Recreation Experience & Access to Recreational Opportunities	Recreation	Quality of Recreation Experience and Access to Recreational Opportunities	It shall be the policy of the TRPA Governing Body in development of the Regional Plan to preserve and enhance the high quality recreational experience including preservation of highquality undeveloped shorezone and other natural areas. In developing the Regional Plan, the staff and Governing Body shall consider provisions for additional access, where lawful and feasible, to the shorezone and high quality undeveloped areas for low density recreational uses.	Policy Statements as Standards	Policy statement
163	Fair Share Distribution Of Recreation Capacity	Recreation	Fair Share Distribution of Recreation Capacity	It shall be the policy of the TRPA Governing Body in development of the Regional Plan to establish and ensure a fair share of the total Basin capacity for outdoor recreation is available to the general public.	Policy Statements as Standards	Policy statement
164	Scenic Quality Ratings for Roadway Units	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in **Tables 13-3**, 13-5, 13-8 and 13-9 of the Draft Study Report.		
165	Travel Route Ratings for Shoreline Travel Units	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, **13-5**, 13-8 and 13-9 of the Draft Study Report.		
166	Travel Route Ratings for Roadway Units (Scenic Resources)	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, 13-5, **13-8** and 13-9 of the Draft Study Report.		

82-11 Sequence Number	Name of Standard	Threshold Category	Reporting Category	Adopted TRPA Threshold Standard (TRPA Resolution 82-11)	Typology	Typology explanation
167	Scenic Quality Ratings for Shoreline Units (Scenic Resources)	Scenic Resources	Roadway and Shoreline Units	Maintain or improve the numerical rating assigned each unit, including the scenic quality rating of the individual resources within each unit, as recorded in the Scenic Resources Inventory and shown in Tables 13-3, 13-5, 13-8 and **13-9** of the Draft Study Report.		
168	Roadway Travel Routes	Scenic Resources	Roadway and Shoreline Units	Maintain the 1982 ratings for all roadway and shoreline units as shown in Tables **13-6** and 13-7 of the Draft Study Report.		
169	Shoreline Travel Routes	Scenic Resources	Roadway and Shoreline Units	Maintain the 1982 ratings for all roadway and shoreline units as shown in Tables 13-6 and **13-7** of the Draft Study Report.		
170	Restore Roadway units	Scenic Resources	Roadway and Shoreline Units	**Restore scenic quality in roadway units rated 15** or below and shoreline units rated 7 or below.		
171	Restore Shoreline units	Scenic Resources	Roadway and Shoreline Units	Restore scenic quality in roadway units rated 15 or below and **shoreline units rated 7 or below**.		
172	Scenic Quality of Other Areas (Recreation Sites and Bike Trails)	Scenic Resources	Other Areas	Maintain or improve the numerical rating assigned to each identified scenic resource, including individual subcomponent numerical ratings, for views from bike paths and other recreation areas open to the general public as recorded in the 1993 Lake Tahoe Basin Scenic Resource Evaluation.		
173	Built Environment (Community Design)	Scenic Resources	Built Environment	It shall be the policy of the TRPA Governing Body in development of the Regional Plan, in cooperation with local jurisdictions, to insure the height, bulk, texture, form, materials, colors, lighting, signing and other design elements of new, remodeled and redeveloped buildings be compatible with the natural, scenic, and recreational values of the region.	Policy Statements as Standards	Policy statement

TAHOE REGIONAL PLANNING AGENCY

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.org

MEMORANDUM

Date: May 2, 2018

To: TRPA Advisory Planning Commission

From: TRPA Staff

Subject: 2017 TRPA Monitoring Report

Requested Action: No action required – informational only.

Summary: Staff will present an overview of 2017 monitoring work.

Background: The Bi-State Compact directs TRPA to establish environmental goals for the Tahoe Basin (threshold standards) and TRPA and its partners monitor progress towards those goals. TRPA and its partners produce the threshold evaluation report every four years to provide a snapshot of the overall environmental health in the Region. While the threshold evaluation provides a four-year overview, the agency reviews the findings of each monitoring program annually as part of its adaptive management process. This presentation will focus on the monitoring work completed by TRPA in 2017 as part of the Region's collective commitment to monitoring. The presentation will cover monitoring work in six focal areas:

1. Tributaries
2. Stream environment zones
3. Noise
4. Wildlife
5. Bicycle and pedestrian monitoring
6. Sensitive Plants

Additional monitoring information is available at https://monitoring.laketahoeinfo.org/.

Contact Information: If you have any questions regarding this agenda item please contact Sean Tevlin, Assistant Environmental Specialist, at stevlin@trpa.org, (775) 589- 5254 or Beth Vollmer, Monitoring Technician at bvollmer@trpa.org, (775) 589- 5223.

AGENDA ITEM NO. VI.A

TAHOE REGIONAL PLANNING AGENCY

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.org

MEMORANDUM

Date: May 2, 2018

To: TRPA Advisory Planning Commission

From: TRPA Staff

Subject: LakeTahoeInfo.org Briefing

Requested Action: No action required – informational only.

Summary: Staff will provide an update on the www.LakeTahoeInfo.org website.

Background: In 2014, TRPA launched www.laketahoeinfo.org platform with the goal of connecting people with information to improve decision making and sustain investments in the Lake Tahoe Basin. Since the last presentation to the APC in November 2017, there have been additions and enhancements to the platform. Staff will present an overview of the following new or expanded portals:

- The expanded Monitoring Dashboard https://monitoring.laketahoeinfo.org/ and its connection to the Tahoe Open Data hub http://data-trpa.opendata.arcgis.com/.
- Enhancements to the Parcel Tracker https://parcels.laketahoeinfo.org/.
- The new Lake Clarity Tracker https://clarity.laketahoeinfo.org/.

Contact: For questions regarding this agenda item, please contact Jeanne McNamara, Principal Planning Analyst at (775) 589-5252 jmcnamara@trpa.org , or Reid Haefer, Data Modeler/Analyst at (775)-589-5289 rhaefer@trpa.org.

2018 Quarterly Report

TAHOE REGIONAL PLANNING AGENCY

First Quarter: January – March 2018

TAHOE REGIONAL PLANNING AGENCY

Photo by Tom Lotshaw

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TRPA STRATEGIC INITIATIVES

ONGOING INITIATIVES AND ANNUAL ACTIVITIES

TRPA STRATEGIC INITIATIVES

The Tahoe Regional Planning Agency (TRPA) is moving forward with strategic initiatives the Governing Board identified in 2015 as priorities over the next five years. These initiatives align directly with the four objectives in the agency's Strategic Plan.

THRESHOLDS UPDATE STRATEGIC INITIATIVE

Most of the threshold standards TRPA adopted in 1982 are based on science that is now over 30 years old. The cost of fully monitoring and measuring the existing threshold system has also proved unsustainable. A broad bi-state consensus supports considering updates to the thresholds and monitoring systems. TRPA is working with the new Bi-State Tahoe Science Advisory Council and science community to create a sustainable, prioritized, and relevant monitoring plan, and to review and consider modifying the threshold standards to reflect the latest science and the significant values in the Lake Tahoe Region.

> ***Strategic Initiative Desired Outcomes:*** *Relevant and scientifically rigorous threshold standards and a cost-efficient, feasible, and informative, comprehensive monitoring and evaluation plan.*

Reorganization and Technical Corrections of the Threshold Standards

In May TRPA will bring a proposed reorganization and set of technical corrections to the TRPA Advisory Planning Commission (APC) and Governing Board. The proposal provides a more coherent structure and numbers each standard to clarify system intent while maintaining the current protections. The proposal is the result of collaborative work with the Tahoe Science Advisory Council who developed a framework to assess and address overlap in the threshold standard system. TRPA applied the framework and identified 51 standards that overlap another standard in the system, and more than 350 instances of standards overlapping one another. The council and TRPA presented the findings of the overlap assessment and a proposal to address some of the issues identified to the Threshold Update Initiative Stakeholders Working Group in March. Following a second meeting of the working group in April, the group recommended bringing the proposal to the APC and Governing Board in May.

SEZ Monitoring and Restoration Project to Inform Future Threshold Updates

TRPA began work on a stream environment zone (SEZ) monitoring and restoration planning project funded through a $200,000 U.S. Environmental Protection Agency Healthy Watersheds grant. The outcomes of this project are threefold:

1. A basin-wide SEZ monitoring program building on TRPA's trial SEZ monitoring program that began in 2016;
2. A basin-wide SEZ restoration plan to inform SEZ restoration priorities going forward; and
3. Performance metrics for SEZ restoration projects that measure restoration success.

This project is being implemented through a group process with all partners involved with SEZ restoration in the basin. Final monitoring and restoration plans are expected to be completed in 2019 and 2020 and will inform future threshold updates for SEZs.

SHORELINE PLAN INITIATIVE

TRPA launched the shoreline initiative to enhance the recreational experience along Lake Tahoe's shores while protecting the environment and responsibly planning for potential future development in the shorezone. TRPA and partner agencies initiated planning by engaging the Consensus Building Institute (CBI), a third-party mediation firm, to convene stakeholders and complete a stakeholder issue assessment. The assessment aided the development of a planning process and work program accepted by the TRPA Governing Board in April 2016.

The scope of work focuses on the extent of allowed development of shoreline structures (marinas, piers, buoys, slips, and boat ramps) to support water-dependent recreation and effective resource management to ensure threshold attainment. The scope of work is detailed in the scope memo on www.shorelineplan.org.

> ***Strategic Initiative Desired Outcomes:*** *The shoreline plan initiative will result in updated goals and policies in TRPA's Regional Plan and new regulations in the TRPA Code of Ordinances (Chapters 80 to 86) aimed at enhancing recreation and protecting the 72 miles of Lake Tahoe's shoreline.*

Administrative Draft Environmental Document Completed

By February, Ascent Environmental completed an administrative draft environmental impact statement (EIS) analyzing the four alternatives put forth last fall by the Shoreline Steering Committee and endorsed by the Regional Plan Implementation Committee (RPIC). The draft analysis identifies potential environmental impacts and mitigation measures designed to reduce those impacts to a less than significant level.

Using these findings, TRPA is working with the Shoreline Steering Committee and partner agencies to ensure that the mitigation measures proposed can be implemented and that program elements are funded and feasible. TRPA staff is laying the groundwork for implementation of the buoy permitting and enforcement program, no-wake zone and non-motorized watercraft protection, and fee programs related to mitigation.

Concurrent with preparing the EIS, TRPA convened a Shoreline Code Working Group and contracted with The Watershed Company to draft accompanying amendments to the TRPA Code of Ordinances based on the Shoreline Steering Committee policy recommendations. TRPA will present the recommended code amendments to RPIC before the public release of the draft EIS anticipated in May 2018.

DEVELOPMENT RIGHTS STRATEGIC INITIATIVE

Private investment in environmentally beneficial redevelopment is vital to implementing the Regional Plan. The development rights strategic initiative is evaluating the effectiveness of the transferable development rights system in accomplishing Regional Plan goals. The initiative is considering potential changes to the system to better manage growth, support environmentally beneficial and economically feasible redevelopment, and improve its effectiveness and predictability. This initiative is evaluating commercial, tourist accommodation, and residential

development units; the timing of development rights allocations; and related codes and policies. It will also examine alternative systems to implement Regional Plan policies while considering existing development rights. Affordable housing and vacation home rentals are being addressed primarily by local governments and in this TRPA initiative will be addressed only in terms of the quantity and type of development rights and allocations available.

> ***Strategic Initiative Desired Outcomes:*** *Facilitate greater understanding of Tahoe's growth management system. Assess and update the commodities growth management system with the goal of encouraging environmentally beneficial redevelopment of legacy properties and removal of development from sensitive lands. Involve relevant stakeholders with the goal of mutual and inclusive engagement.*

This quarter, working groups have honed policy recommendations, which are now being advanced for further development or implementation. Development rights policy recommendations developed by the Mountain Housing Council for Placer and Nevada County were presented to the Governing Board in January and to the Development Rights Working Group in February. The Mountain Housing Council has been looking at housing cost and affordability issues on the North Shore and looked at extending the use of bonus units to moderate and middle-income housing units.

The Development Rights Working Group recommended moving forward on policy, code, and procedural amendments for the following components of the recommended alternative:

1. Conversion exchange rates;
2. Eliminating the local jurisdictional transfer approval; and
3. Eliminating the requirement to have a project approved before the transfer of development rights.

Environmental review of the Development Rights Working Group's recommended alternative was initiated this quarter. A technical code team of subject matter experts has been appointed to draft code and policy changes for the Development Rights Working Group's recommended alternative. The working group, acknowledging the basin's workforce housing shortage, also directed staff to evaluate planning and policy recommendations for expanding eligibility of the bonus unit allocations to housing for a wider range of income lever, termed "local achievable" housing.

More information about the development rights strategic initiative is available online at http://www.trpa.org/about-trpa/how-we-operate/strategic-plan/development-rights/.

TRANSPORTATION STRATEGIC INITIATIVE

TRPA's transportation initiative will enhance Lake Tahoe's transportation system with improved trails, transit, and technology. The approval of the 2017 Regional Transportation Plan, Linking Tahoe, was the first essential step. The most significant issue the initiative aims to address is heavy visitor traffic that causes congestion in community centers, at recreation areas, and at regional entry and exit points.

Strategic Initiative Desired Outcomes: *Accelerate threshold attainment by implementing the Regional Transportation Plan, reducing air pollution, improving water quality, enhancing recreational opportunities and mobility, and shifting people to biking, walking, and transit use.*

Transportation Corridor Planning:

The Tahoe Transportation District completed the first transportation corridor plan for the Region in connection with the Incline to Sand Harbor multi-use trail project. Applying lessons learned from that recreation corridor, partners are now kicking off the next transportation corridor plan for the State Route 89 (Emerald Bay) Recreation Corridor Management Plan. This plan will prioritize improved integration of recreation visitor management into transportation corridor planning and project implementation. The corridor plan steering committee, which includes staff from TRPA, Tahoe Transportation District, and the U.S. Forest Service Lake Tahoe Basin Management Unit, awarded a contract for a consultant to begin developing the corridor management plan. The committee invited stakeholders to join the project team that will guide the corridor planning process.

The State Route 89 Recreation Corridor Management Plan will include data collection and analysis, and best practice research and recommendations for transportation, visitor use management, and visitor experience. Final plan development will focus on both transportation and visitor management strategies, to address the impacts of chaotic traffic congestion and visitor demand during the peak summer recreation season.

Lake Tahoe Bi-State Transportation Consultation Working Group

The Lake Tahoe Bi-State Transportation Consultation Working Group, formed in April 2017, aims to provide leadership and alignment for transportation implementation at Lake Tahoe and build transportation system connections with Northern California and Nevada. Co-chaired by California Secretary of Natural Resources John Laird and Director of the Nevada Department of Conservation and Natural Resources Bradley Crowell, the working group includes regional, local, and private sector representatives. The group organized into four subcomittees - recreation travel, corridor planning, public-private partnerships, and maximizing technology, to identify and solve obstacles to implementing Tahoe's regional transportation plan.

Transportation Safety Performance Measure Targets

With the onset of TRPA's role as a large metropolitan planning organization comes new requirements for the basin to meet. Fixing America's Surface Transportation Act requires added safety standards. TRPA staff coordinate with the states of California and Nevada on safety performance measure targets with the goal of decreasing crashes. TRPA and partners continue to work on the Lake Tahoe Safety Plan and drafted three memorandums outlining recommendations for appropriate design methods for projects, crash statistics and related countermeasure tools, and crash reporting and data collection improvements. The safety performance measures will be utilized to prioritize project funding and inform safe project design.

Active Transportation Plan Implementation

TRPA supported implementation of actions in the 2016 Active Transportation Plan this quarter. Staff located all existing bicycle parking in the basin and identified proposed bicycle parking sites by using technologies that incorporated public involvement. The data collected supports the Lake Tahoe Bicycle Coalition's grant requests to create and implement a bicycle parking program. An

active transportation checklist in development will require all project proponents to identify if they are providing active transportation facilities and how they plan to maintain the facilities.

Travel Management

After a successful travel management workshop, TRPA staff, supported by the Federal Highway Administration, produced a summary of workshop accomplishments and next steps. One important step was filling a new travel management coordinator position at the agency. The coordinator will work with businesses, employers, tourism authorities, and other partners on strategies to reduce use of the private automobile. The new coordinator is starting to develop an awareness campaign for visitors to learn more about transit and trail travel options at Lake Tahoe.

FOREST HEALTH STRATEGIC INITIATIVE

TRPA's forest health strategic initiative includes two objectives consistent with the Lake Tahoe Basin Multi-Jurisdictional Fuel Reduction and Wildfire Prevention Strategy: Completing fuels reduction treatments in the wildland-urban interface and extending forest management actions into the general forest to accomplish large, landscape-scale, multi-benefit restoration through a collaborative multi-agency process. Other objectives include building a shared vision for forest management in the Tahoe Region, making Tahoe a good investment for the public and private sector for forest/watershed restoration, and identifying and addressing current and future threats to Tahoe's forest and watersheds.

> ***Strategic Initiative Desired Outcomes:*** *Reduce the threat of fire in the wildland-urban interface and implement forest restoration at a large-landscape scale.*

Lake Tahoe West Partnership

The Lake Tahoe West initiative has moved into its second phase, development of the large landscape restoration strategy. The Lake Tahoe West Interagency Design Team has been working with the Lake Tahoe West Science Team to develop four management scenarios that will be used in a modeling exercise to help the Tahoe West team decide on the best landscape restoration strategy. The management scenarios aim to "pin the corners" by demonstrating starkly different management options that could be used in the West Shore forests, including prescribed burning, mechanical and hand thinning, and fire suppression. The strategy will integrate the best treatment options to attain resilience to fire, climate change, and drought in the West Shore's forests. The landscape restoration strategy is expected to be completed by October 2018.

The Lake Tahoe West Core Team has been working on strengthening public outreach and education for Lake Tahoe West. A video production company is developing a short movie to communicate the mission and work that Tahoe West plans to achieve. This video will be debuted at the Lake Tahoe Summit in August.

Tahoe Fire and Fuels Team Retreat

TRPA staff Christina Restaino, Bruce Barr, and Tom Lotshaw participated in the Tahoe Fire and Fuels Team (TFFT) retreat in March. The objectives of the retreat were to strengthen the public outreach and engagement component of the TFFT strategy and identify barriers and opportunities for project implementation. At each year's retreat, the partnership reviews the field programs and fuels treatment projects to be implemented this season. In addition, Christina Restaino gave a presentation to the team about the vegetation threshold update and held an open discussion with the group on what values and considerations the threshold update should include.

Forest Health and Fuels Reduction Project Funding

Thirteen high priority forest health and fire protection projects were included in the fiscal year 2019 Lake Tahoe Restoration Act Priority list for potential federal appropriations. This included five water infrastructure projects to improve the basin's capacity to fight a catastrophic wildfire. TFFT members worked closely with the basin's water purveyors to identify these priority water infrastructure projects.

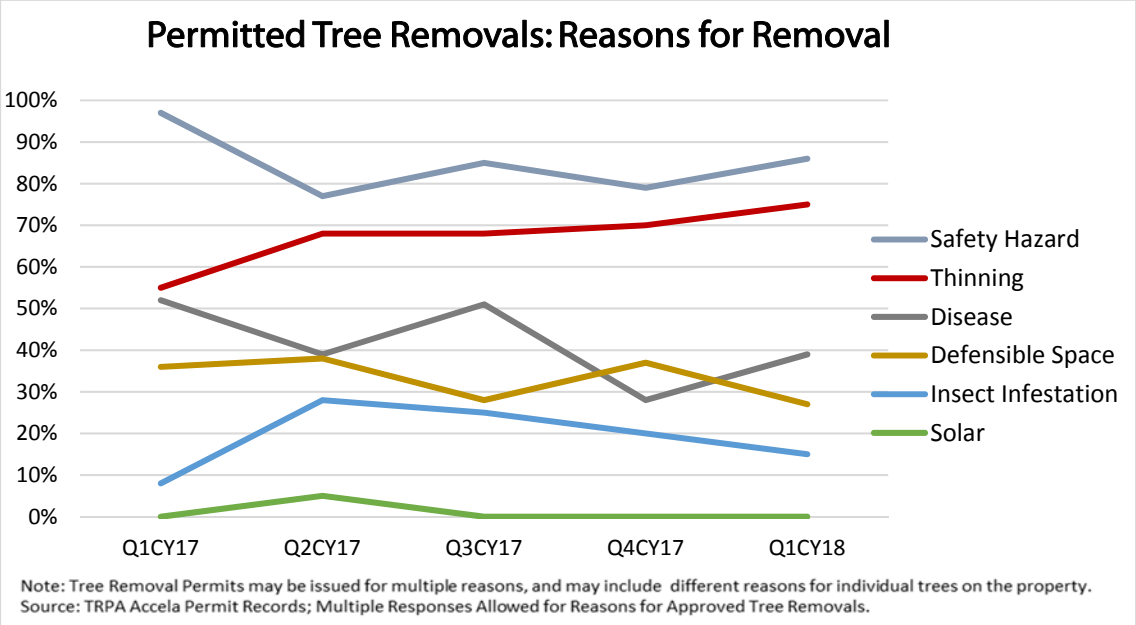
Urban Forestry/Tree Removal Permits on Private Property

TRPA foresters are part of the network of forestry and fire professionals who help private landowners keep their property safe and defensible from wildfire. TRPA's staff forester provides expertise in tree risk assessment and serves private property owners in the Tahoe Basin with thorough tree evaluations. The table below summarizes tree removal applications by quarter since the beginning of 2017. In the first quarter of 2018, TRPA received 90 removal applications, up when compared to the first quarter last year. Trees removed due to safety hazard continue to be the primary reason for marking trees for removal.

Summary of TRPA Tree Removal Application and Permitting Activity Quarter 1 2017 through Quarter 1 2018

	Q1 CY2017	Q2 CY2017	Q3 CY2017	Q4 CY2017	Q1 CY2018
Tree Removal Applications Received	**47**	**270**	**338**	**153**	**90**
Number of Trees Permitted for Removal	166	1141	1,296	520	339
Percent Applications Submitted Online	49%	62%	60%	67%	68%

Source: TRPA Accela Permit Records



AQUATIC INVASIVE SPECIES STRATEGIC INITIATIVE

Control of existing aquatic invasive species (AIS) is one of three core AIS programs, complementing the well-known prevention program as well as early detection/rapid response. Boat inspection fees and funding from California and Nevada combine to fund the boat inspection program. The primary need going forward is to secure AIS control program funding to implement Tahoe's science-based AIS Control Implementation Plan and prioritize effective projects to push back existing populations of AIS.

> ***Strategic Initiative Desired Outcomes:*** *Secure funding for the AIS control program, implement the prioritized implementation plan, and align control projects to reduce existing AIS. Control is important to enhance and restore Tahoe's unique ecosystem impacted by the introduction of invasive weeds, clams, and fish. In addition to environmental protection, the program protects Tahoe's recreation and tourist-based economy.*

AIS Program Funding

In the first quarter of 2018, TRPA received $1 million in funding from the U.S. Army Corps of Engineers that can be directed to all aspects of the AIS program, with a significant portion highlighted for control. Additional funding was awarded to TRPA from the Lahontan Regional Water Quality Control Board (SB630 Nearshore funds) and the Nevada Division of State Lands (Lake Tahoe License Plate funds) to develop an aquatic plant monitoring plan and to complete a lake-wide survey of aquatic plants. Surveillance monitoring has been a critical missing component that will allow managers to better plan future control projects. Another $47,000 was awarded to the Tahoe Resource Conservation District to do AIS control at Elk Point Marina. This project will include a private contribution from the Elk Point Homeowners Association to pay for approximately 25 percent of the project's cost.

AIS Prevention

Throughout the winter, public boating access to the lake is limited to only a few ramp locations, the Cave Rock boat ramp on the south shore and the Tahoe City Public Utility District boat ramp in Lake Forest on the north shore. Watercraft inspections continued during the first quarter of 2018 at both locations. Ninety inspections were completed this quarter with no decontaminations needed.

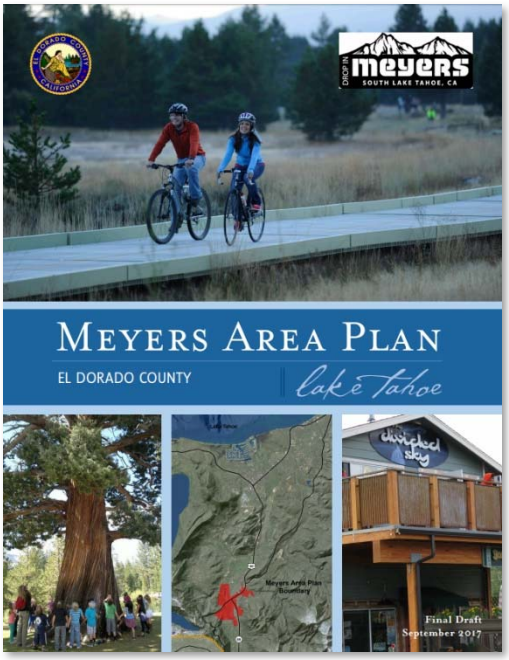
ONGOING INITIATIVES AND ANNUAL ACTIVITIES

LONG RANGE & TRANSPORTATION PLANNING DIVISION

Long range planning priorities are established by TRPA's Governing Board annually and reviewed based on evaluations of progress toward achieving and maintaining environmental threshold standards every four years.

Meyers Area Plan Approved

This quarter saw another milestone met in the ongoing implementation of the 2012 Regional Plan. The TRPA Governing Board unanimously approved El Dorado County's Meyers Area Plan, the fifth local area plan approved at Lake Tahoe. The El Dorado County Board of Supervisors adopted the Meyers Area Plan in December 2017 after five years of community meetings and workshops. The area plan covers approximately 669 acres of the Meyers community, centered around the intersection of U.S. Highway 50 and State Route 89.



The Meyers Area Plan updates land uses, zoning, and building and sign design standards for the Meyers community. It also identifies proposed projects to improve recreation opportunities, transportation, community vitality, and the environment in Meyers. The plan includes new protections for landmark trees in Meyers, adds 348 acres of conservation-zoned land and 137 acres of recreation-zoned land to the area plan boundary, offers new incentives for buildings that reduce greenhouse gas emissions, and outlines proposals for new trails, bike lanes, and shared-use paths to better link neighborhoods, schools, shopping areas, and recreation sites. The plan also creates a Meyers Advisory Council comprised of community residents who will help advise El Dorado County's Planning Commission and Board of Supervisors on projects and issues in Meyers.

Sustainable Recreation

The Tahoe Interagency Executives Steering Committee (TIE-SC), the multi-sector steering committee for the Environmental Improvement Program, two years ago prioritized the need to better integrate recreation management considerations into transportation corridor planning and project implementation. In response, transportation plans for two recreation corridors, State Route 28 from Incline Village to Sand Harbor, and State Route 89 at Emerald Bay, are planning for visitor management together with transportation right-of-way considerations. The Sustainable Recreation Working Group finalized and presented its charter and 2018 work plan to the TIE-SC this quarter and is beginning to address recreation management issues with the project team for the State Route 89 transportation corridor plan.

Electric Vehicle Readiness

In partnership with the Tahoe Fund and Tesla, TRPA plans to distribute electric vehicle charging infrastructure at recreation sites across the Region. In total, 21 recreation sites have been identified

as charging locations, with up to 55 individual stations planned for installation. Increasing the availability of electric vehicle charging stations at recreation sites is a key component toward electrifying Tahoe's transportation system.

Renewable Energy

TRPA was asked to participate in the 2018 California State Energy Efficiency Collaborative greenhouse gas inventory process. This program will provide technical assistance and build staff knowledge around greenhouse gas inventories and result in an updated regional greenhouse gas inventory for the Tahoe Basin. The last basin inventory was completed in 2012.

CURRENT PLANNING DIVISION

TRPA achieves environmental threshold benefits through project implementation by the public and private sectors. The Current Planning Division reviews applications in a timely and consistent manner to serve the public and help facilitate environmental improvement and economic investment in Lake Tahoe communities.

Washoe County Permitting Process Changes

In December 2017, the project review delegation memorandum of understanding (MOU) between TRPA and Washoe County was put on hold at the request of Washoe County. Washoe County is no longer accepting and reviewing permit applications on behalf of TRPA. To better serve the public in Washoe County, TRPA assigned a planner to be available to the public one day a week at Washoe County's Incline Community Center to accept and review applications.

Hearings Officer Meetings

The Hearings Officer approved 15 project applications this quarter:

- Ten land capability challenges;
- Two permits for modifications to historic structures;
- A rebuild of a shoreline protective structure;
- An addition to a commercial building in Incline Village;
- And a permit for Nevada Energy to rebuild its underground electric distribution system in areas of Incline Village that are consistently subject to power outages due to failing equipment.

Permit Application Review

The number of permit applications received this quarter is up 40 percent compared to the same quarter last year including a 47 percent increase in residential projects. The increase could be partially attributable to Washoe County applications coming to TRPA following the County's suspension of its delegation MOU. Verification and banking applications are also up from last year (44 percent increase) which tend to be precursor activity to future project applications.

Summary of TRPA Application and Permitting Activity Quarter 1 2017 through Quarter 1 2018					
	Q1 CY2017	Q2 CY 2017	Q3 CY2017	Q4 CY2017	Q1 CY2018
Applications Recieved[1]	**152**	**234**	**243**	**199**	**213**
Residential Projects[2]	34	42	44	25	50
Commercial Projects[2]	3	4	5	4	4
Recreation/Public Service Projects[2]	10	9	9	11	16
Environmental Improvement Construction Projects	6	5	1	0	5
Shorezone/Lakezone Projects[2]	9	7	7	5	4
Grading Projects	3	10	16	7	5
Verifications and Banking[3]	63	132	124	123	91
Transfers of Development	10	10	5	7	13
Other[4]	14	15	32	17	25

Notes:

1 Does not include Exempt projects, Qualified Exempt declarations, Tree Removal applications, or Administrative applications.

2 Includes New Development and Additions/Modification

3 Includes Soils/Hydrology Verifications, IPES, Land Capability Verifications, Land Capability Challenges, Verifications of Coverage, Verifications of Uses, Site Assessments and Standalone Banking Applications

4 'Other' includes Historic determinations, Lot Line Adjustments, Temporary projects, Scenic, Underground Tank Removal, Subdivision of Existing Uses, Sign, Allocation Assignments, and other miscellaneous project types

Source: TRPA Accela Permit Records

ENVIRONMENTAL IMPROVEMENT PROGRAM DIVISION

TRPA's Environmental Improvement Division leads the Lake Tahoe Environmental Improvement Program (EIP), a collaborative public and private, multi-jurisdictional capital investment program to conserve and restore Lake Tahoe's environment and enhance public recreation opportunities. The division leads the development of new financing strategies for future projects and programs, sets priorities so limited funding achieves maximum threshold gain, and builds new associations beyond the Tahoe Region to improve implementation and leverage new funding sources.

EIP Priority Project List for Potential Lake Tahoe Restoration Act Appropriations

The Lake Tahoe Partnership continues its work to secure federal appropriations under the 2016 Lake Tahoe Restoration Act's authorization. Per the Act's requirements, EIP partners collaboratively developed a "Year 2" project priority list for potential 2018/2019 Lake Tahoe Restoration Act (LTRA) appropriations. The new list is an update to the list submitted last year, increasing the total project number from 22 to 43 high priority projects in the EIP focus areas of forest health and water infrastructure; aquatic invasive species; stormwater management and watershed restoration; and program performance and accountability. On behalf of the partnership, the U.S. Forest Service submitted the revised list to the Lake Tahoe congressional delegation on March 15. The following week the Lake Tahoe Partnership followed up with meetings in Washington, D.C. to discuss with our elected officials the priority projects and the federal share of the EIP. With passage of the recent

federal 2018 omnibus budget bill, Congress appropriated $3.1 million to the AIS category, and EIP partners are continuing to work together to seek additional LTRA appropriations for fiscal year 2019.

EIP Reporting

The EIP Project Tracker is proving its value in consolidating accomplishment information in one platform for all sectors of the EIP. The 2017 EIP reporting season concluded January 15, with all EIP partners submitting project information, expenditures, and accomplishments for the previous year to the Lake Tahoe Info EIP Project Tracker. EIP Division staff review and approve all project updates for accuracy so this data can be relied upon for reports and the annual federal summit. This year showed the highest engagement in the tracker's use with 42 organizations reporting information and 253 projects updated.

BMP Certificates Issued

TRPA issues best management practices (BMP) certificates to recognize a parcel's compliance with BMP requirements in TRPA's Code of Ordinances. The Stormwater Management Program targets priority properties for BMP compliance in coordination with local jurisdictions to achieve required pollutant load reductions. This includes concentrating on commercial and large multi-family (six units or more) properties that the Total Maximum Daily Load Program shows generate more pollutant load compared to single-family residential properties. This quarter, TRPA issued 20 BMP certificates: 15 for single family residential parcels, two for multi-family residential parcels, and three for commercial parcels.

BMP Certificates issued from January 1 to March 31, 2018

	Land Use	Total Certificates Issued Year to Date	Certificates Issued Through Permitted Projects	Certificates Issued Through Voluntary Compliance	Certificates Issued Through Enforced Compliance
California	Single Family Residential	13	10	3	0
	Multi-Family Residential	0	0	0	0
	Commercial	3	0	1	2
	California Total	**16**	**0**	**0**	**0**
Nevada	Single Family Residential	2	1	1	0
	Multi-Family Residential	2	0	1	1
	Commercial	0	0	0	0
	Nevada Total	**4**	**0**	**0**	**0**
	Total Certificates Issued	**20**	**11**	**6**	**3**

Lake-Friendly Business Program

At the end of March, 81 businesses were members of the Lake-Friendly Business Program, up from 74 businesses at the same time last year. The program recognizes local businesses that install and maintain their BMPs by publicly acknowledging them as good stewards of the lake through print advertisements and social media campaigns. Stormwater Management Program staff attended the 2018 Lake Tahoe Business Expo in March and networked with existing and potential Lake-Friendly Business members.

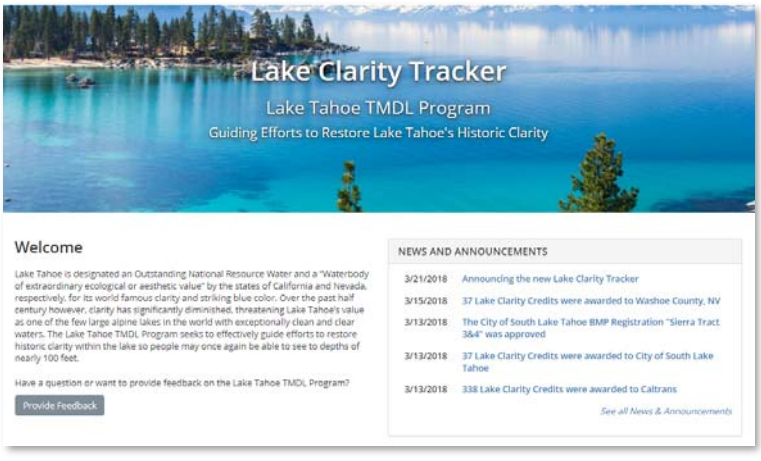
RESEARCH & ANALYSIS DIVISION

TRPA monitors hundreds of environmental threshold standards, performance measures, and management actions for progress and effectiveness. The agency formed a Research and Analysis Division to strengthen its relationship with the science community and provide the best possible information for policy decisions, operations, and accountability. The division builds data platforms, monitors, and maintains current data, and analyzes information needed for policy development and decision making.

LakeTahoeInfo.org Development

TRPA continued to develop the https://laketahoeinfo.org website this quarter with enhancements to make it more accessible, user-friendly, and valuable to the user. Highlights and new features include:

- The Individual Parcel Evaluation System (IPES) database was integrated into the Parcel Tracker(https://parcels.laketahoeinfo.org/.) People can now download IPES score summary sheets directly from the parcel detail page and no longer need to contact TRPA to have these printed for them.
- BMP information is now displayed in the Parcel Tracker and certificates can be viewed and printed directly from the website.
- Information about 675 parcels was updated in the Parcel Tracker this quarter. During this same time, TRPA responded to 31 help requests directly through the Parcel Tracker. These requests were from property owners, real estate agents, and MOU partners requesting updated permitting information on a parcel.
- The Monitoring Dashboard (https://monitoring.laketahoeinfo.org/) was enhanced this quarter to show more featured monitoring programs. Bicycle and pedestrian count data and transit data was added. Additional monitoring programs are continuing to be built on this dashboard allowing users to see more of Tahoe's monitoring data.
- A new Lake Clarity Tracker was unveiled in March. The tracker (https://clarity.laketahoeinfo.org/) replaces the TMDL Online Interface, providing a source for both technical users and the public to see the Lake Tahoe Region's response to TMDL compliance requirements. The Lake Clarity Tracker shares reported results with EIP performance measures. This allows users to enter data once and have it meet multiple reporting requirements, ensuring higher data integrity and greater user efficiency.



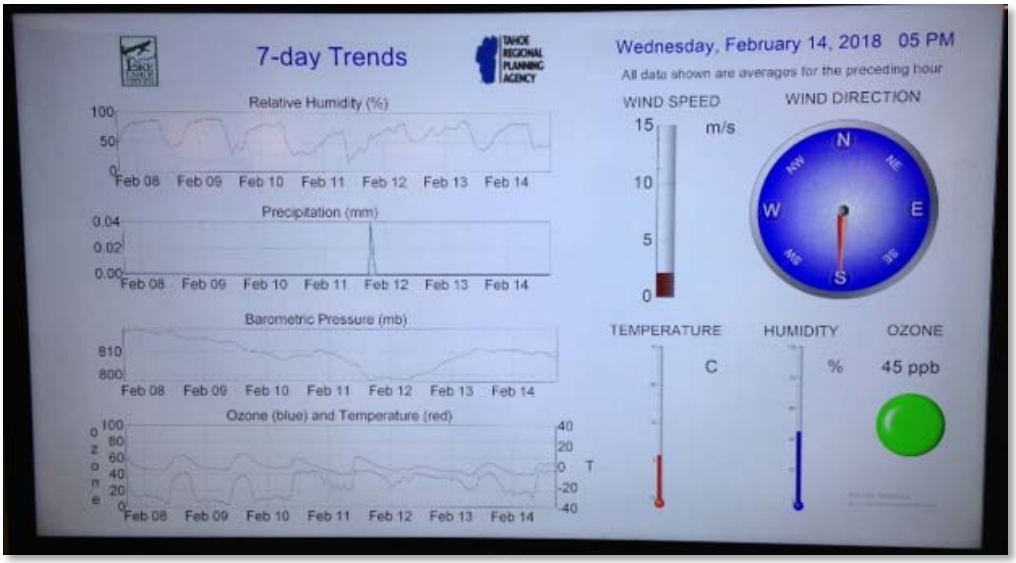
Lake Tahoe Basin Stream & SEZ Restoration Opportunities.

This quarter, TRPA prepared a document summarizing degraded streams and stream environment zones (SEZ) in the Tahoe Basin and shared this report with partners involved with SEZ restoration such as California Tahoe Conservancy and Nevada Tahoe Conservation District. These degraded streams and SEZ have been identified through TRPA's monitoring programs. The document will be updated annually based on monitoring data and will help project implementers identify stream and SEZ restoration opportunities going forward. It is a good example of TRPA's work to better integrate threshold monitoring data into EIP project planning and prioritization.

New Air Quality Monitoring at the Lake Tahoe Community College

New screen in the Lake Tahoe Community College Science Commons displaying real-time air quality and weather data. Photo by Sean Tevlin.

In January, Lake Tahoe Community College and TRPA partnered to install a real-time display of air quality and weather data in the college's Science Commons. The display shows real-time levels of ozone taken from TRPA's air quality monitoring station located on the campus since 2014. Ground-level ozone is the main ingredient in smog and is an important indicator of air quality. This real-time display will be used by students in the Earth Sciences Department to understand better the real-world applications of lessons learned in their courses.

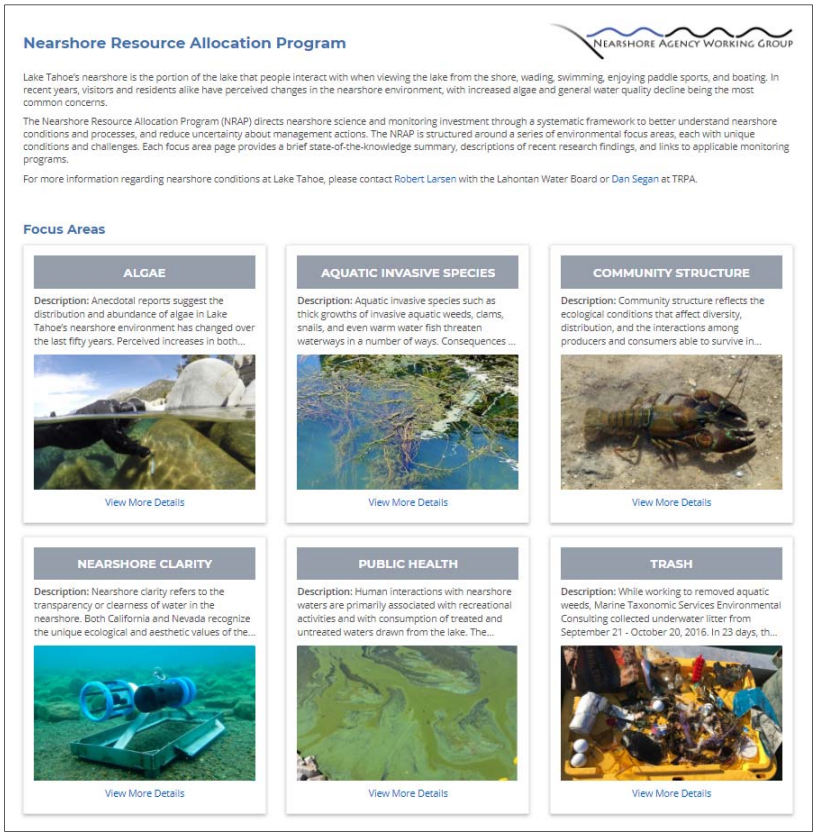


Detail of the data displayed on a new screen at Lake Tahoe Community College. Photo by Sean Tevlin.

Nearshore Agency Working Group Update

Collaborative work continues to better understand the dynamics of the nearshore and explain the variable conditions from one location to another around the lake. The nearshore agency working group, which includes representatives from the Lahontan Water Board, Nevada Division of Environmental Protection, TRPA, Tahoe Resource Conservation District, and U.S. EPA, identified four areas of focus in 2018:

1. Implementation of a lake-wide aquatic invasive plants monitoring program
2. Localized study of groundwater nutrient sources
3. Ecological drivers of attached algae
4. Cyanobacteria survey



The Lahontan Water Board solicited letters of interest from partner agencies and academic institutions interested in leading research to better understand nearshore algae conditions and potential control measures. Seven submissions were received, and the nearshore working group is in the final stages of reviewing the letters and in April will select a contractor to lead the work. TRPA solicited a request for proposals for piloting a lake-wide monitoring program for aquatic invasive plants in February. Five proposals were received, and a contractor will be selected in April.

The Nearshore Resource Allocation Program website is being integrated into the Lake Tahoe Info website at https://laketahoeinfo.org/Initiative/NRAP to support the sharing of data and information related to the nearshore and to promote a collaborative and transparent solution-oriented environment.

EXTERNAL AFFAIRS

TRPA supports a culture committed to public education, outreach, and community engagement to implement the 2012 Regional Plan. The external affairs team leads public engagement initiatives in collaboration with a wide variety of agency and nonprofit stakeholders. This quarter, TRPA continued ongoing education and outreach in the Lake Tahoe Region to raise public awareness about issues at Lake Tahoe and improve public understanding about the role of TRPA.

Representatives from the Lake Tahoe Partnership, including TRPA's Kim Caringer and Julie Regan, pictured with US Senator Dean Heller.

Legislative Affairs:

During the first quarter, TRPA organized several field tours for staff and members of key legislative offices, administration officials in both states, and federal representatives. Numerous visits to both state capitals and congressional offices in Washington D.C. kept Lake Tahoe front and center for important elected officials and decision makers. Priority policies discussed included TRPA's annual budget, strategic initiatives, and funding the Lake Tahoe Restoration Act.

From top left, then clockwise: TRPA team members on field tours with the Nevada Legislative Oversight Committee, Nevada budget officials; Julie Regan and Dennis Zabaglo speaking before the Western Aquatic Plant Management Society meeting in Reno; TRPA and Nevada State Lands staff at Sand Harbor on a field tour; The California State Capitol: in February, Joanne Marchetta, Julie Regan, and Bill Yeates held various policy briefings.

Education and Outreach:
TRPA's external affairs team coordinated the EpicPromise Winter Adventure Program again in 2018. Now in its third year, the program takes more than 300 fifth grade students from Lake Tahoe Unified School District to Heavenly Mountain Resort to snowshoe and learn about winter wildlife survival, the science of snowmaking, and avalanche safety. The program is a partnership between South Tahoe Environmental Education Coalition and Vail Resorts.

External affairs represented TRPA with a booth at the 2018 Business Expo in Stateline. More than 1,000 attendees participated in this important local event and TRPA connected with hundreds of community members on BMPs, upcoming plans and projects, and how people can help protect Lake Tahoe's environment.

The team collaborated with partners in the Aquatic Invasive Species (AIS) program to launch a campaign celebrating 10 years of fighting invasive species at Lake Tahoe. A multi-media program is being executed throughout the summer to raise awareness of AIS and recognize this important milestone.

TRPA representatives are frequent guests on local television programs including this broadcast of Douglas County's "Regional Report" with host Steve Teshara.

FINANCE, INFORMATION TECHNOLOGY, & FACILITIES

Finance Update

TRPA submitted the fiscal year 2018/19 budget to California, and the agency's requests have been incorporated into the Governor's recommended budget. Work has begun on fiscal years 2019/21 biennial budget for the State of Nevada. Additional special programs (grant) funds were received from the U.S. Army Corp of Engineers and the Nevada Division of State Lands for aquatic invasive species work. Funding has also been added by the Lahontan Regional Water Quality Board to finance nearshore monitoring. TRPA's Finance Department completed all fiscal year quarter two invoices and status reports for grantors this quarter.

Comparing the third quarter of the current fiscal year (2018) versus last fiscal year, revenues are approximately the same. Fees for service increased in the quarter, making up for lower fees in the first two quarters of the current fiscal year. Other revenues are down due to timing of receipts from the local jurisdictions. Total receipts in that category are the same on a year-to-date basis.

Compensation is up due to salary adjustments made in the second quarter. Contract expenditures are also higher than last year. The current year has a different mix of contracts, and the timing of spending on shoreline collaboration support is the main driver. We also continue to build out the LT Info web site.

Tahoe Regional Planning Agency
Third Quarter Revenue vs. Expenses

	FY 2018	FY 2017	Change
Revenues			
State Funding	11,553	0	11,553
Grants	547,494	508,158	39,336
Fees for Service	546,402	417,434	128,968
Other	287,718	438,485	(150,767)
Total	1,393,166	1,364,076	29,090
Expenses			
Compensation	1,533,288	1,359,134	174,154
Contracts	1,478,936	802,016	676,920
Financing	341	503	(162)
Other	382,206	347,357	34,850
Total	3,394,771	2,509,010	885,761
Net Fund Balance	(2,001,605)	(1,144,933)	(856,671)

Current assets decreased by $2.6 million during the quarter. Of that, $2.1 million is due to spending. TRPA disbursed $0.5 million of mitigation funds to local partners. Long term assets reflect the net book value of TRPA's office building.

Current liabilities decreased by $0.5 million due primarily to disbursement of mitigation funds to local jurisdictions. These are agency funds, meaning the monies are held in trust and not available for TRPA operations. The substantial deferred revenue balance is largely comprised of Proposition 1B transportation funding which is received in advance of expenditures.

Tahoe Regional Planning Agency
Third Quarter Change in Net Assets

	Beginning	End	Change
Assets			
Current Assets	27,672,095	25,051,673	(2,620,422)
Long Term Assets	9,594,629	9,594,629	0
Total	37,266,724	34,646,302	(2,620,422)
Liabilities			
Current Liabilities	546,085	484,597	(61,488)
Deferred Revenue	2,155,042	2,116,648	(38,394)
Deposits	442,457	462,457	20,000
Long Term Debt	8,445,000	8,445,000	0
Mitigation Funds	10,520,208	10,091,175	(429,033)
Securities	5,011,162	4,977,564	(33,598)
	27,119,953	26,577,440	(542,513)
Net Fund Balance	10,146,771	8,068,862	(2,077,909)

Facilities & Information Technology Update

TRPA recently renewed leases with several tenants, including Design Workshop and Belfor Restoration, and is in the process of renewing a lease with the General Services Administration. At this point, the building is fully leased.

HUMAN RESOURCES

Project Management Training

In January, TRPA hosted the second "Project Management Essentials" training through the University of Nevada, Reno Extended Studies. TRPA planning staff as well as a few participants from the City of South Lake Tahoe. Some of these participants will join other past training participants to implement key skills, processes, and tools across the agency.

New TRPA Staff

Tracy Campbell, Environmental Improvement Program Division

Tracy Campbell joined TRPA in November as an executive assistant with the Environmental Improvement Program. Tracy provides support for the EIP division manager and administration for the stormwater, AIS and forest health programs. Tracy has a bachelor's degree in management from Glasgow University in Scotland and most recently worked as a marketing and public relations consultant in new home construction.

Alex Eidam, Current Planning Division

Alex Eidam started with TRPA in January as an assistant planner in the Current Planning Department. Alex grew up in South Lake Tahoe and has a bachelor's degree in environmental studies with an emphasis in natural resource management and conservation from San Francisco State University. Most recently, Alex worked as an assistant planner for Wells Barnett Associates, an environmental consulting firm in the Tahoe Basin.

Rich Looney, Long Range and Transportation Planning

Rich Looney joined TRPA in March as the travel management coordinator. He will lead the Safe Routes to School Program and the Lake Tahoe Bike Challenge and spearhead TRPA's new Travel Management Program. Rich has been a life-long bicycle and pedestrian advocate. Over the last 20 years, he has developed and implemented several programs in Nevada County that focus on healthy activities, developing self-esteem, and creating a positive environment for personal growth. Rich has been a school teacher for the past 10 years, a safe routes to school coordinator, and has served on several active transportation boards. Before earning his teaching credential, he owned and operated a bicycle shop in Nevada County.

Christina Restaino, Environmental Improvement Program Division

Christina Restaino joined TRPA in January as the new forest ecosystem health program manager. Christina has a master's degree in forest resources and a Ph.D. in environmental and forest science from the University of Washington. Before coming to TRPA, Christina was doing postdoctoral work at UC Davis on the impacts of drought, fire, and climate change on forest ecosystems. In addition to academic work, Christina worked as the coordinator for the Sierra Nevada Region of the California Science Consortium, promoting collaboration between land managers and scientists.

Emily Ulrich, Research and Analysis Division

Emily Ulrich began as a GIS intern at TRPA last August and transitioned to a one-year contract position this quarter. Originally from Dayton, NV, Emily has an extensive background in GIS and environmental science. She holds a bachelor's degree from the University of Nevada, Reno (UNR) and a master's degree from South Dakota State University. Emily came to TRPA from the Nevada Land Trust where she worked as a watershed educator. Before that she was a research assistant for UNR working on controlling aquatic invasive species in the Tahoe Keys. Emily will be working on maintaining, organizing, and analyzing GIS data for TRPA.