



TAHOE  
REGIONAL  
PLANNING  
AGENCY



# THRESHOLD STANDARDS AND REGIONAL PLAN

TAHOE REGIONAL PLANNING AGENCY

|| *Lake Tahoe*





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# INTRODUCTION

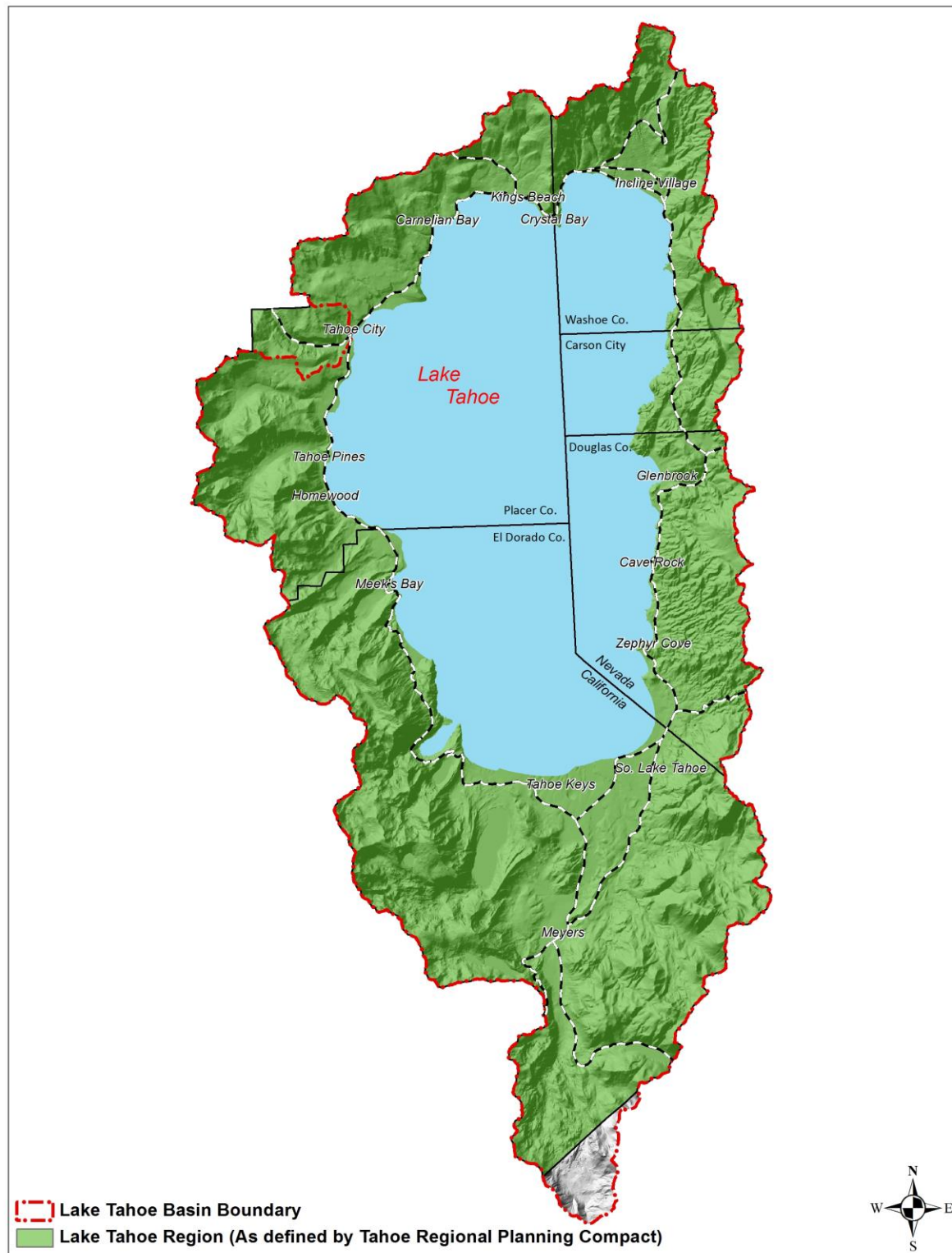
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The Lake Tahoe Region is located on the California-Nevada border between the Sierra Nevada Crest and the Carson Range (Refer to Figure 1). Approximately two-thirds of the Lake Tahoe Region is in California and one-third in Nevada. In total, the Region comprises about 501 square miles including the waters of Lake Tahoe which measures 191 square miles. Lake Tahoe is the dominant natural feature of the Region and is the primary focus of local environmental regulation to protect and restore its exceptional water clarity.

The Lake Tahoe Region contains the incorporated area of the City of South Lake Tahoe and portions of El Dorado County and Placer Counties, California and Washoe and Douglas Counties and the rural area of Carson City, Nevada. The Region is within the Fourth Congressional District of California and the Second Congressional District of Nevada. The Tahoe Regional Planning Agency (TRPA) is a separate legal entity governed by a body of seven voting delegates from California and seven voting delegates from Nevada. There is also a non-voting federal representative to the Governing Board.

The Tahoe Regional Planning Compact (Bi-State Compact) (P.L. 96-551, 94 Stat. 3233(1980), amended P.L. 106-3506, 114 Stat. 2351 (2016)) provides the framework for the development and implementation of the Environmental Threshold Carrying Capacities (threshold standards) and the Regional Plan. The Bi-State Compact defines threshold standards 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.” The threshold standards establish the shared goals for restoration and environmental quality in the Region. The Regional Plan with all of its elements, as implemented through TRPA ordinances and rules and regulations, will achieve and maintain the adopted threshold standards while providing opportunities for orderly growth and development.

**FIGURE 1 - LAKE TAHOE REGION**



## AUTHORITY

The Tahoe Regional Planning Agency (TRPA) was reorganized and given new duties under provisions of the 1980 amendments to the *Bi-State Compact*. In adopting the amended Bi-State Compact, the following findings were made by the legislatures of the states of Nevada and California as well as the U. S. Congress:

### *Article I - Findings and Declarations of Policy*

#### *(a) It is found and declared that:*

- (1) The waters of Lake Tahoe and other resources of the region are threatened with deterioration or degeneration, which endangers the natural beauty and economic productivity of the region.*
  - (2) The public and private interests and investments in the region are substantial.*
  - (3) The region exhibits unique environmental and ecological values which are irreplaceable.*
  - (4) By virtue of the special conditions and circumstances of the region's natural ecology, developmental pattern, population distribution and human needs, the region is experiencing problems of resource use and deficiencies of environmental control.*
  - (5) Increasing urbanization is threatening the ecological values of the region and threatening the public opportunities for use of the public lands.*
  - (6) Maintenance of the social and economic health of the region depends on maintaining the significant scenic, recreational, education, scientific, natural and public health values provided by the Lake Tahoe Basin.*
  - (7) There is a public interest in protecting, preserving and enhancing these values for the residents of the region and for visitors to the region.*
  - (8) Responsibilities for providing recreational and scientific opportunities, preserving scenic and natural areas, and safe-guarding the public who live, work and plan in or visit the region are divided among local governments, regional agencies, the States of California and Nevada, and the Federal Government.*
  - (9) In recognition of the public investment and multistate and national significance of the recreational values, the Federal Government has an interest in the acquisition of recreational property and the management of resources in the region to preserve environmental and recreational values, and the Federal Government should assist the States in fulfilling their responsibilities.*
  - (10) In order to preserve the scenic beauty and outdoor recreational opportunities of the region, there is a need to insure an equilibrium between the region's natural endowment and its manmade environment.*
- (b) In order to enhance the efficiency and governmental effectiveness of the region, it is imperative that there be established a Tahoe Regional Planning Agency with the powers conferred by this compact including the power 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 with such capacities.*
- (c) The Tahoe Regional Planning Agency shall interpret and administer its plans, ordinances, rules and regulations in accordance with the provisions of this compact.*

These findings are intended to direct the actions of the Agency in implementing the amended Bi-State Compact. The Bi-State Compact requires that the Agency review any activities that may substantially affect the land, water, air, space or any other resources of the Region. The basis for such review is a set of standards known as environmental threshold carrying capacities (threshold standards) as implemented through a Regional Plan. The first threshold standards were adopted by the Agency in August 1982.

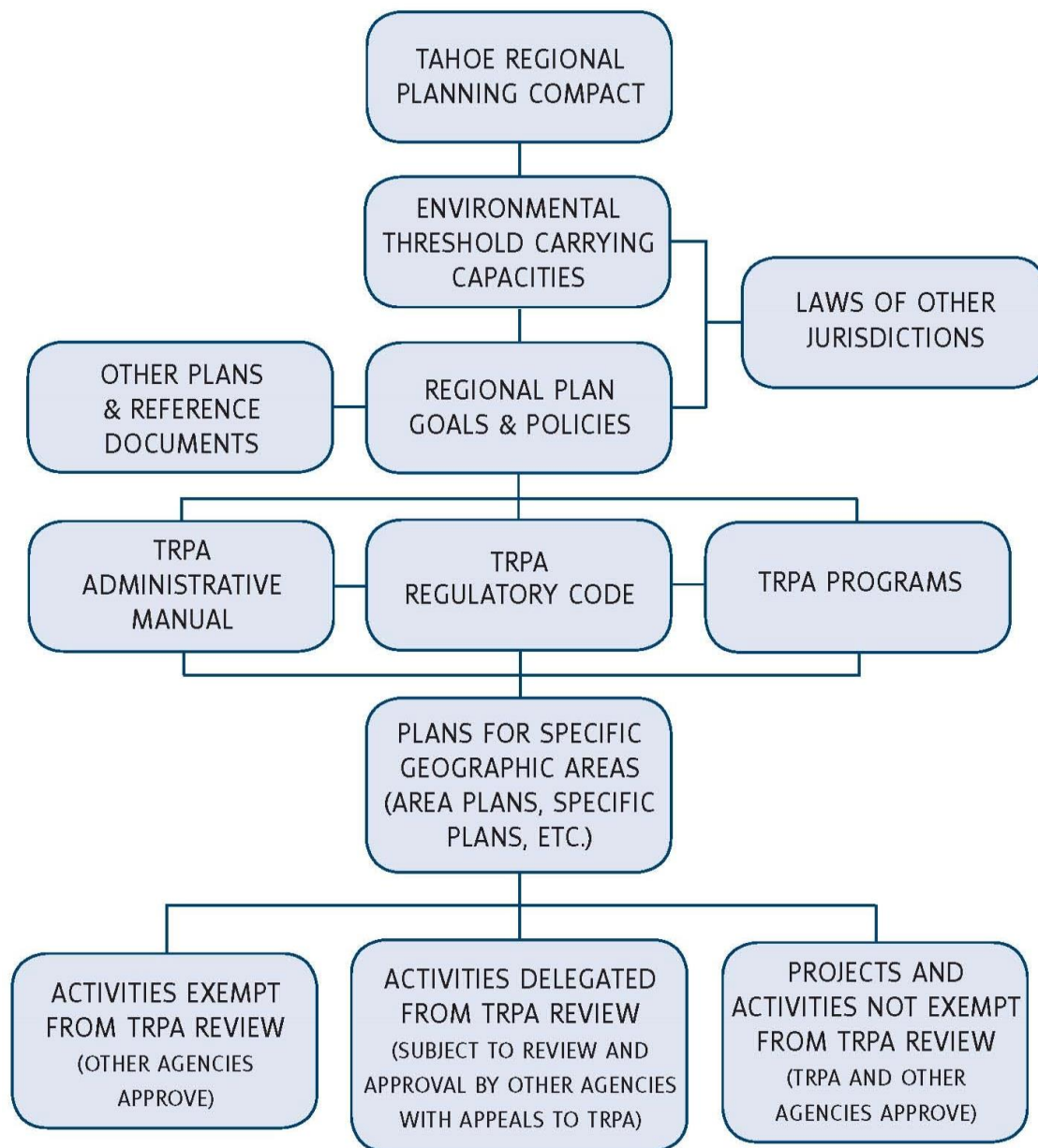
## **Organization**

The basic framework for the planning and review and approval of activities in the Region is established by the following:

- The Tahoe Regional Planning Agency Bi-State Compact;
- The Environmental Threshold Carrying Capacities;
- The TRPA Regional Plan Goals and Policies;
- Other Regional-Scale Plans and Reference Documents;
- Plans for Specific Geographic Areas in the Region;
- TRPA Code of Ordinances;
- TRPA Programs; and
- TRPA Administrative Manuals

The hierarchical relationship is depicted in *Figure 2 – TRPA Planning Framework* and explained in the text below.

**Figure 2 – TRPA PLANNING FRAMEWORK**





## Tahoe Regional Planning Agency Bi-State Compact

The Bi-State Compact as amended on December 19, 1980, required the adoption of threshold standards for the Region. Once that was done, the Bi-State Compact required adoption and implementation of a Regional Plan to achieve and maintain the threshold standards and other specific requirements of the Bi-State Compact. Included in Regional Plan requirements are a Land Use Element, Transportation Element, Conservation Element, Recreation Element, and Public Services and Facilities Element. In order to meet the implementation and scheduling requirements the Agency has added an Implementation Element. Also required in the TRPA plan package are ordinances and programs.

## Threshold Standards

As required by the Bi-State Compact, the Agency adopted the first set of threshold standards for the Region in Resolution 82-11 and has periodically amended the adopted threshold standards based on updated information. Adopted threshold standards set forth standards for water quality, air quality, soils, wildlife, noise, fisheries, vegetation, scenic quality, and recreation. One of the major purposes of the Regional Plan is to establish regulations and programs to achieve and maintain these thresholds.

## Regional Plan Goals and Policies

The Regional Plan identifies goals that depict the desired ends or values to be achieved and policies that establish the strategies necessary to achieve the goals. This plan integrates the requirements of the Bi-State Compact, the threshold standards, other plans and legal requirements, and the public's input. As a result, the Regional Plan provides coordinated and integrated direction for the Agency's regulatory Code of Ordinances and implementation programs.

## Other Regional Scale Plans and Reference Documents

This category includes: (1) plans for which the Agency has adopted or assumed responsibility, such as the Federal 208 Water Quality Management Plan, the Federal Air Quality Plan, and the Regional Transportation Plan; and (2) reference documents that support the Regional Plan and are listed by ordinance.

## Plans for Specific Geographic Areas within the Region

After adoption of the 1987 Regional Plan, over 170 different plans were adopted for certain geographic areas. These include Plan Area Statements, Community Plans, State and Federal Government Master Plans and other detailed Specific or Master Plans (for ski areas, marinas, the airport, etc). With adoption of the 2012 Regional Plan, local, state, federal and tribal governments are encouraged to adopt Area Plans to supersede the older plans for specific geographic areas. Before taking effect, Area Plans must be found in conformance with the Regional Plan. State and Federal Government Master Plans and some of the other detailed Master Plans may remain in place and continue to be implemented or may be replaced with new Area Plans.

## TRPA Regulatory Code of Ordinances

The TRPA regulations that are required to implement the policies set forth in the Goals and Policies Plan are found in the Code of Ordinances.

### TRPA Programs

The programs that are needed to assess and implement the policies set forth in the Goals and Policies Plan are the Monitoring and Evaluation Program and the Environmental Improvement Program. The Agency with the cooperation of other parties is required to implement programs to achieve and maintain the threshold standards.

### TRPA Administrative Manuals

Administrative Manuals provide guidance and specify details such as application procedures, fees, code interpretations and other related matters.

To implement the Bi-State Compact mandates consistently with its principles and as set forth above, TRPA adopts the following mission statement:

## **STATEMENT OF MISSION**

**THE TAHOE REGIONAL PLANNING AGENCY LEADS THE COOPERATIVE EFFORT TO PRESERVE, RESTORE, AND ENHANCE THE UNIQUE NATURAL AND HUMAN ENVIRONMENT OF THE LAKE TAHOE REGION, WHILE IMPROVING LOCAL COMMUNITIES, AND PEOPLE’S INTERACTIONS WITH OUR IRREPLACEABLE ENVIRONMENT.**

### **Statement of Principles**

#### **Preamble**

TRPA shall interpret and administer its plans, ordinances, rules, and regulations in accordance with the provisions of the Bi-State Compact. This statement of principles is intended to confirm the policies set forth in the Tahoe Regional Planning Compact (P.L. 96-551, December 19, 1980), in its specific provisions and as a whole, so as to guide the Agency in resolving conflicts, in charting the future direction, and in enhancing public understandability. The following statement of general policy provides TRPA with direction and consistency for enactment and implementation of the Regional Plan and increases TRPA and public understanding of the TRPA Goals and Policies.

#### **Principles**

1. The Tahoe Region exhibits unique and irreplaceable environmental and ecological values of national significance which are threatened with deterioration or degeneration.
2. The purpose of TRPA is to:
  - a. Maintain the significant scenic, recreational, educational, scientific, natural, and public health values provided by the Region; and
  - b. Ensure an equilibrium between the Region’s natural endowment and its manmade environment.

Together these will encourage the wise use of the waters of Lake Tahoe and the resources of the area, preserve public and private investments in the Region, and preserve the social and economic health of the Region.

3. In accomplishing its purpose, TRPA is to:
  - a. Establish environmental threshold carrying capacities, defined as environmental standards necessary to maintain significant scenic, recreational, educational, scientific, or natural values of the Region or to maintain public health and safety within the Region, including but not limited to standards for air quality, water quality, soil conservation, vegetation preservation, and noise;
  - b. 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 with such capacities; and
  - c. Pursue such activities and projects consistent with the Agency purpose





## THRESHOLD STANDARDS

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Threshold standards establish the environmental standards for the Region and, as such, indirectly define the capacity of the Region to accommodate additional development. The Environmental Thresholds Study Report provides the original basis and rationale for the establishment of threshold standards while the Regional Plan and implementing ordinances define the actual limits and potential for new development consistent with the constraints imposed by the threshold standards.

### ADAPTIVE MANAGEMENT STRUCTURE

#### Initial Threshold Standard Development

The development of the original threshold standards followed a four-step process. The first step incorporated participation by state, federal and local agencies, and the general public. Concurrently, a program was implemented to enhance public awareness and to track the progress of the study. This process helped to identify issues and components of the environment that are of local, regional, or national significance. Value or goal statements established the parameters of interest for each component and narrowed the focus for establishing threshold standards. For example, air quality is an environmental component but the standard development process focused specifically on such "sub-issues" as carbon monoxide and ozone.

The second step identified the variables that affect each environmental component. From this, cause and effect relationships between variables were established. In the third step, these relationships were evaluated according to their individual contributions to the resource. Threshold standards were then established only for those causal factors that were most significant to the resource. The second and third steps were necessary to (1) initially identify the factors responsible for unacceptable changes in the resource and (2) identify the appropriate threshold necessary to protect the resource or to achieve a particular value. Not all environmental components lent themselves to simple quantification and linkage to particular numerical measurements. In such instances, a distinction was made between numerical, management, and policy statements as threshold standards.

The fourth step highlighted the mechanisms necessary to achieve or maintain the threshold standards. This step was preliminary to the more detailed analysis accomplished through the development of policies and ordinances as part of the Regional Plan. This evaluation made it possible to assess the technical feasibility of attaining the threshold standards and to review any threshold standards that might seem impractical.

TRPA officially adopted the threshold standards in 1982 via Resolution 82-11. While the adopted threshold standards were based on the best science at the time, TRPA recognized in the text of Resolution 82-11 that science evolves and new understanding and challenges arise. Therefore, Resolution 82-11 recognized the need to continuously review, amend, and update threshold standards so that Regional Plan strategies are focused on and assessed against the right benchmarks and the planning strategies kept current. Through the incorporation of the adopted threshold standards into Chapter 1 of the Threshold Standards and Regional Plan, Resolution 82-11 is replaced and superseded.

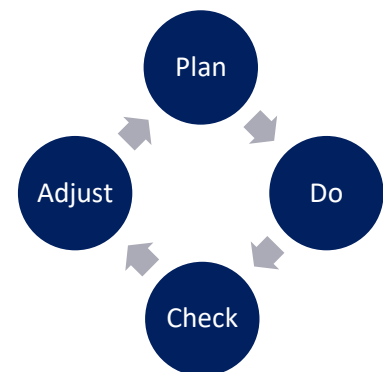
## Threshold Standard Review and Amendment

In the 30 years since initial adoption, a general consensus emerged by 2015 that the threshold standards needed to be reviewed and brought current with new science and emerging understanding of ecosystem changes driven, in part, by climate change. TRPA engaged the Bi-State Tahoe Science Advisory Council to prioritize a comprehensive update of threshold standards.

Threshold standards are long-term goals for the Region to be achieved through a wide range of implementing means. The Environmental Improvement Program, established in 1997 and made part of the plan's implementing element, accelerates Regional Plan implementation through investment in capital projects, research, and monitoring. Attainment of the threshold standards is acknowledged to be a continuing process requiring the cooperation of all sectors with interests in the Region, the States of California and Nevada, the Federal government, local jurisdictions, and the private sector, and will likely not be fully realized until well after the implementation of the Regional Plan.

The approach to keeping threshold standards and the Regional Plan up to date is based on a system of rigorous inputs and adaptive management recommended by the Bi-State Tahoe Science Advisory Council in 2017. The elements of the adaptive management system start with establishing or amending threshold standards and assessing and reporting progress toward those standards using a reporting framework, that may include interim performance measures and monitoring program indicators that support management decision making to promote threshold standard attainment and maintenance. In 2017, the Tahoe Science Advisory Council reviewed the best practices of nine other large natural resource restoration management systems and identified a core set of recommendations for organizing and implementing the system to better support adaptive management in the region and accelerate threshold standard attainment (Tahoe Science Advisory Council (TSAC) 2017).

The adaptive management or continuous improvement “plan-do-check-adjust” approach is “a systematic approach for improving resource management by learning from management outcomes (Williams et al. 2009; Tahoe Science Advisory Council (TSAC) 2017).” The threshold standards and the Regional Plan represent the “plan” function. The long-term goals (threshold standards) are set and kept up to date through periodic review and amendment as needed. Completion of public and private projects, programs, and proposals corresponds to the “do” function. The “check” function is carried-out through monitoring and reporting which is then used on an ongoing basis to “adjust” by making changes to the “plan.” Providing robust information to support as close to continuous threshold evaluation as possible is the key to keeping both threshold standards and Regional Plan policies and implementation strategies current. That is, as new information, knowledge, and resources become available the threshold standards and the Regional Plan may be updated to ensure they continue to reflect current science and best practice. The threshold and Regional Plan adaptive management system structure is designed with the information needs of the “plan-do-check-adjust” approach in mind.



The adaptive management system structure draws heavily from best practice and integrates four elements: (1) conceptual models – that ground threshold standards in the scientific understanding of ecosystem function, (2) results chains – that link management actions to desired outcomes (threshold standards), (3) management actions – that are the

implementation strategies rooted in results chains to promote attaining and maintaining clearly articulated, specific and measurable goals (threshold standards, and (4) monitoring, evaluation, and learning – which provides the structure for incorporating new information into the design of policies, programs, and other means to accelerate threshold attainment.

The adaptive management system structure provides a framework to organize information in a manner that better serves the needs of managers and is more coherent to stakeholders. The conceptual models can be distilled and presented as straightforward summaries of the scientific understanding of the system. The results chains communicate to stakeholders how management actions contribute to standard attainment. The monitoring, evaluation, and learning platform identify how progress is tracked and how results inform future management action.

### ***Threshold Standard Specifications***

Standard formulation – whether long-term threshold standards or interim performance measures --should be consistent with best practice and should enable objective evaluation of conditions relative to the adopted standard. Standard formulation will include three qualities:

**Specific** - The standard establishes a specific numeric target, and benchmark/baseline values are documented where necessary.

**Measurable** – The standard has clearly defined indicator(s) that link to the standard, and there are practical ways to objectively and accurately measure progress towards attainment.

**Outcome-based** – Standards establish a desired condition for an environmental end state. Standards do not establish a means to achieve the desired outcome.

Formulating specific and measurable standards enables objective evaluation of each standard. Outcome-based standards ensure that threshold standards (consistent with the Bi-State Compact definition) focus on the long-term or end-state goals for the system, rather than being prescriptive about the actions to achieve or maintain the goals.

When the first set of threshold standards were adopted, they were organized into nine categories. The Bi-State Compact requires the agency to establish threshold standards for five categories (air quality, water quality, soil conservation, vegetation preservation and noise) and four others (fisheries, recreation, scenic resources, and wildlife) were identified through the collaborative process to identify the threshold standards. The nine categories provide a useful framework for explaining the goals of the threshold standards, but the goals established by the threshold standards are not bound by the reporting category in which the standard resides. Threshold standards span multiple of the existing categories.

The full adaptive management cycle includes review of implementation actions and periodic review of overall program goals. Periodic review of threshold standards serves to ensure that the desired conditions are informed by the best science and continue to reflect relevant values.

### **Guiding Principles**

Seven principles will guide the review and update of threshold standards.

1. **Protect ecosystem processes, structures, and functions:** Restoring and maintaining the qualities of the Region requires identifying the system processes,

- structures, and functions that create those values.
2. **Science-based:** Standards and management programs are updated to remain consistent with the best science.
  3. **Manage as a System:** The standards and adaptive management system reflect ecosystem level thinking at various scales.
  4. **Specific and Measurable:** Standards that are specific and measurable enable objective evaluation and provide meaningful information to managers and stakeholders.
  5. **Informative:** The threshold evaluation and reporting system should be designed to provide information that improves management and accelerates threshold attainment.
  6. **Feasible:** The cost of monitoring and evaluation program that supports the threshold standard system is within the Region's collective monitoring resources.

Threshold standards will be amended where the threshold standard review finds that it is appropriate and necessary to do so. Instances where amendment is appropriate and necessary include, but may not be limited to:

1. Two or more threshold standards are mutually exclusive; or
2. Substantial evidence to provide a basis for a threshold standard does not exist; or
3. A threshold standard cannot be achieved; or
4. A threshold standard is not sufficient to attain or maintain the significant value for which it was identified; or
5. A threshold standard is inconsistent with the adaptive management structure.

TRPA maintains a monitoring and evaluation 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.



## **THRESHOLD STANDARDS**

Threshold standards establish the Environmental Improvement Program partners' shared goals for restoration and maintenance of the qualities of the Tahoe Region.

The adopted current threshold standards are stated below. The agency will maintain and update online inventories of the administrative status and disposition of each threshold standard.

## **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/l.

## **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.<sup>1</sup>

## **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:

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<sup>1</sup> See attachment A

- i. Reduce dissolved inorganic nitrogen loads to pelagic and littoral Lake Tahoe from<sup>2</sup>:
  - a) surface runoff by approximately 50 percent of the 1973-81 annual average,
  - 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).

## 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<sup>3</sup>.

### 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<sup>3</sup>) averaged over 8 hours.

#### MANAGEMENT STANDARD

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<sup>2</sup> 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

<sup>3</sup> See attachment B

- 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**

### **NUMERICAL STANDARDS**

- AQ3) Maintain ozone concentrations at or below 0.08 parts per million averaged over 1 hour.
- AQ4) Maintain oxides of nitrogen (NO<sub>x</sub>) emissions at or below the 1981 level.

## **REGIONAL VISIBILITY<sup>4</sup>**

### **NUMERICAL STANDARDS**

- AQ5) Achieve an extinction coefficient of 25 Mm<sup>-1</sup> 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 kilometers, 97 miles).
- AQ6) Achieve an extinction coefficient of 34 Mm<sup>-1</sup> 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<sup>5</sup>**

### **NUMERICAL STANDARDS**

- AQ7) Achieve an extinction coefficient of 50 Mm<sup>-1</sup> 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<sup>-1</sup> 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<sub>10</sub> 24-hour Standard: Maintain Particulate Matter<sub>10</sub> at or below 50µg/m<sup>3</sup> measured over a 24-hour period in the portion of the Region within California, and maintain Particulate Matter<sub>10</sub> at or below 150 µg/m<sup>3</sup> measured over a 24-hour period in the portion of the Region within Nevada. Particulate Matter<sub>10</sub> 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<sub>10</sub> Annual Arithmetic Average - Maintain Particulate Matter<sub>10</sub> at or below annual arithmetic average of 20µg/m<sup>3</sup> in the portion of the Region within

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<sup>4</sup> 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.

<sup>5</sup> 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.



California, and maintain Particulate Matter<sub>10</sub> at or below annual arithmetic average of 50µg/m<sup>3</sup> in the portion of the Region within Nevada. Particulate Matter<sub>10</sub> 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<sub>2.5</sub> 24-hour Standard - Maintain Particulate Matter<sub>2.5</sub> at or below 35µg/m<sup>3</sup> 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.

AQ12) Particulate Matter<sub>2.5</sub> Annual Arithmetic Average - Maintain Particulate Matter<sub>2.5</sub> at or below annual arithmetic average of 12µg/m<sup>3</sup> in the portion of the Region within California and maintain Particulate Matter<sub>2.5</sub> at or below annual arithmetic average of 15µg/m<sup>3</sup> in the portion of the Region within Nevada. Particulate Matter<sub>2.5</sub> 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.

## **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<sup>6</sup>, for allowable impervious  
cover and permanent site disturbance.

## **LATE SERAL AND OLD GROWTH FOREST ECOSYSTEMS<sup>7</sup>**

### **NUMERICAL STANDARDS**

VP12) 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

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<sup>6</sup> See attachment B

<sup>7</sup> 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.

across elevation zones. Standards VP 13, VP14, and VP15 must be attained to achieve this threshold.

- VP13) 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.
- VP14) 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.
- VP15) 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**

VP16-VP17) 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:

- VP16) The deep-water plants of Lake Tahoe.
- VP17) The Freel Peak Cushion Plant community.

## **SENSITIVE PLANTS**

### **NUMERICAL STANDARDS**

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

- VP18) Maintain a minimum of 2 *Lewisia pygmaea longipetala* population sites.
- VP19) Maintain a minimum of 2 *Draba asterophora* v. *macrocarpa* population sites.
- VP20) Maintain a minimum of 5 *Draba asterophora* v. *asterophora macrocarpa* population sites.
- VP21) Maintain a minimum of 26 *Rorippa subumbellata* population sites.
- VP22) 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.
- W15) Provide disturbance zones in meadows and influence zones in mapped areas for Deer.

## **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.

### **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<sup>8</sup>
- N2) 77.1 dBA - between the hours of 8pm and 8am

Watercraft:

- N3) Pass-By Test - 82 L<sub>max</sub> -measured 50ft from engine at 3,000rpm.
- N4) Shoreline test - 75 L<sub>max</sub> - 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<sub>max</sub> for boats manufactured before January 1, 1993; Microphone 3.3 feet from exhaust outlet - 5 feet above water.
- N6) Stationary Test - 90 dBA L<sub>max</sub> 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.

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<sup>8</sup> The single event noise standard of 80 dBA L<sub>max</sub> for aircraft departures at Lake Tahoe Airport shall be effective immediately. The single event noise standard of 80 dBA L<sub>max</sub> 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.

- 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.

## 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<sup>9</sup>.
- SR2) Table 13-5 of the Draft Study Report<sup>10</sup>.
- SR3) Table 13-8 of the Draft Study Report<sup>11</sup>.
- SR4) Table 13-9 of the Draft Study Report<sup>12</sup>.

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

- SR5) Table 13-6 of the Draft Study Report<sup>13</sup>.

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<sup>9</sup> See attachment C

<sup>10</sup> See attachment D

<sup>11</sup> See attachment E

<sup>12</sup> See attachment F

<sup>13</sup> See attachment G



- SR6) Table 13-7 of the Draft Study Report<sup>14</sup>.
- 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**

### **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.

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<sup>14</sup> See attachment H

## THRESHOLD STANDARDS ATTACHMENTS

### **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.

**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%.

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

| <b>Table 13-3. Criteria and Composite Scenic Quality Ratings for Roadway Units</b>  |                          |          |         |           |            |       |                              |
|---|--------------------------|----------|---------|-----------|------------|-------|------------------------------|
| Roadway Unit No.  | Roadway Unit Name        | Criteria |         |           |            |       | Composite Total <sup>a</sup> |
|   |                          | 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                            |
| <sup>a</sup> Total Scores      Composite Score<br>10 – 12 High      =    3 High<br>6 – 9 Moderate    =    2 Moderate<br>1 – 5 Low          =    1 Low |                          |          |         |           |            |       |                              |

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

| <b>Table 13-5. Criteria and Composite Scenic Quality Ratings for Shoreline Units</b>  |                                     |          |         |           |            |       |                                 |
|---|-------------------------------------|----------|---------|-----------|------------|-------|---------------------------------|
| Shoreline <sup>a</sup><br>Unit No.  | Shoreline <sup>a</sup> Unit<br>Name | Criteria |         |           |            |       | Composite<br>Total <sup>b</sup> |
|   |                                     | 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                               |
| <sup>a</sup> Original table incorrectly labeled these columns as “Roadway” units. These have been corrected to be labeled as “Shoreline” units.<br><sup>b</sup> <u>Total Scores</u> <u>Composite Score</u><br>10 – 12 High      =    3 High<br>6 – 9 Moderate    =    2 Moderate<br>1 – 5 Low          =    1 Low |                                     |          |         |           |            |       |                                 |

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

| <b>Table 13-8. Recommended Scenic Resource Threshold, Roadway Units</b> |                          |                       |                              |                       |
|---|--------------------------|-----------------------|------------------------------|-----------------------|
| 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 |
|----|----------------------|---|---|---|



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

| <b>Table 13-9. Recommended Scenic Resource Threshold, Shoreline Units</b> |                     |                       |                              |                       |
|---|---------------------|-----------------------|------------------------------|-----------------------|
| 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                     |

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

| <b>Table 13-6. Roadway Travel Route Ratings, 1971, 1978, and 1982</b> |                          |         |      |                 |
|---|--------------------------|---------|------|-----------------|
| 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 <sup>a</sup> |
| 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 <sup>a</sup> |
| 33  | The Strip                | 9       | 6    | 6               |
| 34  | El Dorado Beach          | 16      | 16   | 16              |
| 35  | Al Tahoe                 | 10      | 6    | 7 <sup>a</sup>  |
| 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 |
| <sup>a</sup> Indicates Improvement |                      |   |   |    |

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

| <b>Table 13-7. Shoreline Travel Route Ratings, 1971 and 1982</b> |                     |         |      |
|--|---------------------|---------|------|
| Shoreline<br>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   |

# REGIONAL PLAN

(TEMPORARY COVER PAGE)



# CHAPTER 1

## Introduction

The Regional Plan describes the needs and goals of the Region and provides statements of policy to guide decision making as it affects the Region's resources. The plan with all of its elements, as implemented through Agency ordinances and rules and regulations, will achieve and maintain the adopted environmental threshold carrying capacities (thresholds) while providing opportunities for orderly growth and development.

### **Regional Plan Development and Maintenance**

The development of the initial Regional Plan was structured around the adopted threshold standards and other issues of local and regional significance. Issues, other than those associated with threshold standards, were initially identified through scoping meetings with local agencies and other interested parties. Agency staff then performed extensive analyses of available data, evaluated alternative techniques for achieving or maintaining the threshold standards, and developed a recommended plan in 1984.

The 1984 draft Regional Plan was evaluated in an Environmental Impact Statement (EIS) and modified following extensive public outreach, litigation, settlement discussions and a supplemental EIS. The Governing Board ultimately adopted the Regional Plan on September 17, 1986 and completed more detailed plans for specific geographic areas following adoption of the Regional Plan. This initial Regional Plan is referred to as the "1987 Plan."

Between 1987 and 2010, numerous targeted amendments to the Regional Plan were adopted. These amendments addressed specific topics, but did not update the plan introduction or the original references to the EIS and other work from the 1980s.

The focus of the 1987 Regional Plan was to achieve and maintain the threshold standards primarily through growth control, development regulations and property acquisition. Growth control measures in the 1987 Plan were extensively litigated and ultimately upheld as lawful. The 1987 Plan established a "carrying capacity" for development in the Region that was dramatically lower than what previous plans had envisioned. A system of transferrable development rights and land coverage regulations was adopted within constraints of the Region's carrying capacity. Concurrently, aggressive property acquisition programs were instituted. State and federal land management agencies acquired over 8,500 private parcels and retired the associated development rights between 1987 and 2011. The 1987 Regional Plan and the programs it established substantially reduced the rate of environment decline. Starting in the 1990s, *Threshold Evaluations* and other studies made it clear that the strategy

of regulation and land acquisition alone would not be enough to successfully achieve and maintain the threshold standards. The environmental impact of “legacy development” that was constructed prior to the initial Regional Plan continued to adversely impact the Region. In response, federal, state and local government dramatically increased funding for stormwater management infrastructure, wetland restorations and other environmentally beneficial projects through the Environmental Improvement Program (EIP). Trends towards threshold standard attainment improved measurably, but threshold standards for water quality and other resources were still not being attained.

In the 2000s, extensive studies for the Lake Tahoe Total Maximum Daily Load (TMDL) provided more detailed information related to water quality. TMDL reports adopted by California and Nevada included the following summary of Lake Tahoe’s major water pollution sources:

*The ongoing decline in Lake Tahoe’s deep water transparency and clarity is a result of light scatter from fine sediment particles (primarily particles less than 16 micrometers in diameter) and light absorption by phytoplankton. The addition of nitrogen and phosphorus to Lake Tahoe contributes to phytoplankton growth. Fine sediment particles are the most dominant pollutant contributing to the impairment of the lake’s deep water transparency and clarity, accounting for roughly two thirds of the lake’s impairment.*

*A pollutant source analysis conducted by the California State Water Resources Control Board and Nevada Division of Environmental Protection identified urban uplands runoff, atmospheric deposition, forested upland runoff, and stream channel erosion as the primary sources of fine sediment particle, nitrogen, and phosphorus loads discharging to Lake Tahoe. The largest source of fine sediment particles to Lake Tahoe is urban stormwater runoff, comprising 72 percent of the total fine sediment particle load. The urban uplands also provide the largest opportunity to reduce fine sediment particle and phosphorus contributions to the lake.*

While the TMDL focuses on impairment of Lake Tahoe’s deep water transparency and clarity, the primary pollutants that it addresses (fine sediment, nitrogen and phosphorous) also may affect nearshore water quality. Given the exceptional scenic quality and significant recreational and ecological values provided by Lake Tahoe’s nearshore, the protection of nearshore water quality is equally important.

To better address these water quality issues, one of the primary goals of the 2012 Regional Plan Update is to accelerate private investment in environmentally-beneficial redevelopment activities to complement the ongoing investment in public projects targeted at threshold gain. Amendments related to other scientific reports and to legislation in California and Nevada are also addressed in the 2012 Regional Plan.

California and Nevada reaffirmed their Bi-State Compact commitments in 2013, more explicitly recognizing the critical link between the region’s economy and the protection and restoration of the natural environment, and directing the agency to consider changing economic conditions and the effect of regulation on the economy. Congress ratified the amended Bi-State Compact in 2016 (P.L. 106-3506, 114 Stat. 2351).

After adoption of the 2012 Regional Plan, a regular cycle of plan evaluations and updates will be maintained. At least regular four year updates will maintain consistency with the federally mandated transportation planning cycle for the Tahoe Metropolitan Planning Organization (TMPO) and will facilitate amendments based on the status of plan implementation, progress



towards attainment and maintenance of threshold standards, updated science and other new information. The plan update cycle is depicted on *Figure 3 - TRPA Process Flowchart*.

### **Relationship to Other Plans**

The Regional Plan will help guide decision-making as it affects the growth and development of the Lake Tahoe Region. Because of its inherent broad scope and purpose, the Regional Plan will affect the planning activities of numerous governmental jurisdictions and utility service districts. Each of the affected entities were encouraged to participate actively in developing the Regional Plan so that adequate consideration was given to local, individual, and community needs.

Other jurisdictions can enact plans, ordinances, rules, regulations and policies which conform to the Regional Plan. Optimum implementation of this plan depends on the cooperation of all jurisdictions in the Region. As provided in the Bi-State Compact, whenever possible without diminishing the effectiveness of the Regional Plan, the ordinances, rules, regulations and policies of the Agency shall be confined to matters which are general and regional in application, leaving to the jurisdiction of the respective states, counties, and cities the enactment of specific and local ordinances, rules, regulations, and policies which conform to the Regional Plan.

A mix of local, state, and federal plans now exists in the Region and is expected to be maintained and updated over time in coordination with TRPA. The TRPA planning framework is depicted on *Figure 3 – TRPA Planning Framework*.

**FIGURE 3 – TRPA PROCESS FLOW CHART**





# CHAPTER 2

## Land Use Element

**A**rticle V(c)(1) of the Tahoe Regional Planning Agency Bi-State Compact calls for a *"land use plan for the integrated arrangement and general location and extent of, and the criteria and standards for, the uses of land, water, air, space and other natural resources within the region, including but not limited to indication or allocation of maximum population densities and permitted uses."*

In general, the Land Use Element sets forth the fundamental land use philosophies of the Regional Plan, including: the direction of development to the most suitable locations within the Region; maintenance of the environmental, economic, social, and physical well-being of the Region; and coordination of the Regional Plan with local, state, and federal requirements.

The Land Use Element includes the following Subelements: Land Use, Housing, Community Design, Noise, Natural Hazards, Air Quality, and Water Quality.

## LAND USE

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The Tahoe Regional Planning Agency Bi-State Compact calls for development of a Regional Plan that establishes a balance, or equilibrium, between the natural environment and the manmade environment. The TRPA has established environmental threshold carrying capacities that define the capacity of the natural environment and set specific environmental performance standards related to land use. The thresholds, however, do not define the maximum buildout, densities, permitted uses, or other land use criteria for the manmade environment; this is the function of the Regional Plan.

It is the intent of this Subelement to establish land use goals and policies that will ensure the desired equilibrium and attain and maintain the environmental thresholds within a specific time schedule.

### GOAL LU-1

#### **RESTORE, MAINTAIN, AND IMPROVE THE QUALITY OF THE LAKE TAHOE REGION FOR THE VISITORS AND RESIDENTS OF THE REGION.**

Lake Tahoe is a unique natural resource in a spectacular natural setting. It is truly one of the natural treasures of the United States. The long-term economic and natural health of the Region depends on the maintenance of this unusual quality. While previous land use planning efforts have concentrated on regulating the quantity of permitted development, this plan emphasizes an improvement in the quality of development in the Region and in the quality of the natural environment.

#### **POLICIES:**

##### **LU-1.1 THE PRIMARY FUNCTION OF THE REGION SHALL BE AS A MOUNTAIN RECREATION AREA WITH OUTSTANDING SCENIC AND NATURAL VALUES.**

The economic health of the Region depends on a viable tourist and recreation-oriented environment. It is the intent of this Regional Plan, among other things, to encourage development that enhances these values.

##### **LU-1.2 REDEVELOPING EXISTING TOWN CENTERS IS A HIGH PRIORITY.**

Many of the Region's environmental problems can be traced to past and existing development which often occurred without recognition of the sensitivity of the area's natural resources.

To correct this, environmentally beneficial redevelopment and rehabilitation of identified Centers is a priority.

##### **LU-1.3 THE PLAN SHALL SEEK TO MAINTAIN A BALANCE BETWEEN ECONOMIC/SOCIAL HEALTH AND THE ENVIRONMENT.**

### GOAL LU-2

#### **DIRECT THE AMOUNT AND LOCATION OF NEW LAND USES IN CONFORMANCE WITH THE ENVIRONMENTAL THRESHOLD CARRYING CAPACITIES AND THE OTHER GOALS OF THE TAHOE REGIONAL PLANNING AGENCY BI-STATE COMPACT.**

## **POLICIES:**

### **LU-2.1 THE REGIONAL PLAN ADOPTED BY THE AGENCY SHALL SPECIFY THE TOTAL ADDITIONAL DEVELOPMENT WHICH MAY BE PERMITTED WITHIN THE REGION, NOT TO EXCEED THE LIMITATIONS SET FORTH BELOW.**

The Environmental Impact Statement prepared for this plan analyzed impacts based on defined development parameters which are integrated into this plan. It is the intent of this policy to ensure that these limitations are incorporated, both individually and cumulatively, into the Land Use Element. These limitations shall be expressed in appropriate land use regulations, such as zoning, use limitations, floor area limitations, allocation limits and other such regulations. For the purposes of this plan, regulated development is categorized as residential, tourist accommodation, commercial, recreation, public service, and resource management.

Residential: Each undeveloped legal parcel existing on August 17, 1986, unless otherwise restricted, has a potential residential unit of use, except where additional development rights are acquired pursuant to the Implementation Element.

The status of residential units of use and potential residential units of use that existed on August 17, 1986 are shown in the table below:

| <b>Residential Units of Use Inventory (as of October 24, 2012)*</b>                  |              |
|--|--------------|
| Residences Developed before 1987   | 40,865       |
| Total Potential Residential Units of Use in 1987                                     | 18,690       |
| Potential Residential Units of Use Retired 1987-2011                                 | 8,360        |
| Potential Residential Units of Use Developed or Allocated to Jurisdictions 1987-2011 | 6,087        |
| <b>Total Potential Residential Units of Use Remaining</b>                            | <b>4,243</b> |
| Remaining on Buildable Parcels   | 2,791        |
| Remaining on Marginal Parcels  | 765          |
| Remaining on Unbuildable Parcels   | 535          |
| Banked Potential Residential Units of Use  | 152          |
| *Note: All statistics are estimates and are not regulatory                           |              |

Tourist Accommodation: There is a limited need for additional tourist accommodation units. Based on demonstrated need, projects may be permitted additional units as specified within a Community Plan or a Conforming Area Plan and as provided for in the Implementation Element.

Commercial: The amount of additional commercial development is based on the estimated needs of the Region. Commercial development may be permitted as specified in Plan Area Statements, Community Plans, other Specific Plans or Master Plans, or a Conforming Area Plan.

Recreation: Additional recreation uses may be permitted only as specified within Plan Area Statements, Community Plans, other Specific Plans or Master Plans, or a Conforming Area Plan. The total capacity of additional outdoor recreational facilities for the Region shall not exceed 6,114 persons at one time (PAOTs) for overnight facilities, 6,761 PAOTs for summer day use facilities, and 12,400 PAOTs for winter day use facilities. (See Recreation Element for more detail.)

Public Service: Additional public service development shall be limited to those projects needed to serve the other development permitted by this plan. (See Public Service Element for more detail.)

Resource Management: Resource Management activities pertaining to the utilization, management, or conservation of natural resources shall be limited to those activities that are consistent with policies of this plan and of other adopted plans.

**LU-2.2 NO NEW DIVISIONS OF LAND SHALL BE PERMITTED WITHIN THE REGION WHICH WOULD CREATE NEW DEVELOPMENT POTENTIAL INCONSISTENT WITH THE GOALS AND POLICIES OF THIS PLAN.**

This policy does not consider the following divisions of land to be inconsistent when the result does not increase the development potential permitted by this plan:

- A. Division of land for the purposes of conveying a portion thereof to a governmental agency, public entity, or public utility.
- B. Division of land for the purposes of creating cemetery lots.
- C. Division of land ordered by a federal or state court of competent jurisdiction as a result of bona fide, adversary legal proceedings to which the Agency is a party. Any such division of land or approval of any other project or action resulting from such legal proceedings shall be pursuant to an evaluation of the effect of such division or approval upon the Regional Plan, the environmental thresholds, and other requirements of the Bi-State Compact. Based on the above evaluation, appropriate adjustments to the Regional Plan shall be made.
- D. A modification to an existing subdivision or a lot line adjustment or lot consolidation, which does not result in any increase in development potential, or in present or potential land coverage or density, and shall not have an adverse impact upon the health, safety, general welfare or environment of the Region.
- E. Conversion of an existing structure, to a stock cooperative, community apartment, condominium, or any other form of divided interest; which conversion does not result in any increase in development potential, or in present or potential land coverage or density, and will not have an adverse impact upon the health, safety, general welfare or environment of the Region.
- F. Redivision, adjustment, or consolidation, of parcels within an existing urban area, as part of a TRPA approved redevelopment plan that does not increase development potential region-wide.
- G. Division of land through condominiums, community apartments, or stock cooperatives within an existing urban area in conjunction with the approval of a project associated with an approved transfer of development, or otherwise in accordance with the provisions of this plan. In order to subdivide a project under this provision, the project itself shall be approved prior to the approval of the division and in no case shall the division result

in a greater amount, a different location, or a greater rate of development than otherwise permitted by this plan.

- H. Division of land through air space condominiums in two resort recreation designated areas with the approval of a project associated with an approved transfer of development. In order to subdivide a project under this provision, the project itself shall be approved prior to the approval of the division and in no case shall the division result in a greater amount, a different location or a greater rate of development than otherwise permitted by this plan. Subdivisions shall be limited to air space condominium divisions with no lot and block subdivisions allowed, development shall be transferred from outside the area designated as resort recreation, and transfers shall result in the retirement of development.

**LU-2.3 BUILDINGS, WHETHER CONFORMING OR NONCONFORMING, WHICH ARE DAMAGED OR DESTROYED BY FIRE OR OTHER SIMILAR CALAMITY, MAY BE REPAIRED OR REBUILT WITH NO REQUIREMENT FOR REDUCTION IN COVERAGE OR HEIGHT BY WAY OF FEE OR OTHERWISE. THIS POLICY APPLIES ONLY IF THE BUILDING IS RECONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE ORIGINAL STRUCTURE AND, WITH NO INCREASE IN FLOOR AREA, LAND COVERAGE, HEIGHT, OR VOLUME. OTHER PROVISIONS GENERALLY APPLICABLE TO REHABILITATION OR RECONSTRUCTION OF BUILDINGS SHALL APPLY. THIS POLICY IS SUBJECT TO THE NATURAL HAZARDS SUBELEMENT. SPECIAL PROVISIONS SHALL APPLY TO BUILDINGS IN THE SHOREZONE, LAKEWARD OF THE HIGHWATER LINE.**

**LU-2.4 STRUCTURES, LEGALLY EXISTING AS OF THE EFFECTIVE DATE OF THIS PLAN, BUT WHICH, BY VIRTUE OF THEIR DESIGN OR LOCATION, ARE PROHIBITED, ARE CONSIDERED NONCONFORMING AND SUBJECT TO THE FOLLOWING POLICIES:**

- A. Nonconforming structures may be maintained or repaired. Maintenance and repair shall be defined in implementing ordinances.
- B. Nonconforming structures may not be enlarged, replaced, or rebuilt without the approval of TRPA. Such approval shall occur through direct TRPA review, through the conformance review process for Area Plans, or through Memorandum of Understanding with applicable governments and shall be based on criteria set forth in implementing ordinances to ensure that:
  - i. the activity shall not increase the extent of nonconformity; and
  - ii. if the structure is subject to a specific program of removal or modification by TRPA, the activity shall not conflict with that program.

**LU-2.5 USES, LEGALLY EXISTING AS OF THE EFFECTIVE DATE THIS PLAN, BUT WHICH ARE NOW PROHIBITED, ARE CONSIDERED NONCONFORMING AND SUBJECT TO THE FOLLOWING POLICIES:**

- A. Nonconforming uses may continue as they exist except where specifically subject to a program of removal or modification.
- B. Nonconforming uses may not be modified, expanded, or intensified, nor resumed following a significant interruption without the approval of TRPA. Such approval shall occur through direct TRPA review, through the conformance review process for Area Plans, or through Memorandum of



Understanding with applicable governments and shall be based on criteria set forth in ordinances to ensure that:

- i. the activity shall not increase the extent of nonconformity.
- ii. the activity shall not make it more difficult to attain and maintain environmental threshold carrying capacities.
- iii. the use is otherwise consistent with applicable Plan Area Statements and Community Plans.

C. Additional rules regarding excess land coverage are set forth in this Land Use Subelement, Policies LU-2.11 and 2.12.

**LU-2.6 USES OF THE BODIES OF WATER WITHIN THE REGION SHALL BE LIMITED TO OUTDOOR WATER-DEPENDENT USES REQUIRED TO SATISFY THE GOALS AND POLICIES OF THIS PLAN.**

This policy is intended to promote the use of waters of the Region for water-dependent outdoor recreation and to protect the scenic and natural qualities of such waters. Plan Area Statements or conforming Area Plans shall detail the specific policies.

**LU-2.7 RESTORATION AND REHABILITATION SHALL BE A HIGH PRIORITY FOR IMPROVING ENVIRONMENTAL QUALITY AND COMMUNITY CHARACTER OF AREAS DESIGNATED FOR REDIRECTION BUT NOT INCLUDED IN A REDEVELOPMENT PLAN.**

The Regional Plan calls for improvement of environmental quality and community character in redirection areas through restoration and rehabilitation. Implementation of rehabilitation and restoration strategies shall be by ordinance.

**LU-2.8 THE PROVISIONS SET FORTH IN ARTICLE VI (d) THROUGH VI (i) OF THE BI-STATE COMPACT APPLY TO TRPA REGULATION OF STRUCTURES HOUSING GAMING.**

**LU-2.9 ALLOWABLE LAND COVERAGE IN THE TAHOE REGION SHALL BE SET FORTH IN ACCORDANCE WITH THE LAND CAPABILITY DISTRICT CLASSIFICATION METHODOLOGY AND DISTRICT BASED LAND COVERAGE LIMITATIONS SET FORTH IN "THE LAND CAPABILITY CLASSIFICATION OF THE LAKE TAHOE BASIN, CALIFORNIA-NEVADA, A GUIDE FOR PLANNING, BAILEY, 1974."**

This policy limits allowable impervious land coverage associated with new development. These policies set allowable land coverage by applying the recommended Bailey land coverage coefficients to specifically defined and related areas. In some instances, provisions are made to allow additional coverage by transfer. The transfer programs shall operate by a direct offset method. In addition, land capability is one of the basic factors in determining the suitability of lands for development and appropriateness of land uses.

**LU-2.10 ALLOWED BASE LAND COVERAGE FOR ALL NEW PROJECTS AND ACTIVITIES SHALL BE CALCULATED BY APPLYING THE BAILEY COEFFICIENTS, AS SHOWN BELOW, TO THE APPLICABLE AREA WITHIN THE PARCEL BOUNDARY, OR AS OTHERWISE SET FORTH IN A, B, AND C OF THIS POLICY.**

| LAND CAPABILITY DISTRICT | MAXIMUM ALLOWED LAND COVERAGE |
|--------------------------|-------------------------------|
| 1a                       | 1 percent                     |

|    |            |
|----|------------|
| 1b | 1 percent  |
| 1c | 1 percent  |
| 2  | 1 percent  |
| 3  | 5 percent  |
| 4  | 20 percent |
| 5  | 25 percent |
| 6  | 30 percent |
| 7  | 30 percent |

- A. In the case of subdivisions approved by TRPA in conformance with the coefficients coverages assigned to individual lots shall be the allowed base coverage for those lots. A list of such TRPA-approved subdivisions appears in *Attachment 2*
- B. In the case of existing planned unit developments (PUDs) not in conformance with the coefficients, the coefficients shall apply to the entire project area minus public rights-of-way, and the allowed base coverage shall be apportioned to the individual lots or building sites, and common area facilities. A list of such PUDs appears in *Attachment 3*
- C. After December 31, 1988, for vacant residential parcels evaluated under the Individual Parcel Evaluation System (IPES), the allowable base land coverage shall be a function of a parcel's combined score under the IPES criteria for relative erosion hazard and runoff potential as correlated with the above coefficients and applied to the designated evaluation area.

The method of calculation of allowed land coverages shall be detailed in the implementing ordinances consistent with the above policy.

**LU-2.11 THE ALLOWED COVERAGE IN POLICY LU-2.10 MAY BE INCREASED BY TRANSFER OF LAND COVERAGE WITHIN HYDROLOGICALLY RELATED AREAS UP TO THE LIMITS AS SET FORTH IN THIS POLICY:**

**SPECIAL PROVISIONS FOR ADDITIONAL COVERAGE, SUCH AS EXCEPTIONALLY LONG DRIVEWAYS, PERVIOUS COVERAGE, PUBLIC TRAILS AND ACCESS FOR THE DISABLED, MAY ALSO BE ALLOWED. ORDINANCES SHALL SPECIFICALLY LIMIT AND DEFINE THESE PROGRAMS.**

**LAND COVERAGE MAY BE TRANSFERRED THROUGH PROGRAMS THAT ARE FURTHER DESCRIBED IN THE IMPLEMENTATION ELEMENT. NOTWITHSTANDING THE LIMITATION STATED ABOVE, LAND COVERAGE MAY BE TRANSFERRED ACROSS HYDROLOGICALLY RELATED AREAS WHEN EXISTING HARD OR SOFT COVERAGE IS TRANSFERRED AND RETIRED FROM SENSITIVE LAND AND TRANSFERRED TO NON-SENSITIVE LAND FURTHER THAN 300 FEET FROM THE HIGH WATER LINE OF LAKE TAHOE, OR ON THE LANDWARD SIDE OF HIGHWAYS 28 OR 89 IN THE TAHOE CITY OR KINGS BEACH TOWN CENTERS.**

The intent of the land coverage transfer programs is to allow greater flexibility in the placement of land coverage. Such programs include the use of land banks, lot consolidation, land coverage restoration programs, and transfer programs based on the calculation of land coverage on non-contiguous parcels. The coverage transfer programs allow for coverage over base coverage to be

permitted and still be consistent with the soils threshold and *Goal LU-2* of this Subelement.

- A. Single Family Residential: The maximum land coverage allowed (Base + Transfer) on a parcel through a transfer program shall be as set forth below:

| <u>Parcel Size (Square Feet)</u> | <u>Land Coverage</u>  |
|----------------------------------|---|
| 0 - 4,000                        | Base Land Coverage<br>as Set Forth in <i>Policy LU-2.10</i> |
| 4,001 - 9,000                    | 1,800 sq. ft.   |
| <u>Parcel Size (Square Feet)</u> | <u>Land Coverage</u>  |
| 9,001 - 14,000                   | 20 percent  |
| 14,001 - 16,000                  | 2,900 sq. ft.   |
| 16,001 - 20,000                  | 3,000 sq. ft.   |
| 20,001 - 25,000                  | 3,100 sq. ft.   |
| 25,001 - 30,000                  | 3,200 sq. ft.   |
| 30,001 - 40,000                  | 3,300 sq. ft.   |
| 40,001 - 50,000                  | 3,400 sq. ft.   |
| 50,001 - 70,000                  | 3,500 sq. ft.   |
| 70,001 - 90,000                  | 3,600 sq. ft.   |
| 90,001 - 120,000                 | 3,700 sq. ft.   |
| 120,001 - 150,000                | 3,800 sq. ft.   |
| 150,001 - 200,000                | 3,900 sq. ft.   |
| 200,001 - 400,000                | 4,000 sq. ft.   |

For lots in planned unit developments, the maximum coverage allowed (Base + Transfer) shall be up to 100 percent of the proposed building envelope but shall not exceed 2,500 square feet. Lots in subdivisions with TRPA-approved transfer programs may be permitted the coverage specified by that approval.

- B. Facilities in Centers: Except as provided in Subsections A, F, I, J and K of this Policy, the maximum coverage (Base + Transfer) allowed on a parcel through a transfer program shall be 70 percent of the land in capability districts 4 - 7, provided such parcel is within a Center of a Conforming Area Plan. Coverage transfers to increase coverage from the base coverage up to the maximum coverage allowed shall be at a ratio of 1:1 for coverage transfers from sensitive lands. For transfer of coverage from non-sensitive lands, coverage shall be transferred at a gradually increasing ratio from 1:1 to 2:1, as further specified in the Code of Ordinances.
- C. Commercial and Mixed Use Facilities in a Community Plan: The maximum coverage (Base + Transfer) allowed on an existing undeveloped parcel through a transfer program, shall be 70 percent of the land in capability districts 4 - 7, provided the parcel is within an approved community plan. For existing developed parcels, the maximum land coverage allowed is 50 percent. Coverage transfers to increase coverage from the base coverage up to the maximum coverage allowed, shall be at a ratio of 1:1 for coverage transfers from sensitive lands. For coverage transfers from non-sensitive lands, coverage shall be transferred at a gradually increasing ratio from 1:1

to 2:1, as further specified in the Code of Ordinances.

- D. Tourist Accommodation Facilities, Multi-Residential Facilities of 5 Units or More, Public Service Facilities, and Recreational Facilities in a Community Plan: The maximum coverage (Base + Transfer) allowed on a parcel through a transfer program shall be 50 percent of the land in capability districts 4 - 7, provided such parcel is within an approved community plan. The coverage transfer ratio to increase coverage from the base coverage to 50 percent shall be at a ratio of 1:1.
- E. Other Multi-Residential Facilities: The maximum coverage (Base + Transfer) allowed on a parcel through a transfer of coverage programs shall be the amounts set forth in Subsection A, above.
- F. Linear Public Facilities and Public Health and Safety Facilities: Such public facilities defined by ordinance and whose nature requires special consideration, are limited to transferring the minimum coverage needed to achieve their public purpose.
- G. Public Service Facilities Outside a Community Plan or Center: The maximum coverage (Base + Transfer) allowed on a parcel through a transfer program shall be 50 percent land coverage provided TRPA determines there is a demonstrated need and requirement to locate such a facility outside a Community Plan or Center, and there is no feasible alternative which would reduce land coverage.
- H. Other Facilities Outside of Community Plans and Centers, Facilities Within Community Plans Before the Community Plan is Approved, and Facilities within Centers before Conforming Area Plans are approved: Other than the exceptions in Subsections A, E, F, and G, the maximum land coverage allowed shall be the base land coverage as set forth in Policy LU-2.10.
- I. Notwithstanding Subsection A above, when existing development is relocated to Centers and the prior site is restored and retired, non-conforming coverage may be maintained with the relocation as long as the new site is developed in accordance with all other TRPA Policies and Ordinances.
- J. Conforming Area Plans may include a comprehensive coverage management system as an alternative to the parcel level coverage requirements outlined in Subsection A-H above. In order to be found in conformance with the Regional Plan, the comprehensive coverage management system shall reduce coverage overall, reduce coverage in land capability districts 1 and 2 compared to the parcel level limitations in the Regional Plan and Code of Ordinances and not increase allowed coverage within 300 feet of Lake Tahoe (excluding those areas landward of Highways 28 and 89 in Kings Beach and Tahoe City Town Centers within that zone).
- K. Additional land coverage limitations shall be implemented within 300 feet of Lake Tahoe, as further described in the Code of Ordinances.

**LU-2.12 REHABILITATION, RECONSTRUCTION, AND UPGRADING OF THE EXISTING INVENTORY OF STRUCTURES, OR OTHER FORMS OF COVERAGE IN THE TAHOE REGION, ARE HIGH PRIORITIES OF THE REGIONAL PLAN. TO ENCOURAGE REHABILITATION AND UPGRADING OF STRUCTURES, THE FOLLOWING POLICIES SHALL APPLY:**

- A. Repair or reconstruction of buildings damaged or destroyed by fire or other calamity subject to Policy LU-2.3 of this subelement is exempt from this policy.
- B. Reconstruction, rehabilitation, modification, relocation, or major repair of structures or coverage other than as specified in *Subsection A* above may be allowed, provided such use is allowed under this Land Use Subelement. For parcels with existing coverage in excess of the Bailey Coefficients, a land coverage mitigation program shall be set by ordinance, which shall provide for the reduction of coverage in an amount proportional to the cost of the repair, reconstruction, relocation, rehabilitation, or modification, and to the extent of excess coverage. To accomplish these reductions, property owners shall have at least the following options:
  - i. reducing coverage on-site;
  - ii. reducing coverage off-site;
  - iii. paying a rehabilitation fee in lieu of on-site or off-site coverage reduction in an amount established by Agency ordinance to help fund a land bank program established to accomplish coverage reductions;
  - iv. lot consolidation with a contiguous parcel or lot line adjustment to reduce the percentage of excess coverage on the resulting parcels; or
  - v. any combination of the foregoing options.
- C. Existing development in Centers with excess coverage may earn multi-residential bonus units, tourist accommodation bonus unit and bonus commercial floor area for removing and retiring excess coverage onsite.
- D. Existing coverage may be relocated within a parcel provided it is relocated to areas of equal or superior environmental capability consistent with *Subsection B* above.
- E. TRPA shall maintain a rehabilitation fee schedule that is adequate to carry out an effective land coverage banking program, equitably divides the costs to the public and private sectors, and has the minimum possible deterrent effect on the Regional Plan goal of encouraging rehabilitation, reconstruction, and upgrading of the existing inventory of structures. The rehabilitation fee schedule shall be updated annually.
- F. In approving repair, reconstruction, rehabilitation, modification, or relocation of structures or other coverage, the Agency shall also apply other relevant standards, including installation and maintenance of Best Management Practices or compliance with the design review guidelines.

### **GOAL LU-3**

**PROVIDE TO THE GREATEST POSSIBLE EXTENT, WITHIN THE CONSTRAINTS OF THE ENVIRONMENTAL THRESHOLD CARRYING CAPACITIES, A DISTRIBUTION OF LAND USE THAT ENSURES THE SOCIAL, ECONOMIC, AND ENVIRONMENTAL WELL-BEING OF THE REGION.**

The Tahoe Regional Planning Agency Bi-State Compact and extensive public testimony call for TRPA, along with other governmental and private entities, to safeguard the well-being of those who live in, work in, or visit the Region.

**POLICIES:**

**LU-3.1 ALL PERSONS SHALL HAVE THE OPPORTUNITY TO UTILIZE AND ENJOY THE REGION'S NATURAL RESOURCES AND AMENITIES.**

**LU-3.2 NO PERSON OR PERSONS SHALL DEVELOP PROPERTY SO AS TO ENDANGER THE PUBLIC HEALTH, SAFETY, AND WELFARE.**

Persons who develop property in the Region must ensure that their development conforms to the Goals and Policies Plan, all TRPA regulations and all applicable local, state, and federal laws pertaining to public health, safety and welfare.

**LU-3.3 DEVELOPMENT IS PREFERRED IN AND DIRECTED TOWARD CENTERS, AS IDENTIFIED ON THE REGIONAL LAND USE MAP. CENTERS SHALL HAVE THE FOLLOWING CHARACTERISTICS:**

- 1) A concentration of non-residential and mixed-use development at a higher intensity than exists in other areas of the Region.
- 2) Existing or planned transit service.
- 3) Highway access.
- 4) Infill and redevelopment opportunities.
- 5) Capacity for receiving transfers of development rights and relocations of existing development.
- 6) Existing or planned housing in the vicinity.
- 7) Existing or planned street designs with continuous sidewalks, paths and other infrastructure that promotes walking, bicycling and transit use so as to encourage mobility without use of private vehicles.

**LU-3.4 EXISTING DEVELOPMENT PATTERNS IN RESIDENTIAL NEIGHBORHOODS OUTSIDE OF CENTERS AND ENVIRONMENTALLY-SENSITIVE LANDS SHOULD BE MAINTAINED WITH NO SIGNIFICANT CHANGE.**

**LU-3.5 DEVELOPMENT IS DISCOURAGED IN AND DIRECTED AWAY FROM ENVIRONMENTALLY-SENSITIVE LANDS AND AREAS FURTHEST FROM NON-RESIDENTIAL SUPPORT SERVICES. THESE AREAS ARE FURTHER DEFINED IN OTHER PLAN POLICIES.**

**LU-3.6 TRPA SHALL RESERVE A PORTION OF THE AVAILABLE DEVELOPMENT ALLOCATIONS AND RESIDENTIAL BONUS UNITS TO PROMOTE THE TRANSFER OF DEVELOPMENT RIGHTS FROM SENSITIVE LANDS TO CENTERS.**

**LU-3.7 TRPA SHALL MAINTAIN A PORTION OF THE AVAILABLE DEVELOPMENT ALLOCATIONS AND RESIDENTIAL BONUS UNITS TO PROMOTE THE TRANSFER OF DEVELOPMENT RIGHTS FROM OUTLYING RESIDENTIAL AREAS TO CENTERS.**

**LU-3.8 TRPA SUPPORTS SENSITIVE LAND AND DEVELOPMENT RIGHT ACQUISITION PROGRAMS THAT PRIORITIZE THE RETIREMENT OF DEVELOPMENT AND THE RESTORATION OF SENSITIVE LAND.**

## **GOAL LU-4**

**REGIONAL PLAN GOALS, POLICIES, AND ORDINANCES SHALL BE IMPLEMENTED USING AN INTEGRATED SYSTEM OF REGIONAL AND LOCAL GOVERNMENT PLANNING.**

### **POLICIES:**

**LU-4.1 THE REGIONAL PLAN LAND USE MAP IDENTIFIES GROUPINGS OF GENERALIZED LAND USES AND PRIORITY REDEVELOPMENT AREAS IN THE REGION. AREAS OF SIMILAR USE AND CHARACTER ARE MAPPED AND CATEGORIZED WITHIN ONE OR MORE OF THE FOLLOWING EIGHT LAND USE CLASSIFICATIONS: WILDERNESS, BACKCOUNTRY, CONSERVATION, RECREATION, RESORT RECREATION, RESIDENTIAL, MIXED-USE, AND TOURIST. THESE LAND USE CLASSIFICATIONS SHALL DICTATE ALLOWABLE LAND USES. EXISTING URBANIZED AREAS ARE IDENTIFIED AS CENTERS AND INCLUDE TOWN CENTERS, THE REGIONAL CENTER AND THE HIGH DENSITY TOURIST DISTRICT. CENTERS ARE THE AREAS WHERE SUSTAINABLE REDEVELOPMENT IS ENCOURAGED.**

Since the development permitted under this plan is generally limited to the existing urban boundaries in which uses have already been established, the concept of this land use plan is directed toward encouraging infill and redirection. The intent of this system is to provide flexibility when dealing with existing uses, continuation of acceptable land use patterns, and redirection of unacceptable land use patterns. Implementation ordinances set forth the detailed management criteria and allowed uses for each land use classification.

#### **Wilderness**

Wilderness Districts are designated and defined by the U.S. Congress as part of the National Wilderness Preservation System. These lands offer outstanding opportunities for solitude and primitive, unconfined recreation experiences, and they contain ecological, geological, and other features of scientific, educational, scenic and historic value. The wilderness designation is intended to protect and preserve such areas for present and future generations. These lands are managed to prevent the degradation of wilderness character. Natural ecological processes and functions are preserved, and restored where necessary. Permanent improvements and mechanized uses are prohibited. Wilderness District lands within the Tahoe Region include portions of the Desolation, Granite Chief and Mount Rose Wilderness Areas.

#### **Backcountry**

Backcountry Districts are designated and defined by the U.S. Forest Service as part of their Resource Management Plans. These lands are roadless areas including Dardanelles/Meiss, Freel Peak and Lincoln Creek. On these lands, natural ecological processes are primarily free from human influences. Backcountry areas offer a recreation experience similar to wilderness, with places for people seeking natural scenery and solitude. Primitive and semi-primitive recreation opportunities include hiking, camping, wildlife viewing, and cross-country skiing, in addition to more developed or mechanized activities not allowed in wilderness areas (e.g., mountain biking, snowmobiling). Management activities that support administrative and dispersed recreation activities are minimal, but may have a limited influence. Limited roads may be present in some backcountry areas; road reconstruction may be permitted on backcountry lands where additional restrictions do not apply. Backcountry areas contribute to ecosystem and species diversity and sustainability, serve as habitat for fauna and flora, and offer wildlife corridors. These areas provide a diversity of terrestrial and

aquatic habitats, and support species dependent on large, undisturbed areas of land. Backcountry areas are managed to preserve and restore healthy watersheds with clean water and air, and healthy soils. Watershed processes operate in harmony with their setting, providing high quality aquatic habitats.

### **Conservation**

Conservation areas are non-urban areas with value as primitive or natural areas, with strong environmental limitations on use, and with a potential for dispersed recreation or low intensity resource management. Conservation areas include (1) public lands already set aside for this purpose, (2) high-hazard lands, stream environment zones, and other fragile areas, without substantial existing improvements, (3) isolated areas which do not contain the necessary infrastructure for development, (4) areas capable of sustaining only passive recreation or non-intensive agriculture, and (5) areas suitable for low-to-moderate resource management.

### **Recreation**

Recreation areas are non-urban areas with good potential for developed outdoor recreation, park use, or concentrated recreation. Lands which this plan identified as recreation areas include (1) areas of existing private and public recreation use, (2) designated local, state, and federal recreation areas, (3) areas without overriding environmental constraints on resource management or recreational purposes, and (4) areas with unique recreational resources which may service public needs, such as beaches and ski areas.

### **Resort Recreation**

Resort Recreation areas are the specific Edgewood and Heavenly parcels depicted on Map 1 of the Regional Plan.

### **Residential**

Residential areas are urban areas having potential to provide housing for the residents of the Region. In addition, the purpose of this classification is to identify density patterns related to both the physical and manmade characteristics of the land and to allow accessory and non-residential uses that complement the residential neighborhood. These lands include: (1) areas now developed for residential purposes; (2) areas of moderate-to-good land capability; (3) areas within urban boundaries and serviced by utilities; and (4) areas of centralized location in close proximity to commercial services and public facilities.

### **Mixed-Use**

Mixed-use areas are urban areas that have been designated to provide a mix of commercial, public services, light industrial, office, and residential uses to the Region or have the potential to provide future commercial, public service, light industrial, office, and residential uses. The purpose of this classification is to concentrate higher intensity land uses for public convenience, and enhanced sustainability.

### **Tourist**

Tourist areas are urban areas that have the potential to provide intensive tourist accommodations and services or intensive recreation. This land use classification also includes areas recognized by the Bi-State Compact as suitable for gaming. These lands include areas that are:

- 1) already developed with high concentrations of visitor services, visitor accommodations, and related uses;
- 2) of good to moderate land capability (land capability districts 4-7);
- 3) with existing excess land coverage; and



- 4) located near commercial services, employment centers, public services and facilities, transit facilities, pedestrian paths, and bicycle connections

#### **Town Center District**

Town centers contain most of the Region's non-residential services and have been identified as a significant source of sediments and other contaminants that continue to enter Lake Tahoe. Town centers are targeted for redevelopment in a manner that improves environmental conditions, creates a more sustainable and less auto-dependent development pattern and provides economic opportunities in the Region.

#### **Regional Center District**

The Regional Center includes a variety of land uses in the core of South Lake Tahoe, including the Gondola and base lodge facilities for Heavenly Ski Area. Development patterns in the Regional Center have been and should continue to be more intensive than town centers and less intensive than the High Density Tourist District. Older development within the Regional Center is a significant source of sediment and other water contaminants. The Regional Center is targeted for redevelopment in a manner that improves environmental conditions, creates a more sustainable and less auto-dependent development pattern and provides economic opportunities in the Region.

#### **High Density Tourist District**

The High Density Tourist District contains a concentration of hotel/casino towers and is targeted for redevelopment in a manner that improves environmental conditions, creates a more sustainable and less auto-dependent development pattern and provides economic opportunities for local residents. The High Density Tourist District is the appropriate location for the Region's highest intensity development.

#### **Stream Restoration Plan Area**

Stream Restoration Plan Areas are Stream Environment Zones along major waterways that have been substantially degraded by prior or existing development. Individual Restoration Plans should be developed for each Stream Restoration Plan Area in coordination with the applicable local government and property owners in the plan area. Restoration Plans may be developed as a component of an Area Plan or as a separate document and should identify feasible opportunities for environmental restoration.

**LU-4.2 DETAILED PLAN AREA STATEMENTS HAVE BEEN APPROVED FOR ALL PROPERTIES IN THE REGION. THESE PLAN AREA STATEMENTS WERE ADOPTED IN ACCORDANCE WITH THE 1987 REGIONAL PLAN AND SHALL REMAIN IN EFFECT UNTIL SUPERSEDED BY AREA PLANS THAT ARE DEVELOPED IN ACCORDANCE WITH AND FOUND IN CONFORMANCE WITH THIS REGIONAL PLAN. IF ANY PLAN AREA STATEMENT CONTAINS PROVISIONS THAT CONTRADICT NEWER PROVISIONS OF THE REGIONAL PLAN OR DEVELOPMENT CODE, THE NEWER PROVISIONS OF THE REGIONAL PLAN OR DEVELOPMENT CODE SHALL PREVAIL, BUT ONLY TO THE EXTENT THAT SPECIFIC PROVISIONS CONFLICT.**

**LU-4.3 COMMUNITY PLANS HAVE BEEN APPROVED FOR SOME PROPERTIES IN THE REGION TO REFINE AND SUPERSEDE THE PLAN AREA STATEMENTS. THESE COMMUNITY PLANS WERE ADOPTED IN ACCORDANCE WITH THE 1987 REGIONAL PLAN AND SHALL REMAIN IN EFFECT UNTIL SUPERSEDED BY AREA PLANS THAT ARE DEVELOPED IN ACCORDANCE WITH AND FOUND IN CONFORMANCE WITH THIS REGIONAL PLAN. IF ANY COMMUNITY PLAN**

**CONTAINS PROVISIONS THAT CONTRADICT NEWER PROVISIONS OF THE REGIONAL PLAN OR DEVELOPMENT CODE, THE NEWER PROVISIONS OF THE REGIONAL PLAN OR DEVELOPMENT CODE SHALL PREVAIL, BUT ONLY TO THE EXTENT THAT SPECIFIC PROVISIONS CONFLICT.**

- LU-4.4 OTHER DETAILED PLANS, SUCH AS THE AIRPORT MASTER PLAN, SKI AREA MASTER PLANS, AND REDEVELOPMENT PLANS HAVE ALSO BEEN APPROVED FOR SOME PROPERTIES IN THE REGION TO FURTHER REFINE AND SUPERSEDE THE PLAN AREA STATEMENTS. THESE PLANS WERE ADOPTED IN ACCORDANCE WITH THE 1987 REGIONAL PLAN AND SHALL REMAIN IN EFFECT UNTIL SUPERSEDED BY AREA PLANS THAT ARE DEVELOPED IN ACCORDANCE WITH AND FOUND IN CONFORMANCE WITH THIS REGIONAL PLAN. IF ANY OF THESE PLANS CONTAIN PROVISIONS THAT CONTRADICT NEWER PROVISIONS OF THE REGIONAL PLAN OR DEVELOPMENT CODE, THE NEWER PROVISIONS OF THE REGIONAL PLAN OR DEVELOPMENT CODE SHALL PREVAIL, BUT ONLY TO THE EXTENT THAT SPECIFIC PROVISIONS CONFLICT.**
- LU-4.5 TRPA SHALL REQUEST THAT ALL LOCAL, STATE, FEDERAL AND TRIBAL GOVERNMENTS IN THE REGION PROVIDE WRITTEN STATEMENTS INDICATING THEIR INTENT TO PREPARE AREA PLANS AND THEIR ANTICIPATED SCHEDULE FOR COMPLETION OF AREA PLANS FOR AREAS WITHIN THEIR JURISDICTION. STATEMENTS OF INTENT SHOULD BE PROVIDED TO TRPA NO LATER THAN DECEMBER 31, 2013. THE TRPA GOVERNING BOARD SHALL EVALUATE THE LOCAL GOVERNMENT STATEMENTS OF INTENT AND DEVELOP AN ACTION PLAN BY APRIL 30, 2014. THE ACTION PLAN MAY INCLUDE UPDATES AND CONSOLIDATIONS OF PLAN AREA STATEMENTS, COMMUNITY PLANS AND OTHER PLANS FOR AREAS THAT ARE NOT INCLUDED IN AREA PLANS. ANY PLANS THAT ARE UPDATED BY TRPA MAY UTILIZE THE PROVISIONS THAT APPLY TO AREA PLANS.**
- LU-4.6 IN ORDER TO BE RESPONSIVE TO THE UNIQUE NEEDS AND OPPORTUNITIES OF COMMUNITIES OF THE REGION, LOCAL, STATE, FEDERAL AND TRIBAL GOVERNMENTS ARE ENCOURAGED TO PREPARE CONFORMING AREA PLANS THAT SUPERSEDE EXISTING PLAN AREA STATEMENTS AND COMMUNITY PLANS OR OTHER TRPA REGULATIONS FOR AREAS WITHIN THEIR JURISDICTION. AREA PLANS SHALL BE PREPARED IN COORDINATION WITH LOCAL RESIDENTS, OTHER STAKEHOLDERS AND TRPA STAFF, AND SHALL BE CONSISTENT WITH THE REGIONAL GOAL AND POLICY PLAN AND APPLICABLE ORDINANCES. AFTER BEING FOUND IN CONFORMANCE WITH THE REGIONAL PLAN, AREA PLANS SHALL BECOME A COMPONENT OF THE REGIONAL PLAN.**
- LU-4.7 AFTER APPROVAL BY LOCAL, STATE, FEDERAL OR TRIBAL GOVERNMENTS, AREA PLANS SHALL BE REVIEWED BY THE TRPA GOVERNING BOARD AT A PUBLIC HEARING. IN ORDER TO TAKE EFFECT, THE TRPA GOVERNING BOARD SHALL MAKE A FINDING THAT THE AREA PLAN, AND ZONING AND DEVELOPMENT CODES WITHIN THE PLAN, ARE CONSISTENT WITH AND FURTHER THE GOALS AND POLICIES OF THE REGIONAL PLAN. THIS FINDING SHALL BE REFERRED TO AS A FINDING OF CONFORMANCE AND SHALL BE SUBJECT TO THE SAME VOTING REQUIREMENTS AS APPROVAL OF A REGIONAL PLAN AMENDMENT.**
- LU-4.8 IN ORDER TO BE FOUND IN CONFORMANCE WITH THE REGIONAL PLAN, ALL**

**AREA PLANS SHALL INCLUDE POLICIES, ORDINANCES AND OTHER IMPLEMENTATION MEASURES TO:**

- 1) Identify zoning designations, allowed land uses and development standards throughout the plan area.
- 2) Be consistent with all applicable Regional Plan policies, including but not limited to the regional growth management system, development allocations and coverage requirements.
- 3) Either be consistent with the Regional Land Use Map or recommend and adopt amendments to the Regional Land Use Map as part of an integrated plan to comply with Regional Plan policies and provide threshold gain.
- 4) Recognize and support planned, new, or enhanced Environmental Improvement Projects. Area Plans may also recommend enhancements to planned, new, or enhanced Environmental Improvement Projects as part of an integrated plan to comply with Regional Plan Policies and provide threshold gain.
- 5) Promote environmentally beneficial redevelopment and revitalization within Centers.
- 6) Preserve the character of established residential areas outside of Centers, while seeking opportunities for environmental improvements within residential areas.
- 7) Protect and direct development away from Stream Environment Zones and other sensitive areas, while seeking opportunities for environmental improvements within sensitive areas. Development may be allowed in disturbed Stream Environment Zones within Centers only if allowed development reduces coverage and enhances natural systems within the Stream Environment Zone.
- 8) Identify facilities and implementation measures to enhance pedestrian, bicycling and transit opportunities along with other opportunities to reduce automobile dependency.

**LU-4.9 IN ORDER TO BE FOUND IN CONFORMANCE WITH THE REGIONAL PLAN, ALL AREA PLANS THAT INCLUDE TOWN CENTERS OR THE REGIONAL CENTER SHALL INCLUDE POLICIES, ORDINANCES AND OTHER IMPLEMENTATION MEASURES TO:**

- 1) Address all requirements of *Policy LU-4.8*.
- 2) Include building and site design standards that reflect the unique character of each area, respond to local design issues and consider ridgeline and viewshed protection.
- 3) Promote walking, bicycling, transit use and shared parking in town centers and the Regional Center, which at a minimum shall include continuous sidewalks or other pedestrian paths and bicycle facilities along both sides of all highways within town centers and the Regional Center, and to other major activity centers.
- 4) Use standards within town centers and the Regional Center addressing the form of development and requiring that projects promote pedestrian activity and transit use.
- 5) Ensure adequate capacity for redevelopment and transfers of development rights into town centers and the Regional Center.
- 6) Identify an integrated community strategy for coverage reduction and

enhanced stormwater management.

- 7) Demonstrate that all development activity within town centers and the Regional Center will provide threshold gain, including but not limited to measurable improvements in water quality.

**LU-4.10 IN ORDER TO BE FOUND IN CONFORMANCE WITH THE REGIONAL PLAN, AREA PLANS THAT INCLUDE THE HIGH DENSITY TOURIST DISTRICT SHALL INCLUDE POLICIES, ORDINANCES AND OTHER IMPLEMENTATION MEASURES TO:**

- 1) Address all requirements of Policies LU-4.8 and LU-4.9.
- 2) Include building and site design standards that substantially enhance the appearance of existing buildings in the High Density Tourist District.
- 3) Provide pedestrian, bicycle and transit facilities connecting the High Density Tourist District with other regional attractions.
- 4) Demonstrate that all development activity within the High Density Tourist District will provide threshold gain, including but not limited to measurable improvements in water quality. If necessary to achieve threshold gain, off-site improvements may be additionally required.

**LU-4.11 LOCAL, STATE, FEDERAL AND TRIBAL GOVERNMENTS MAY ADOPT DEVELOPMENT ORDINANCES THAT SUPERSEDE TRPA ORDINANCES IF THE AREA PLAN AND ASSOCIATED ORDINANCES ARE FOUND IN CONFORMANCE WITH THE REGIONAL PLAN, AND MEET THE INTENT OF TRPA ORDINANCES.**

**LU-4.12 ONCE AN AREA PLAN, AND ZONING AND DEVELOPMENT CODES WITHIN THE PLAN, HAVE BEEN FOUND IN CONFORMANCE WITH THE REGIONAL PLAN, LOCAL, STATE, FEDERAL AND TRIBAL GOVERNMENTS MAY ASSUME DEVELOPMENT REVIEW AUTHORITY BY MEMORANDUM OF UNDERSTANDING WITH TRPA, SUBJECT TO THE FOLLOWING LIMITATIONS:**

- 1) The TRPA Governing Board shall annually review a sample of permits issued within each Area Plan, and shall certify that the Area Plans are being implemented in conformance with the Regional Plan. If the TRPA Governing Board finds that development that has been permitted within an Area Plan does not comply with the Conforming Area Plan, TRPA may retract delegation of certain permitting authority and implement the Conforming Area Plan.
- 2) Where applicable, Area Plans shall be prepared and maintained in coordination with TMDL regulatory agencies and applicable load reduction plans, as specified in the Code of Ordinances.
- 3) Approval of projects within Area Plans shall require TRPA review and approval if the project includes any of the following criteria, except for minor improvements as further specified in the Code of Ordinances:
  - i. All development within the High Density Tourist District;
  - ii. All development within the Shorezone of Lake Tahoe;
  - iii. All development within the Conservation District;
  - iv. All development within the Resort Recreation District;
  - v. All development meeting criteria on the following table:

|                 | Regional Center | Town Center    | Not in Center  |
|-----------------|-----------------|----------------|----------------|
| Residential     | 100,000 sq. ft. | 50,000 sq. ft. | 25,000 sq. ft. |
| Non-Residential | 80,000 sq. ft.  | 40,000 sq. ft. | 12,500 sq. ft. |

- 4) All delegated permitting decisions shall be appealable to TRPA. Appeal procedures are set forth in the Code of Ordinances and are intended to address the following goals:
  - i. Eliminate frivolous appeals and appellants “laying in wait” by encouraging early and consistent engagement.
  - ii. Increase procedural certainty and timeliness irrespective of outcomes.
  - iii. Establish that project-by-project negotiation should not be the Governing Board’s default position.
- 5) All ongoing TRPA development monitoring and reporting requirements are met.
- 6) The limitations on delegation specified in the Table above may be increased or decreased by the TRPA Governing Board. The levels of delegation may be decreased, or increased if the Governing Board finds that lead agencies, based on ongoing monitoring, reporting and performance review, are acting on projects consistent with the Area Plan and that the terms and conditions of the Area Plan are being met. After four years from the adoption of this provision, the Governing Board shall consider increasing the levels of delegation.

**LU-4.13 TRPA SHALL TAKE AN ACTIVE ROLE IN ASSISTING WITH THE DEVELOPMENT OF CONFORMING AREA PLANS TO HELP ENSURE THAT AREA PLANS ARE IN CONFORMANCE WITH TRPA REQUIREMENTS. LOCAL, STATE, FEDERAL AND TRIBAL GOVERNMENTS SHALL ALSO SEEK REVIEW AND COMMENT FROM ALL PUBLIC AGENCIES WITH JURISDICTIONAL AUTHORITY AT APPROPRIATE POINTS IN THE PLANNING PROCESS TO ENSURE THAT REQUIREMENTS OF OTHER PUBLIC AGENCIES ARE ADDRESSED. THIS POLICY IS INTENDED TO ENSURE THAT EACH AREA PLAN, AND ZONING AND DEVELOPMENT CODES WITHIN THE PLAN, WHEN PRESENTED TO TRPA FOR CONFORMANCE REVIEW AND APPROVAL, WILL HAVE ADDRESSED THE NEEDS AND CONCERNS OF THE COMMUNITY AND WILL BE CONSISTENT WITH ALL APPLICABLE LOCAL, STATE, AND REGIONAL PLAN REQUIREMENTS.**

## **GOAL LU-5**

### **COORDINATE THE REGULATION OF LAND USES WITHIN THE REGION WITH THE LAND USES SURROUNDING THE REGION.**

To minimize the impacts on one another, the Tahoe Region and its surrounding communities should attempt to coordinate land use planning decisions. This goal is especially pertinent with respect to major land use decisions immediately adjacent to the Region which may have significant impacts on the Region and affect the ability of TRPA to attain environmental thresholds.

#### **POLICIES:**

**LU-5.1 THE REGIONAL PLAN SHALL ATTEMPT TO MITIGATE ADVERSE IMPACTS GENERATED BY THE PLAN WITHIN THE REGION, AND NOT EXPORT THE IMPACTS TO SURROUNDING AREAS.**

Where project approvals or other proposed actions by TRPA would adversely impact surrounding areas, TRPA shall consult with the affected jurisdictions. While the Agency will attempt to ensure that adverse impacts are mitigated within the Region, there may be situations where the adverse impacts on surrounding areas are outweighed by the environmental harm that would result from absorbing all impacts within the Region. In that regard, state laws in California and Nevada require the export of virtually all waste-waters and solid wastes from the Region.

**LU-5.2 WHERE NECESSARY FOR THE REALIZATION OF THE REGIONAL PLAN, THE AGENCY MAY ENGAGE IN COLLABORATIVE PLANNING WITH LOCAL GOVERNMENTAL JURISDICTIONS LOCATED OUTSIDE THE REGION, BUT CONTIGUOUS TO ITS BOUNDARIES. THE TRPA GOVERNING BOARD SHALL INITIATE ALL COLLABORATIVE PLANNING EFFORTS THAT ARE AUTHORIZED BY THIS POLICY.**

## HOUSING

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**T**he purpose of this Subelement is to assess the housing needs of the Region and to make provisions for adequate housing. The Bi-State Compact does not specifically mandate this Subelement nor do the environmental thresholds address this topic. However, the states of Nevada and California both require housing to be addressed as part of a General Plan. It is the intent of this Subelement to address housing issues on a regional basis with Area Plans handling the specifics of implementation.

### **GOAL HS-1**

**PROMOTE HOUSING OPPORTUNITIES FOR FULL-TIME AND SEASONAL RESIDENTS AS WELL AS WORKERS EMPLOYED WITHIN THE REGION.**

#### **POLICIES:**

- HS-1.1 SPECIAL INCENTIVES, SUCH AS BONUS DEVELOPMENT UNITS, WILL BE GIVEN TO PROMOTE AFFORDABLE OR GOVERNMENT-ASSISTED HOUSING FOR LOWER INCOME HOUSEHOLDS (80 PERCENT OF RESPECTIVE COUNTY'S MEDIAN INCOME) AND FOR VERY LOW INCOME HOUSEHOLDS (50 PERCENT OF RESPECTIVE COUNTY'S MEDIAN INCOME). EACH COUNTY'S MEDIAN INCOME WILL BE DETERMINED ACCORDING TO THE INCOME LIMITS PUBLISHED ANNUALLY BY THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.**
- HS-1.2 LOCAL GOVERNMENTS WILL BE ENCOURAGED TO ASSUME THEIR "FAIR SHARE" OF THE RESPONSIBILITY TO PROVIDE LOWER AND VERY LOW INCOME HOUSING.**
- HS-1.3 FACILITIES SHALL BE DESIGNED AND OCCUPIED IN ACCORDANCE WITH LOCAL, REGIONAL, STATE, AND FEDERAL STANDARDS FOR THE ASSISTANCE OF HOUSEHOLDS WITH LOW AND VERY LOW INCOMES. SUCH HOUSING UNITS SHALL BE MADE AVAILABLE FOR RENTAL OR SALE AT A COST TO SUCH PERSONS THAT WOULD NOT EXCEED THE RECOMMENDED STATE AND FEDERAL STANDARDS.**
- HS-1.4 AFFORDABLE OR GOVERNMENT ASSISTED HOUSING FOR LOWER INCOME HOUSEHOLDS SHOULD BE LOCATED IN CLOSE PROXIMITY TO EMPLOYMENT CENTERS, GOVERNMENT SERVICES, AND TRANSIT FACILITIES. SUCH HOUSING MUST BE COMPATIBLE WITH THE SCALE AND DENSITY OF THE SURROUNDING NEIGHBORHOOD.**

### **GOAL HS-2**

**TO THE EXTENT FEASIBLE, WITHOUT COMPROMISING THE GROWTH MANAGEMENT PROVISIONS OF THE REGIONAL PLAN, THE ATTAINMENT OF THRESHOLD GOALS, AND AFFORDABLE HOUSING INCENTIVE PROGRAMS, MODERATE INCOME HOUSING WILL BE ENCOURAGED IN SUITABLE LOCATIONS FOR THE RESIDENTS OF THE REGION.**

**POLICIES:**

- HS-2.1** SPECIAL INCENTIVES, SUCH AS BONUS DEVELOPMENT UNITS, WILL BE MADE AVAILABLE TO PROMOTE HOUSING FOR MODERATE INCOME HOUSEHOLDS (120 PERCENT OF RESPECTIVE COUNTY'S MEDIAN INCOME). SUCH INCENTIVES SHALL BE MADE AVAILABLE WITHIN JURISDICTIONS THAT DEVELOP HOUSING PROGRAMS THAT ARE SUBSTANTIALLY CONSISTENT WITH AND COMPLEMENTARY TO THE REGIONAL PLAN.
- HS-2.2** RESIDENTIAL UNITS DEVELOPED USING MODERATE INCOME HOUSING INCENTIVES SHALL BE USED TO PROVIDE HOUSING FOR FULL-TIME RESIDENTS OF THE TAHOE REGION. SUCH UNITS SHALL NOT BE USED FOR VACATION RENTAL PURPOSES.
- HS-2.3** RESIDENTIAL UNITS DEVELOPED USING MODERATE INCOME HOUSING INCENTIVES SHALL REMAIN PERMANENTLY WITHIN THE PROGRAM.

**GOAL HS-3**

**REGULARLY EVALUATE HOUSING NEEDS IN THE REGION AND UPDATE POLICIES AND ORDINANCES IF NECESSARY TO ACHIEVE STATE, LOCAL AND REGIONAL HOUSING GOALS.**

**POLICIES:**

- HS-3.1** TRPA SHALL REGULARLY REVIEW ITS POLICIES AND REGULATIONS TO REMOVE IDENTIFIED BARRIERS PREVENTING THE CONSTRUCTION OF NECESSARY AFFORDABLE HOUSING IN THE REGION. TRPA STAFF WILL WORK WITH LOCAL JURISDICTIONS TO ADDRESS ISSUES INCLUDING, BUT NOT LIMITED TO, WORKFORCE AND MODERATE INCOME HOUSING, SECONDARY RESIDENTIAL UNITS AND LONG TERM RESIDENCY IN MOTEL UNITS IN ACCORDANCE WITH THE TIMELINE OUTLINED IN THE IMPLEMENTATION ELEMENT.



## COMMUNITY DESIGN

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**T**he purpose of this Subelement is to implement the TRPA regional design criteria as they apply to the built environment. The Governing Board policy applicable to community design is derived from environmental threshold carrying capacities for scenic resources:

### **POLICY STATEMENT**

**It shall be the policy of the TRPA Governing Board in development of the Regional Plan, in cooperation with local jurisdictions, to ensure 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.**

This Subelement sets forth policies for new developments or existing developments in need of remodeling or redevelopment. Some aspects of development can be brought to total conformance within a certain period of time, such as a five-year program to bring all signs into conformance with adopted standards. Others may require more time or extensive redevelopment or rehabilitation to correct past deficiencies.

### **GOAL CD-1**

**ENSURE PRESERVATION AND ENHANCEMENT OF THE NATURAL FEATURES AND QUALITIES OF THE REGION, PROVIDE PUBLIC ACCESS TO SCENIC VIEWS, AND ENHANCE THE QUALITY OF THE BUILT ENVIRONMENT.**

#### **POLICIES:**

**CD-1.1 THE SCENIC QUALITY RATINGS ESTABLISHED BY THE ENVIRONMENTAL THRESHOLDS SHALL BE MAINTAINED OR IMPROVED.**

Implementation of regional design review requirements will be required to ensure compliance with this policy.

**CD-1.2 RESTORATION PROGRAMS BASED ON INCENTIVES WILL BE IMPLEMENTED IN THOSE AREAS DESIGNATED IN NEED OF SCENIC RESTORATION TO ACHIEVE THE RECOMMENDED RATING.**

### **GOAL CD-2**

**REGIONAL BUILDING AND COMMUNITY DESIGN CRITERIA SHALL BE ESTABLISHED TO ENSURE ATTAINMENT OF THE SCENIC THRESHOLDS, MAINTENANCE OF DESIRED COMMUNITY CHARACTER, COMPATIBILITY OF LAND USES, AND COORDINATED PROJECT REVIEW.**

The intent of the criteria is that they be regional in nature yet specific enough to ensure that the Agency meets the mandate of specific thresholds and other policy requirements of this plan as they relate to site planning. The concept is that a design review document is the focal point for implementing many other plan policies relating to transportation, noise, water quality, air quality, scenic and aesthetic considerations, etc.

## **POLICIES:**

### **CD-2.1 TO BE FOUND IN CONFORMANCE WITH THE REGIONAL PLAN, AREA PLANS SHALL REQUIRE THAT ALL PROJECTS COMPLY WITH THE FOLLOWING DESIGN REQUIREMENTS. AREA PLANS MAY ALSO INCLUDE ADDITIONAL OR SUBSTITUTE REQUIREMENTS NOT LISTED BELOW THAT PROMOTE THRESHOLD ATTAINMENT.**

- A. Community Design: Area Plans that include the Regional Center or town centers shall address the following design standards:
  - i. Existing or planned pedestrian and bicycle facilities shall connect properties within Centers to transit stops and the Regional Bicycle and Pedestrian network.
  - ii. Area Plans shall encourage the protection of views of Lake Tahoe.
  - iii. Within town centers and the Regional Center, building height and density should be varied with some buildings smaller and less dense than others.
  - iv. Site and building designs within Centers shall promote pedestrian activity and provide enhanced design features along public roadways. Enhanced design features to be considered include increased setbacks, stepped heights, increased building articulation, and/or higher quality building materials along public roadways.
  - v. Area Plans shall include strategies for protecting undisturbed sensitive lands and, where feasible, establish park or open space corridors connecting undisturbed sensitive areas within Centers to undisturbed areas outside of Centers.
- B. Site Design: All new development shall consider site design which includes, at a minimum:
  - i. Existing natural features to be retained and incorporated into the site design.
  - ii. Building placement and design to be compatible with adjacent properties and consideration of solar exposure, climate, noise, safety, fire protection, and privacy.
  - iii. Site planning to include a drainage, infiltration, and grading plan meeting water quality standards.
  - iv. Access, parking, and circulation to be logical, safe, and meet the requirements of the transportation element.

- C. Building Design: Standards shall be adopted to ensure attractive and compatible development. The following shall be considered:
- i. Outside town centers, building height shall be limited to two stories (24 - 42 feet). Within town centers, building height may be allowed up to four stories (56 feet) as part of an Area Plan that has been found in conformance with the Regional Plan. Within regional centers, building height may be allowed up to six stories (95 feet) as part of a Conforming Area Plan. Within the High Density Tourist District, the height of casino hotel buildings existing as of 2012 that are at least eight stories or 85 feet high may be increased up to 197 feet as part of a Conforming Area Plan. Subject to TRPA approval pursuant to TRPA Code of Ordinances or a Conforming Area Plan, provisions for additional height requirements may be provided for unique situations such as lighting towers, ski towers, buildings within Ski Area Master Plans, steep sites, and essential public safety facilities.
  - ii. Building height limits shall be established to ensure that buildings do not project above the forest canopy, ridge lines, or otherwise detract from the viewshed.
  - iii. Buffer requirements should be established for noise, snow removal, aesthetic, and environmental purposes.
  - iv. The scale of structures should be compatible with existing and planned Land Uses in the area.
  - v. Viewshed should be considered in all new construction. Emphasis should be placed on lake views from major transportation corridors.
  - vi. Area Plans that allow buildings over two stories in height shall where feasible include provisions for transitional height limits or other buffer areas adjacent to areas not allowing buildings over two stories in height.
  - vii. Area Plans shall include design standards for building design and form. Within Centers, building design and form standards shall promote pedestrian activity.
- D. Landscaping: The following should be considered with respect to this design component of a project:
- i. Native vegetation should be utilized whenever possible, consistent with fire defensible space requirements.
  - ii. Vegetation should be used to screen parking, alleviate long strips of parking space and accommodate stormwater runoff where feasible.
  - iii. Vegetation should be used to give privacy, reduce glare and heat, deflect wind, muffle noise, prevent erosion, and soften the line of architecture where feasible.
- E. Lighting: Lighting increases the operational efficiency of a site. In determining the lighting for a project, the following should be required:
- i. Exterior lighting should be minimized to protect dark sky views, yet adequate to provide for public safety and should be consistent with the architectural design.

- ii. Exterior lighting should utilize cutoff shields that extend below the lighting element to minimize light pollution and stray light.
  - iii. Overall levels should be compatible with the neighborhood light level. Emphasis should be placed on a few, well placed, low intensity lights.
  - iv. Lights should not blink, flash, or change intensity except for temporary public safety signs.
- F. Signing: Area Plans may include alternative sign standards. For Area Plans to be found in conformance with the Regional Plan, the Area Plan must demonstrate that the sign standards will minimize and mitigate significant scenic impacts and move toward attainment or achieve the adopted scenic thresholds for the Lake Tahoe Region.

In the absence of a Conforming Area Plan that addresses sign standards, the following policies apply, along with implementing ordinances:

- i. Off premise signs should generally be prohibited; way-finding and directional signage may be considered where scenic impacts are minimized and mitigated.
  - ii. Signs should be incorporated into building design
  - iii. When possible, signs should be consolidated into clusters to avoid clutter
  - iv. Signage should be attached to buildings when possible
  - v. Standards for number, size, height, lighting, square footage, and similar characteristics for on premise signs shall be formulated and shall be consistent with the land uses permitted in each district.
- G. Center Boundaries: Area Plans may propose modifications to the boundaries of a Center, if the modification complies with the following:
- i. Boundaries of Centers shall be drawn to include only properties that are developed, unless undeveloped parcels proposed for inclusion have either at least three sides of their boundary adjacent to developed parcels (for four-sided parcels), or 75 percent of their boundary adjacent to developed parcels (for non-four-sided parcels). For purposes of this requirement, a parcel is considered developed if it includes 30 percent or more of allowed coverage already existing on site or an approved but un-built project meeting this coverage requirement.
  - ii. Properties included in a Center shall be less than 1/4 mile from existing Commercial and Public Service uses.
  - iii. Properties included in a Center shall encourage and facilitate the use of existing or planned transit stops and transit systems.

## NOISE

High noise levels can reduce the public's enjoyment of the natural environment, impact quality of life for residents, and disturb native wildlife. The TRPA Bi-State Compact recognizes noise as an environmental threshold and requires that TRPA establish carrying capacity standards for noise. The Noise Subelement establishes Goals and Policies to achieve and maintain TRPA's noise thresholds.

| CUMULATIVE NOISE EVENTS   |                 |
|---|-----------------|
| POLICY STATEMENT: It shall be a policy of the TRPA Governing Board in the development of the Regional Plan to define, locate, and establish CNEL levels for transportation corridors.   |                 |
| TRANSPORTATION CORRIDORS <sup>1</sup>   |                 |
| Highway 50  | 65 <sup>2</sup> |
| Highways 89, 207, 28, 267 and 431   | 55 <sup>2</sup> |
| South Lake Tahoe Airport  | 60 <sup>3</sup> |
| <ol style="list-style-type: none"><li>1. Recommended CNEL levels for transportation corridors.</li><li>2. This recommended threshold overrides the land use CNEL thresholds and is limited to an area within 300 feet from the edge of the road.</li><li>3. This recommended threshold applies to those areas impacted by the approved flight paths</li></ol> |                 |

### GOAL N-1

#### SINGLE EVENT NOISE STANDARDS SHALL BE ATTAINED AND MAINTAINED.

People can be annoyed by a specific noise source. Thresholds have been adopted that apply to aircraft, boats, motor vehicles, off-road vehicles, and snowmobiles to reduce impacts associated with single noise events.

#### POLICIES:

**N-1.1 UNLESS SUPERSEDED BY AN UPDATE TO THE 1986 AIRPORT MASTER PLAN, AN ORDINANCE AND ENFORCEMENT PROGRAM SHALL PERMIT ONLY AIRCRAFT THAT MEET THE SINGLE EVENT NOISE THRESHOLDS TO USE THE AIRPORT.**

The Airport Master Plan shall provide for implementation and enforcement of the single event noise thresholds for aircraft. TRPA and the City of South Lake Tahoe (owner/operator of the airport) will continue to analyze the airport's environmental impacts, the best available aircraft technologies, and the needs of the community to develop plans for threshold attainment with regard to airport operations.

**N-1.2 BOATS WILL ONLY BE ALLOWED ON LAKE TAHOE IF IN COMPLIANCE WITH THE SINGLE-EVENT THRESHOLD.**

Implementation of the single-event threshold for boats shall be shared by the public and private sectors. TRPA shall prepare a model ordinance, and encourage local government and the U. S. Coast Guard to adopt and enforce the model ordinance. TRPA shall also encourage marinas and other boat launching facilities to participate in implementation of the single-event threshold standard.

**N-1.3 MOTOR VEHICLES AND MOTORCYCLES SHALL COMPLY WITH THE APPROPRIATE NOISE THRESHOLDS.**

The local and state law enforcement agencies should not allow motor vehicles and motorcycles to use the streets and highways in the Region if they exceed the single-event thresholds for noise.

**N-1.4 OFF-ROAD VEHICLE USE IS PROHIBITED IN THE LAKE TAHOE REGION EXCEPT ON SPECIFIED ROADS, TRAILS, OR DESIGNATED AREAS WHERE THE IMPACTS CAN BE MITIGATED.**

Reduce noise impacts of off-road vehicles, as well as impacts on wildlife, vegetation and water quality by allowing their use only in designated areas.

**N-1.5 THE USE OF SNOWMOBILES WILL BE RESTRICTED TO DESIGNATED AREAS.**

Snowmobile use should be restricted to specified areas where potential conflicts with other winter outdoor activities and wildlife can be minimized. Exceptions will be allowed pursuant to Policy N-1.4, above.

**N-1.6 PERMIT USES ONLY IF THEY ARE CONSISTENT WITH THE NOISE STANDARDS. NOISE MITIGATION MEASURES MAY BE REQUIRED ON ALL STRUCTURES CONTAINING USES THAT WOULD OTHERWISE ADVERSELY IMPACT THE PRESCRIBED NOISE LEVELS.**

Ordinances shall be adopted to allow the Agency or local governments to review and resolve any existing and future problems of nuisances associated with a specific source of noise. The ordinances shall allow the Agency or local governments to require that the impacts be mitigated either through voluntary compliance or through conditions of project approval.

## **GOAL N-2**

### **COMMUNITY NOISE EQUIVALENT LEVELS SHALL BE ATTAINED AND MAINTAINED.**

CNEL thresholds were adopted to reduce the annoyance associated with cumulative noise events on people and wildlife. In the Region, the main sources of noise are attributed to the major transportation corridors and the airport. Therefore, these policies are directed towards reducing the transmission of noise from those sources. The CNEL thresholds will be attained upon implementation of the following policies.

#### **POLICIES:**

**N-2.1 TRANSMISSION OF NOISE FROM THE TRANSPORTATION CORRIDORS SHALL BE REDUCED.**

The noise associated with the transportation corridors can be decreased by reducing the number of trips and by installing mitigation measures. Trip reduction will be accomplished by the transit improvements identified in the Transportation Element. Ordinances will establish specific site design criteria for projects to help reduce the transmission of noise from the transportation corridors. The design criteria will also be incorporated into the water quality and transportation improvement programs. The mitigation measures may include setbacks, earth berms, and barriers.

**N-2.2 NOISE-RELATED IMPACTS ASSOCIATED WITH THE AIRPORT SHOULD BE AT AN ACCEPTABLE LEVEL.**

The Airport Master Plan should include specific recommendations necessary to attain the environmental thresholds. The Master Plan should also include implementation provisions for attaining the noise thresholds.

**N-2.3 IN CONSULTATION AND COORDINATION WITH FEDERAL LAND MANAGEMENT AGENCIES, TRPA WILL FURTHER DEFINE CNELs FOR WILDERNESS AND ROADLESS AREAS AND FOR CRITICAL WILDLIFE HABITAT AREAS.**

The 25 CNEL standard for the above areas needs further evaluation as to location of monitoring and conditions of monitoring. The Agency will further evaluate the proper application of the standard.

# NATURAL HAZARDS

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**N**atural hazards result from naturally occurring events that can be hazardous to public health and safety. In the Lake Tahoe Region, natural hazards are most frequently related to the dangers of avalanches, wildfires, flooding, earthquakes and seiches.

## GOAL NH-1

### **RISKS FROM NATURAL HAZARDS (E.G., FLOOD, FIRE, AVALANCHE, EARTHQUAKE, SEICHE) WILL BE MINIMIZED.**

Land uses within the Tahoe Region should be planned with recognition of natural hazards so as to help prevent damage to property and to protect public health. Natural hazard areas or situations can be identified and precautionary measures taken to minimize impacts.

#### **POLICIES:**

##### **NH-1.1 DEVELOPMENT SHALL BE REGULATED IN IDENTIFIED AVALANCHE OR MASS INSTABILITY HAZARD AREAS.**

In the areas with identified avalanche or mass instability danger (*Natural Hazards of the Lake Tahoe Basin, 1978* or by other studies accepted by TRPA), the type of uses or activities can be designed or regulated to protect the public during hazard periods. Construction, reconstruction or replacement of structures in identified avalanche or mass instability hazard areas shall be restricted unless precautionary measures can be implemented to ensure protection of public health and safety.

##### **NH-1.2 PROHIBIT ADDITIONAL DEVELOPMENT, GRADING, AND FILLING OF LANDS WITHIN THE 100-YEAR FLOOD PLAIN AND IN THE AREA OF WAVE RUN-UP EXCEPT FOR PUBLIC RECREATION FACILITIES, PUBLIC SERVICE FACILITIES, NECESSARY CROSSINGS, RESTORATION FACILITIES, AND AS OTHERWISE NECESSARY TO IMPLEMENT THE GOALS AND POLICIES OF THE PLAN. REQUIRE ALL FACILITIES LOCATED IN THE 100-YEAR FLOOD PLAIN AND AREA OF WAVE RUN-UP TO BE CONSTRUCTED AND MAINTAINED TO MINIMIZE IMPACTS ON THE FLOOD PLAIN.**

The Tahoe Region is often subject to rain or storm events which cause extreme fluctuations in stream flows or wave run-up which can result in flooding and damage to property. Grading, filling, and structural development within the flood plain causes alteration of the stream flow and may accentuate downstream flooding.

##### **NH-1.3 INFORM RESIDENTS AND VISITORS OF THE WILDFIRE HAZARD ASSOCIATED WITH OCCUPANCY IN THE REGION. ENCOURAGE USE OF FIRE RESISTANT MATERIALS AND FIRE PREVENTATIVE TECHNIQUES WHEN CONSTRUCTING STRUCTURES, ESPECIALLY IN THE HIGHEST FIRE HAZARD AREAS. MANAGE FOREST FUELS TO BE CONSISTENT WITH STATE LAWS AND OTHER GOALS AND POLICIES OF THIS PLAN.**

Most wildfires in the Lake Tahoe Region are human-caused. The decadent and monoculture vegetation on steep slopes is highly susceptible to wildfires. Serious environmental damage, property damage and impacts to public health can result from wildfires. Public awareness and education can help to decrease



the risk of human-caused wildfires. Programs involving the manipulation of vegetation can also reduce fire hazards. The potential for damage to structures can be minimized with various construction techniques and installation of fire resistant materials. The Agency, in cooperation with fire protection agencies, will set forth criteria describing areas of high hazard and will also propose fire prevention techniques and measures.

**NH-1.4 TRPA WILL ENCOURAGE PUBLIC SAFETY AGENCIES TO PREPARE DISASTER PLANS.**

The Agency will encourage police and fire departments and other agencies to prepare contingency plans for major disasters such as described in this Subelement.

## AIR QUALITY

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Poor air quality poses a risk to human health and reduces the public's enjoyment of the natural environment. Air pollution also degrades ecosystem integrity and impairs water quality. Maintaining and improving air quality will protect the quality of life for residents and visitors, maintain the Region's tourism economy, and attain multiple thresholds.

The TRPA Bi-State Compact recognizes air as a natural resource and requires that TRPA establish environmental threshold carrying capacity standards for air quality. The Bi-State Compact directs TRPA to develop a land use plan that considers air resources, as well as a transportation plan that reduces air pollution from motor vehicles. TRPA is also required to attain federal, state, and local air quality standards for the portions of the Region in which they apply. The Air Quality Subelement, along with the Transportation Element, establishes Goals and Policies to achieve and maintain TRPA's air quality thresholds and all applicable federal, state, and local standards for air quality.

### GOAL AQ-1

**ATTAIN AND MAINTAIN AIR QUALITY IN THE REGION AT LEVELS THAT ARE HEALTHY FOR HUMANS AND THE ECOSYSTEM, ACHIEVE AND MAINTAIN ENVIRONMENTAL THRESHOLDS AND DO NOT INTERFERE WITH RESIDENTS' AND VISITORS' VISUAL EXPERIENCE.**

It is intended that implementation of the control measures contained in the Air Quality Subelement and other TRPA programs will lead to attainment of the TRPA threshold standards and will also lead to attainment and maintenance of federal and state air quality standards.

### POLICIES:

**AQ-1.1 COORDINATE WITH OTHER AGENCIES AND JURISDICTIONS TO REDUCE EMISSIONS, EXPOSURES, AND HEALTH AND ENVIRONMENTAL RISKS WHEN DEVELOPING AND IMPLEMENTING PROGRAMS, PLANS, AND PROJECTS.**

The Regional Plan will facilitate cooperative efforts that efficiently attain and maintain air quality threshold standards, and federal and state air quality standards, while at the same time achieving other threshold standards.

**AQ-1.2 REDUCE OR LIMIT SOURCES OF POLLUTANTS THAT DEGRADE VISIBILITY.**

Some air pollutants, such as fugitive dust and wood smoke, degrade visibility as well as harm human or ecosystem health. The Regional Plan will control those pollutants to minimize their impact on visibility, as well as their impact on human or ecosystem health.

**AQ-1.3 ENCOURAGE THE REDUCTION OF EMISSIONS FROM MOTOR VEHICLES AND OTHER MOTORIZED MACHINERY IN THE REGION.**

Significant emissions of air pollutants including greenhouse gases (GHGs) and entrained dust are produced by automobiles, motor vehicles and other gas

powered machinery in the Region. The Land Use Subelement and the Transportation Element contain Goals and Policies to reduce the amount of air pollution generated from motor vehicles in the Region. Additionally, TRPA shall pursue other feasible and cost effective opportunities to reduce emissions from motor vehicles and other gas powered machinery in the Region.

**AQ-1.4 ENCOURAGE THE REDUCTION OF EMISSIONS FROM GAS APPLIANCES.**

Additional emissions of air pollutants are produced by building appliances. TRPA shall seek feasible and cost effective opportunities to reduce emissions from gas appliances in the Region.

**AQ-1.5 ENCOURAGE THE REDUCTION OF EMISSIONS THROUGH BUILDING EFFICIENCY.**

Construction of energy efficient buildings, replacement of energy inefficient buildings, and improvements to the efficiency of existing buildings can significantly reduce air pollutant emissions in the Region. TRPA shall seek feasible opportunities to promote energy efficient buildings in the Region.

**AQ-1.6 REDUCE EMISSIONS FROM WOOD BURNING STOVES IN THE REGION, AND REQUIRE WOOD STOVES TO COMPLY WITH CURRENT EPA EMISSIONS STANDARDS WITH A TARGET COMPLIANCE DATE OF 2020.**

Older, less efficient wood burning appliances emit more air pollutants than newer, more efficient appliances. A faster rate of replacement of old inefficient wood burning appliances with newer cleaner burning technology will benefit attainment of the air quality threshold standards.

**AQ-1.7 PROMOTE THE REDUCTION OF AIR QUALITY IMPACTS FROM CONSTRUCTION AND PROPERTY MAINTENANCE ACTIVITIES IN THE REGION.**

**AQ-1.8 PROMOTE TECHNOLOGIES THAT REDUCE THE AIR QUALITY IMPACTS OF PRESCRIBED BURNING, OR NON-BURNING METHODS OF REDUCING HAZARDOUS FOREST FUELS, WHERE PRACTICAL.**

**GOAL AQ-2**

**MAINTAIN AN EFFECTIVE AIR QUALITY MITIGATION PROGRAM FOR THE REGION.**

Administer a program that effectively mitigates significant air quality impacts resulting from new projects or changes in use. Under the mitigation program, impact fees and mitigation measures are among the strategies to address significant impacts.

**POLICIES:**

- AQ-2.1 IN ADDITION TO OTHER POLICIES AND REGULATIONS INTENDED TO MINIMIZE AIR QUALITY IMPACTS OF DEVELOPMENT, COLLECT AND EXPEND AIR QUALITY MITIGATION FEES TO OFFSET AIR POLLUTION IN COORDINATION WITH THE ENVIRONMENTAL IMPROVEMENT PROGRAM (EIP). A PORTION OF MITIGATION FUNDS SHALL BE EXPENDED IN THE LOCAL JURISDICTION WHERE THE FUNDS ARE GENERATED AND A PORTION OF THE FUNDS MAY BE USED ON THE MOST COST EFFECTIVE AND ENVIRONMENTALLY BENEFICIAL PROJECTS IN THE REGION.**

## WATER QUALITY

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**T**hresholds for water quality shall be achieved and maintained through a coordinated federal, state, regional, local and private effort to retrofit existing infrastructure, redevelop poorly designed development sites, and restore degraded natural processes to minimize the impacts of all activities in the Region. The goals and policies are generally grouped to address this coordinated effort, point sources and non-point sources of pollution.

The Lake Tahoe Total Daily Maximum Load (TMDL) identifies loads of fine sediment particles, nitrogen, and phosphorus discharging to Lake Tahoe from urban uplands runoff, atmospheric deposition, forested upland runoff, and stream channel erosion as the primary sources of pollution impairing Lake Tahoe's deep water transparency and clarity. These pollutants of concern may also affect Lake Tahoe's nearshore water quality, which is an equal priority for protection given the exceptional scenic quality and significant recreational and ecological values it provides.

The Regional Plan supports pollutant load reductions from each source category in the following ways:

### **Atmospheric Deposition**

Land Use and Transportation policies support the reduction of nitrogen emissions and fine sediment particles and phosphorus that are entrained as road dust through encouraging walkable mixed-use centers and a connected bicycle and pedestrian network, which reduce automobile dependency. Furthermore, policies seek to control emissions from residential wood smoke and target other stationary dust sources by requiring application and maintenance of temporary and permanent Best Management Practices (BMPs).

### **Forested Uplands**

Sources of fine sediment particles from Forest Uplands include disturbed forest lands, unpaved roads and trails, and paved or impervious surfaces. Water Quality and Vegetation policies target reducing fine sediment particles from these sources by requiring application and maintenance of temporary and permanent Best Management Practices (BMPs) and by promoting restoration of disturbed lands.

### **Stream Channel Erosion**

Vegetation policies promote protection, maintenance, and restoration of riparian plant communities and Water Quality policies promote infiltration within naturally functioning floodplains. Soils and Stream Environment Zone policies emphasize reestablishment of natural fluvial processes, limit coverage in sensitive areas, and protect, maintain and restore Stream Environment Zones.

### **Urban Uplands**

Water Quality policies support the Lake Tahoe Total Daily Maximum Load, reduce or eliminate point and non-point sources of pollutants and allow area-wide water quality treatment as an alternative when it can be shown to achieve equal or greater water quality improvements. Land Use and Soils policies incentivize the removal and transfer of coverage in sensitive areas and Vegetation policies promote the use of native and nutrient efficient vegetation in urban areas.

## **GOAL WQ-1**

**FEDERAL, STATE, REGIONAL, LOCAL AND PRIVATE WATER QUALITY MANAGEMENT PROGRAMS SHOULD BE IMPLEMENTED IN A COORDINATED MANNER TO RESTORE AND MAINTAIN LAKE TAHOE'S UNIQUE TRANSPARENCY, COLOR AND CLARITY IN ACCORDANCE WITH ENVIRONMENTAL THRESHOLD CARRYING CAPACITY STANDARDS.**

### **POLICIES:**

- WQ-1.1    ACHIEVE AND MAINTAIN WATER QUALITY THRESHOLDS THROUGH COMPREHENSIVE REGIONAL PLANNING AND THROUGH COORDINATION WITH OTHER PUBLIC AGENCIES AND THE PRIVATE SECTOR.**
- WQ-1.2    COORDINATE A MULTI-AGENCY EFFORT TO PRIORITIZE AND FUND WATER QUALITY IMPROVEMENT PROJECTS IN THE LAKE TAHOE REGION THROUGH THE ENVIRONMENTAL IMPROVEMENT PROGRAM (EIP).**
- WQ-1.3    REQUIRE THAT DEVELOPMENT AND OTHER ACTIVITIES IN THE LAKE TAHOE REGION MITIGATE ANTICIPATED WATER QUALITY IMPACTS.**
- WQ-1.4    SUPPORT AND SEEK TO EXPEDITE ACTIVITIES TO REDEVELOP NON-CONFORMING PROPERTIES IN A MANNER THAT IMPROVES WATER QUALITY AND TO RELOCATE OR RETIRE DEVELOPMENT RIGHTS ON SENSITIVE LANDS.**
- WQ-1.5    SUPPORT THE LAKE TAHOE TOTAL MAXIMUM DAILY LOAD (TMDL) PROGRAMS IN CALIFORNIA AND NEVADA AND THE TMDL POLLUTANT/STORMWATER LOAD REDUCTION PLANS FOR EACH LOCAL GOVERNMENT IN THE REGION.**
- WQ-1.6    SUPPORT FEDERAL, STATE, LOCAL AND PRIVATE WATER QUALITY IMPROVEMENT PROGRAMS THAT IMPROVE WATER QUALITY IN THE REGION.**
- WQ-1.7    COORDINATE WITH PUBLIC AND PRIVATE ENTITIES TO MAXIMIZE THE EFFICIENCY AND EFFECTIVENESS OF WATER QUALITY PROGRAMS.**

## **GOAL WQ-2**

**REDUCE OR ELIMINATE POINT SOURCES OF POLLUTANTS WHICH AFFECT, OR POTENTIALLY AFFECT, WATER QUALITY IN THE TAHOE REGION.**

## **POLICIES:**

- WQ-2.1 DISCHARGE OF MUNICIPAL OR INDUSTRIAL WASTEWATER TO LAKE TAHOE, ITS TRIBUTARIES, OR THE GROUNDWATERS OF THE TAHOE REGION IS PROHIBITED, EXCEPT FOR EXISTING DEVELOPMENT OPERATING UNDER APPROVED ALTERNATIVE PLANS FOR WASTEWATER DISPOSAL, AND FOR FIRE SUPPRESSION EFFORTS IN ACCORDANCE WITH APPLICABLE STATE LAWS.**

This policy states a fundamental premise of water quality protection at Lake Tahoe; that the Region's surface and groundwater cannot accept municipal or industrial waste waters and meet adopted thresholds and state water quality standards.

- WQ-2.2 DISCHARGES OF SEWAGE TO LAKE TAHOE, ITS TRIBUTARIES, OR THE GROUNDWATERS OF THE LAKE TAHOE REGION ARE PROHIBITED. SEWAGE COLLECTION, CONVEYANCE AND TREATMENT DISTRICTS SHALL HAVE APPROVED SPILL CONTINGENCY, PREVENTION, AND DETECTION PLANS.**

Sewage discharges, regardless of their cause, not only contribute unnecessary nutrient loads to Lake Tahoe, but may also cause public health problems. Accidental discharges may be minimized through proper design, construction, and maintenance practices and comprehensive spill contingency, prevention, and detection plans. All agencies which collect or transport sewage should have plans for detecting and correcting exfiltration problems.

- WQ-2.3 UNDERGROUND STORAGE TANKS FOR SEWAGE, FUEL, OR OTHER POTENTIALLY HARMFUL SUBSTANCES SHALL MEET STANDARDS SET FORTH IN TRPA ORDINANCES, AND SHALL BE INSTALLED, MAINTAINED, AND MONITORED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES HANDBOOK.**

Leaking underground tanks are a nationwide water quality problem. In the Tahoe Region, the environmental impacts of leaking tanks may be especially noticeable and harmful to the environment

- WQ-2.4 NO PERSON SHALL DISCHARGE SOLID WASTES IN THE LAKE TAHOE REGION BY DEPOSITING THEM ON OR IN THE LAND, EXCEPT AS PROVIDED BY TRPA ORDINANCE.**

Landfilling or other practices for disposing of solid wastes can add harmful biological oxygen demand, nutrients, and toxic substances to the watershed of Lake Tahoe. Therefore, the control of solid waste disposal is necessary to protect and enhance water quality. Existing state policies and laws will continue to govern solid waste disposal in the Tahoe Region.

- WQ-2.5 TRPA SHALL COOPERATE WITH OTHER AGENCIES WITH JURISDICTION IN THE LAKE TAHOE REGION IN THE PREPARATION, EVALUATION, AND IMPLEMENTATION OF TOXIC AND HAZARDOUS SPILL CONTROL PLANS.**

A single spill of a toxic or hazardous material in the Region could reverse progress in attaining water quality goals gained at great local expense and effort. TRPA will cooperate with the U.S. Forest Service, the EPA, and state water quality and health agencies to prevent and control toxic and hazardous spills.

**WQ-2.6 LIQUID OR SOLID WASTES FROM RECREATIONAL VEHICLES AND BOATS SHALL BE DISCHARGED AT APPROVED PUMP-OUT FACILITIES. PUMP-OUT FACILITIES WILL BE PROVIDED BY PUBLIC UTILITY DISTRICTS, MARINAS, CAMPGROUNDS, AND OTHER RELEVANT FACILITIES IN ACCORDANCE WITH STANDARDS SET FORTH IN THE BEST MANAGEMENT PRACTICES HANDBOOK.**

Attempts to control the addition of pollutants to Lake Tahoe and its tributaries should not overlook vehicle and vessel wastes. The present shortage of pump-out facilities contributes to the size of this problem. The Best Management Practices Handbook shall be revised to address pump-out facilities.

**WQ-2.7 REDUCE THE IMPACTS OF MOTORIZED WATERCRAFT ON WATER QUALITY.**

The use of motorized watercraft on lakes within the Region can adversely affect water quality through the discharge of pollutants. TRPA shall implement measures to achieve and maintain TRPA, state, and federal water quality standards.

**GOAL WQ-3**

**REDUCE OR ELIMINATE NON POINT SOURCES OF POLLUTANTS WHICH AFFECT, OR POTENTIALLY AFFECT, WATER QUALITY IN THE TAHOE REGION IN A MANNER CONSISTENT WITH THE LAKE TAHOE TMDL, WHERE APPLICABLE.**

**POLICIES:**

**WQ-3.1 REDUCE LOADS OF SEDIMENT, NITROGEN, AND PHOSPHORUS TO LAKE TAHOE; AND MEET WATER QUALITY THRESHOLDS FOR TRIBUTARY STREAMS, SURFACE RUNOFF, AND GROUNDWATER.**

The quality of the littoral zone is important because these waters are the most vulnerable to aesthetic degradation and most visible to those who enjoy the lake. Data show that water quality tends to be worse in areas adjacent to development and especially in relatively shallow bays and shelves. Tributary, surface runoff, and groundwater quality also display the negative impacts of development of the watershed.

**WQ-3.2 RESTORE AT LEAST 80 PERCENT OF THE DISTURBED LANDS WITHIN THE REGION (FROM THE 1983 BASELINE; EXCLUDING HARD COVERAGE).**

It is the Agency's intent to have at least 80 percent of these lands restored by application and maintenance of Best Management Practices.

**WQ-3.3 UNITS OF LOCAL GOVERNMENT, STATE TRANSPORTATION DEPARTMENTS, U.S. FOREST SERVICE AND OTHER IMPLEMENTING AGENCIES SHALL RESTORE 25 PERCENT OF THE SEZ LANDS (FROM THE 1983 BASELINE) THAT HAVE BEEN DISTURBED, DEVELOPED, OR SUBDIVIDED IN ACCORDANCE WITH THE ENVIRONMENTAL IMPROVEMENT PROGRAM.**

Stream Environment Zones have many beneficial effects on water quality, vegetation, scenic, wildlife and fisheries thresholds. The development of Stream Environment Zones in the Tahoe Region has adversely affected water quality, in many cases permanently. Stream Environment Zone restoration is a cost-



effective policy for improving water quality and other thresholds and is a priority for the Environmental Improvement Program as well as TRPA policies and ordinances.

- WQ-3.4** IN ADDITION TO OTHER POLICIES AND REGULATIONS THAT ARE INTENDED TO MINIMIZE WATER QUALITY IMPACTS OF DEVELOPMENT ON-SITE, MAINTAIN MITIGATION FEE PROGRAMS TO FINANCE ACTIVITIES THAT MITIGATE THE WATER QUALITY IMPACTS OF DEVELOPMENT ACTIVITIES. THE MITIGATION FEE PROGRAMS SHALL REFLECT DIRECT AND INDIRECT WATER QUALITY IMPACTS AND BENEFITS RESULTING FROM DIFFERENT TYPES OF DEVELOPMENT AND REDEVELOPMENT ACTIVITIES, AS WELL AS GEOGRAPHIC DIFFERENCES.
- WQ-3.5** PROMOTE INFILTRATION FACILITIES AND FUNCTIONING FLOOD PLAINS ALONG STREAM CORRIDORS AS A STRATEGY FOR REMOVING INSTREAM LOADS OF SEDIMENT AND NUTRIENTS.
- WQ-3.6** ALL PERSONS ENGAGING IN PUBLIC ROAD MAINTENANCE OR SNOW DISPOSAL OPERATIONS IN THE TAHOE REGION SHALL MAINTAIN ROADS AND DISPOSE OF SNOW TO MINIMIZE THE DISCHARGE OF DEICERS, FINE PARTICULATES AND OTHER CONTAMINANTS TO STREAM ENVIRONMENT ZONES, GROUNDWATER AND SURFACE-WATER IN ACCORDANCE WITH SITE CRITERIA AND MANAGEMENT STANDARDS IN THE BEST MANAGEMENT PRACTICES HANDBOOK.
- WQ-3.7** INSTITUTIONAL USERS OF ROAD TRACTION ABRASIVES AND DEICERS IN THE LAKE TAHOE REGION SHALL KEEP RECORDS SHOWING THE TIME, RATE, LOCATION, AND TYPE OF TRACTION ABRASIVES AND DEICERS APPLICATION. STORAGE OF ROAD SALT SHALL BE IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES HANDBOOK.
- WQ-3.8** OFF ROAD MOTORIZED VEHICLE USE IS PROHIBITED IN THE LAKE TAHOE REGION EXCEPT ON SPECIFIED ROADS, TRAILS, OR DESIGNATED AREAS WHERE THE IMPACTS CAN BE MITIGATED.
- WQ-3.9** RESTRICT APPLICATION OF FERTILIZER WITHIN THE TAHOE REGION TO USES, AREAS, AND PRACTICES IDENTIFIED IN THE CODE OF ORDINANCES AND THE BEST MANAGEMENT PRACTICES HANDBOOK. FERTILIZERS SHALL NOT BE USED IN OR NEAR STREAM AND DRAINAGE CHANNELS, OR IN STREAM ENVIRONMENT ZONES, INCLUDING SETBACKS, AND IN SHOREZONE AREAS EXCEPT FOR MAINTENANCE OF PREEXISTING LANDSCAPING. MAINTENANCE OF PREEXISTING LANDSCAPING SHALL BE MINIMIZED IN STREAM ENVIRONMENT ZONES AND ADJUSTED OR PROHIBITED IF FOUND, THROUGH EVALUATION OF CONTINUING MONITORING RESULTS, TO BE IN VIOLATION OF APPLICABLE WATER QUALITY DISCHARGE AND RECEIVING WATER STANDARDS. ADDITIONALLY, ENCOURAGE THE PHASE OUT THROUGH EDUCATION AND OUTREACH OF THE SALE AND USE OF CHEMICAL FERTILIZER CONTAINING PHOSPHORUS FOR LAWNS IN THE REGION, WITH LIMITED EXCEPTIONS, BY 2017.

Since one of Lake Tahoe's water quality problems is an imbalance in the Lake's nutrients, control of artificial chemical fertilizers (which add nutrients to the Lake) is an essential component of TRPA's water quality policy.

**WQ-3.10 IMPLEMENT LAND USE, TRANSPORTATION AND AIR QUALITY MEASURES AIMED AT REDUCING AIRBORNE NITROGEN EMISSIONS AND ENTRAINED DUST IN THE TAHOE REGION.**

There is evidence that atmospheric sources of nitrogen and entrained dust may be a major contributor of nutrients to Lake Tahoe, and that local emissions of oxides of nitrogen and entrained dust, primarily from automobiles, account for most of these atmospheric inputs. The land use, transportation and air quality measures aimed at reducing emissions of oxides of nitrogen and entrained dust should be carried out to ensure that atmospheric sources do not degrade Lake Tahoe's water quality.

**WQ-3.11 REQUIRE ALL PERSONS WHO OWN LAND AND ALL PUBLIC AGENCIES WHICH MANAGE PUBLIC LANDS IN THE LAKE TAHOE REGION TO INSTALL AND MAINTAIN BEST MANAGEMENT PRACTICES (BMPs) IMPROVEMENTS IN ACCORDANCE WITH A BMP MANUAL THAT SHALL BE MAINTAINED AND REGULARLY UPDATED BY TRPA. BMP REQUIREMENTS SHALL PROTECT VEGETATION FROM UNNECESSARY DAMAGE; RESTORE THE DISTURBED SOILS AND BE CONSISTENT WITH FIRE DEFENSIBLE SPACE REQUIREMENTS. AS AN ALTERNATIVE, AREA-WIDE WATER QUALITY TREATMENT FACILITIES AND FUNDING MECHANISMS MAY BE IMPLEMENTED IN LIEU OF CERTAIN SITE SPECIFIC BMPs WHERE AREA-WIDE TREATMENTS CAN BE SHOWN TO ACHIEVE EQUAL TO OR GREATER WATER QUALITY BENEFITS.**

This policy guarantees continuing reductions in pollutant loads through the application of Best Management Practice improvements (BMPs). The Best Management Practices Handbook identifies the recommended BMPs for various situations. Application of BMPs requires a flexible approach involving evaluation of site-specific considerations and defensible space requirements. In some situations, area-wide treatments and funding mechanisms may provide greater water quality benefits than site specific BMPs.

BMP compliance requires proper installation and regular maintenance to preserve BMP function and help prevent pollution discharges. Regularly performed maintenance activities are described in the Best Management Practices Handbook.

In all aspects of the BMP retrofit program, TRPA shall emphasize voluntary compliance with the ordinance provisions, the provision of technical assistance through the Resource Conservation Districts, and public information campaigns to inform the public about basic BMP requirements and benefits. Areas targeted for accelerated BMP implementation should occur in coordination with local government Pollution/Stormwater Load Reduction Plans.

**WQ -3.12 PROJECTS SHALL BE REQUIRED TO MEET TRPA BMP REQUIREMENTS AS A CONDITION OF APPROVAL FOR ALL PROJECTS.**

All projects shall be required, as a condition of approval, to apply Best Management Practices to the project parcel during construction and as follows upon completion of construction:

- A. New projects on undeveloped parcels shall require application and maintenance of temporary and permanent BMPs as a condition of project approval.
- B. Projects which expand structures or land coverage shall require application

and maintenance of temporary and permanent BMPs to the project area.

- C. Rehabilitation projects, other than minor utility projects, shall require the preparation of a plan and schedule for application and maintenance of temporary and permanent BMPs to the entire parcel. The amount of work required pursuant to the project approval shall consider the cost and nature of the project.
- D. Where area-wide treatments are approved, projects shall install improvements in accordance with the approved area-wide BMP plan.

**WQ-3.13 MAINTAIN THE BEST MANAGEMENT PRACTICES HANDBOOK TO INCLUDE SPECIAL CONSTRUCTION TECHNIQUES, DISCHARGE STANDARDS, AND DEVELOPMENT CRITERIA APPLICABLE TO PROJECTS IN THE SHOREZONE.**

Sediment and other discharges from shorezone construction or dredging have an immediate and obvious impact on water clarity in localized areas and are harmful to fish. Proper construction techniques and other measures shall be required as necessary to mitigate activities in the shorezone and to protect the natural values of the shorezone.



# CHAPTER 3

## Transportation Element

**T**he TRPA Bi-State Compact calls for the development of an integrated transportation plan addressing all modes of travel to *“reduce dependency on the automobile,” “reduce air pollution which is caused by motor vehicles,”* and provide *“public transportation and public programs and projects related to transportation.”*

Although it is not a threshold category, Tahoe’s transportation system relates to multiple threshold areas, particularly air and water quality. To fulfill the Bi-State Compact’s mandate and work towards attainment of thresholds, the Regional Plan Transportation Element seeks to establish a first-class transportation system that prioritizes bicycling, walking, and transit, and serves residents and visitors while contributing to the environmental and socioeconomic health of the Region. This Element includes transportation goals, policies and implementation measures that address multiple aspects of transportation planning and interact to create a successful multi-modal transportation system.

TRPA is designated as the Tahoe Metropolitan Planning Organization (TMPO) for state and federal transportation planning. In addition to fulfilling the Bi-State Compact’s directives, as the TMPO, TRPA must develop a long-range Regional Transportation Plan (RTP) consistent with federal transportation laws. The RTP must also meet statutory requirements in California through the adoption of a “Sustainable Communities Strategy” (SCS). The SCS lays out a plan for reducing passenger vehicle related greenhouse gas (GHG) emissions in California. The goals and policies of the RTP are identical to those in the Regional Plan Transportation Element. In addition to goals and policies, the RTP also includes a detailed transportation improvement strategy, predicated on received or forecasted funding.

## GOAL 1: ENVIRONMENT



**Protect and enhance the environment, promote energy conservation, and reduce greenhouse gas emissions.**

### *Policies*

- 1.1 Support mixed-use, transit oriented development, and community revitalization projects that encourages walking, bicycling, and easy access to existing and planned transit stops.
- 1.2 Leverage transportation projects to benefit multiple environmental thresholds through integration with the Environmental Improvement Program.
- 1.3 Mitigate the regional and cumulative traffic impacts of new, expanded, or revised developments or land uses by prioritizing projects and programs that enhance non-automobile travel modes.
- 1.4 Facilitate the use of electric and zero emission vehicles and fleets by supporting deployment of vehicle charging infrastructure within the Region, and supporting incentives and education of residents, businesses, and visitors related to the use of electric and zero emission vehicles.
- 1.5 Require major employers of 100 employees or more to implement vehicle trip reduction programs.
- 1.6 Require new and encourage existing major commercial interests providing gaming, recreational activities, excursion services, condominiums, timeshares, hotels and motels to participate in transportation demand programs and projects.
- 1.7 Coordinate with the City of South Lake Tahoe to update and maintain an Airport Master Plan and limit aviation facilities within the Tahoe Region to existing facilities.
- 1.8 Strongly encourage traffic calming and noise reduction strategies when planning transportation improvements.
- 1.9 Develop and implement a cooperative continuous, and comprehensive Congestion Management Process to adaptively manage congestion within the Region's multi-modal transportation system.

## GOAL 2: CONNECTIVITY



**Enhance and sustain the connectivity and accessibility of the Tahoe transportation system, across and between modes, communities, and neighboring regions, for people and goods.**

### *Policies*

#### **Transit**

- 2.1 Coordinate with Federal, state, and local government as well as private sector partners to identify and secure adequate transit service funding that provides a viable and reliable transportation alternative to the private automobile for all categories of travelers in the Region.
- 2.2 Provide frequent transit service to major summer and winter recreational areas.
- 2.3 Establish regional partnerships with surrounding metropolitan areas to expand transit to and from Lake Tahoe.
- 2.4 Improve the existing transit system for the user making it frequent, fun, and free in targeted locations. Consider and use increased frequency, preferential signal controls, priority travel lanes, expanded service areas, and extended service hours.
- 2.5 Integrate transit services across the Region. Develop and use unified fare payment systems, information portals, and shared transfers.
- 2.6 Consider waterborne transportation systems using best available technology to minimize air and water quality impacts in coordination with other modal options, as an alternative to automobile travel within the Region.
- 2.7 Provide specialized public transportation services for individuals with disabilities through subsidized fare programs for transit, taxi, demand response, and accessible van services.
- 2.8 Make transit and pedestrian facilities ADA-compliant and consistent with Coordinated Human Services Transportation Plans.
- 2.9 Develop formal guidelines or standards for incorporating transit amenities in new development or redevelopment, as conditions of project approval.
- 2.10 Provide public transit services at locations nearby school campuses.
- 2.11 Coordinate public and private transit service, where feasible, to reduce service costs and avoid service duplication.

#### **Active Transportation**

- 2.12 Develop and maintain an Active Transportation Plan as part of the regional transportation plan. Include policies, a project list of existing and proposed bicycle and pedestrian facilities, and strategies for implementation in the Active Transportation Plan.
- 2.13 Incorporate programs and policies of the active transportation plan into regional and local land use plans and regulatory processes.
- 2.14 Construct, upgrade, and maintain pedestrian and bicycle facilities consistent with the active transportation plan.

## **Multi-Modal**

- 2.15 Accommodate the needs of all categories of travelers by designing and operating roads for safe, comfortable, and efficient travel for roadway users of all ages and abilities, such as pedestrians, bicyclists, transit riders, motorists, commercial vehicles, and emergency vehicles.
- 2.16 Encourage parking management programs that incentivize non-auto modes and discourage private auto-mobile use at peak times in peak locations, alleviate circulating vehicle trips associated with parking availability, and minimize parking requirements through the use of shared-parking facilities while potentially providing funding that benefits infrastructure and services for transit, pedestrians, and bicyclists.
- 2.17 Coordinate and include in area plans, where applicable, intermodal transportation facilities ("Mobility Hubs") that serve centers and other major areas of activity while encouraging the consolidation of off-street parking within mixed-use areas.
- 2.18 In roadway improvements, construct, upgrade, and maintain active transportation and transit facilities along major travel routes. In constrained locations, all design options should be considered, including but not limited to restriping, roadway realignment, signalization, and purchase of right of way.
- 2.19 Encourage jurisdiction partners to develop and plan coordinated wayfinding signage for awareness of alternative transportation modes including transit (TART/BlueGO), pedestrian, and bicycle facilities.

## **GOAL 3: SAFETY**



### **Increase safety and security for all users of Tahoe's transportation system.**

#### ***Policies***

- 3.1 Coordinate the collection and analysis of safety data, identify areas of concern, and propose safety-related improvements that support state and federal safety programs and performance measures.
- 3.2 Consider safety data and use proven safety design countermeasures for safety hotspots recommended from roadway safety audits, the active transportation plan, corridor plans, and other reliable sources when designing new or modifying existing travel corridors.
- 3.3 Coordinate safety awareness programs that encourage law abiding behavior by all travelers.
- 3.4 Support emergency preparedness and response planning, including the development of regional evacuation plans, and encourage appropriate agencies to use traffic incident management performance measures.
- 3.5 Design projects to maximize visibility at vehicular, bicycle, and pedestrian conflict points. Consider increased safety signage, site distance, and other design features, as appropriate.

## GOAL 4: OPERATIONS AND CONGESTION MANAGEMENT



**Provide an efficient transportation network through coordinated operations, system management, technology, monitoring, and targeted investments.**

### *Policies*

- 4.0 Prioritize regional and local investments that fulfill TRPA objectives in transit, active transportation, transportation demand management, and other programs and directly support identified TRPA transportation performance outcomes.
- 4.1 Identify opportunities to implement comprehensive transportation solutions that include technology, safety, and other supporting elements when developing infrastructure projects.
- 4.2 Collaborate with jurisdictions and DOT partners to develop adaptive management strategies for peak traffic periods at Basin entry/exit routes.
- 4.3 Promote awareness of travel options and conditions through advertising and real-time travel information.
- 4.4 Incorporate programs and policies of the Tahoe Basin Intelligent Transportation Systems Strategic Plan into regional and local land use plans and regulatory processes.
- 4.5 Support the use of emerging technologies, such as the development and use of mobile device applications, to navigate the active transportation network and facilitate ridesharing, efficient parking, transit use, and transportation network companies.
- 4.6 Level of service (LOS) criteria for the Region's highway system and signalized intersections during peak periods shall be: "C" on rural recreational/scenic roads; "D" on rural developed area roads; "D" on urban developed area roads; "D" for signalized intersections. Level of Service "E" may be acceptable during peak periods in urban areas, but not to exceed four hours per day. These vehicle LOS standards may be exceeded when provisions for multi-modal amenities and/or services (such as transit, bicycling, and walking facilities) are adequate to provide mobility for users at a level that is proportional to the project-generated traffic in relation to overall traffic conditions on affected roadways.
- 4.7 Regional transportation plan updates shall review projected travel into and within adopted area plans and effectiveness of mobility strategies.
- 4.8 Prohibit the construction of roadways to freeway design standards in the Tahoe Region. Establish Tahoe specific traffic design volume for project development and analysis.
- 4.9 Require the development of traffic management plans for major temporary seasonal activities, including the coordination of simultaneously occurring events.
- 4.10 Actively support Transportation Management Associations (TMAs) in the Tahoe Region.
- 4.11 Establish a uniform method of data collection for resident and visitor travel behavior.
- 4.12 Maintain monitoring programs for all modes that assess the effectiveness of the long-term implementation of local and regional mobility strategies on a publicly accessible reporting platform (e.g [www.laketahoeinfo.org](http://www.laketahoeinfo.org) website).



- 4.13 Establish regional and inter-regional cooperation and cost-sharing to obtain basin-wide data for transportation-related activities.
- 4.14 Design roadway corridors, including driveways, intersections, and scenic turnouts, to minimize impacts to regional traffic flow, transit, and bicycle and pedestrian facilities by using shared access points where feasible.

## GOAL 5: ECONOMIC VITALITY & QUALITY OF LIFE



**Support the economic vitality of the Tahoe Region to enable a diverse workforce, sustainable environment, and quality experience for both residents and visitors.**

### *Policies*

- 5.1 Encourage community revitalization and transit oriented development projects that comprehensively support regional and local transportation, housing, land use, environment, and other goals.
- 5.2 Provide multimodal access to recreation sites. Encourage collaboration between public lands managers, departments of transportation, transit providers, and other regional partners to improve year-round access to dispersed recreation activities. Strategies could include active transportation end-of-trip facilities, transit services, parking management programs, and incentives to use multi-modal transport.
- 5.3 Collaborate with local, state, regional, federal, and private partners to develop a regional revenue source to fund Lake Tahoe transportation and water quality projects.
- 5.4 Collaborate with regional and inter-regional partners to establish efficient transportation connections within the Trans-Sierra Region including to and from Tahoe and surrounding metropolitan areas.

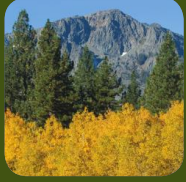
## GOAL 6: SYSTEM PRESERVATION



**Provide for the preservation of the existing transportation system through maintenance activities that support climate resiliency, water quality, and safety.**

### *Policies*

- 6.1 Preserve the condition of sidewalks and bicycle facilities and where feasible, maintain their year-round use.
- 6.2 Maintain and preserve pavement condition to a level that supports the safety of the traveling public and protects water quality.
- 6.3 Make “dig once” the basin-wide standard, requiring public and private roadway projects to accommodate the installation of conduit to support community needs. (e.g: fiber optic, broadband, lighting, etc.)
- 6.4 Consider the increased vulnerability and risk to transportation infrastructure from climate stressors, such as increased precipitation, flooding, and drought when designing new infrastructure and repairing or maintaining existing infrastructure.



# CHAPTER 4

## Conservation Element

The purpose of this Element is to plan for the preservation, development, utilization, and management of the scenic and other natural resources within the Region. To achieve this end and to minimize the threat that increasing urbanization has on the ecological values of the Region and the public opportunities for use of public lands, ten Subelements were selected to cover the full range of Lake Tahoe's natural and historical resources. For each Subelement, specific policies are outlined to help guide decision-making as it affects that particular resource.

## VEGETATION

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The Lake Tahoe Region's diverse and unique plant communities provide a variety of environmental and ecological functions and values including water quality, wildlife habitat, soil stabilization, and nutrient cycling. Plant communities also contribute to the Region's scenic quality, improve air quality, and facilitate noise control. The Vegetation Subelement guides the protection and management of the Region's vegetation resources.

### GOAL VEG-1:

#### **PROVIDE FOR A WIDE MIX AND INCREASED DIVERSITY OF PLANT COMMUNITIES IN THE TAHOE REGION.**

The natural succession of vegetation in the Region has been stifled over the past 130 years. Following clear cut activities in the late 1800s, the forest vegetation has been managed under wildfire exclusion policies. The resulting lack of naturally occurring fires and other natural perturbations has created an unnatural forest structure with regard to forest health and diversity. Extensive and overstocked stands of second growth conifers now dominate the forest vegetation. Other plant communities that require openings in the forest canopy are relatively scarce. The resulting situation is one of low plant diversity, poor age class structure, vulnerability to disease and pest organisms and increased risk of catastrophic wildfire. The preservation of the Region's vegetation and the achievement of environmental thresholds require programs that preserve or protect certain plant communities and species while permitting increased opportunities to manage the vegetation for diversity, fire prevention, and health. Attainment of these thresholds requires an on-going program involving harvest of fire fuels, revegetation, and vegetation manipulation.

### POLICIES:

#### **VEG-1.1 FOREST MANAGEMENT PRACTICES SHALL BE ALLOWED WHEN CONSISTENT WITH ACCEPTABLE STRATEGIES FOR THE MAINTENANCE AND ENHANCEMENT OF FOREST HEALTH AND DIVERSITY, PREVENTION OF WILDFIRE, PROTECTION OF WATER QUALITY, AND ENHANCEMENT OF WILDLIFE HABITATS.**

Forest management practices that may include both timber harvest and prescribed burning are acceptable strategies for restoring and maintaining the biological health of the forest ecosystem. This policy would also permit practices necessary to reduce the risk of catastrophic wildfires.

#### **VEG-1.2 OPPORTUNITIES TO IMPROVE THE AGE STRUCTURE OF THE PINE AND FIR PLANT COMMUNITIES SHALL BE ENCOURAGED WHEN CONSISTENT WITH OTHER ENVIRONMENTAL CONSIDERATIONS.**

The conifer forests of the Tahoe Region are mostly even-aged. This has serious implications related to plant diversity and forest health. Opportunities to increase the ratio of young trees to mature trees should be encouraged.

**VEG-1.3 FOREST PATTERN SHALL BE MANIPULATED WHENEVER APPROPRIATE AS GUIDED BY THE SIZE AND DISTRIBUTION OF FOREST OPENINGS.**

Extensive stands of even-aged timber predominate in the Tahoe Region. Openings in these stands are uncommon. The forest pattern and resultant plant diversity can be improved through forest management practices that open-up the forest canopy to increase the proportion of shrub and meadow communities.

**VEG-1.4 EDGE ZONES BETWEEN ADJACENT PLANT COMMUNITIES SHALL BE MAXIMIZED AND TREATED FOR THEIR SPECIAL VALUE RELATIVE TO PLANT DIVERSITY AND WILDLIFE HABITAT.**

The mixing of two plant communities creates a zone of high plant diversity and provides an effective screen between adjacent land uses. Besides the benefit of increased plant diversity, edge zones provide critical habitats to many species of wildlife.

**VEG-1.5 PERMANENT DISTURBANCE OR UNNECESSARY ALTERATION OF NATURAL VEGETATION ASSOCIATED WITH DEVELOPMENT ACTIVITIES SHALL NOT EXCEED THE APPROVED BOUNDARIES (OR FOOTPRINTS) OF THE BUILDING, DRIVEWAY, OR PARKING STRUCTURES, OR THAT WHICH IS NECESSARY TO REDUCE THE RISK OF FIRE OR EROSION.**

Protecting the existing vegetation around a construction site will aid in preventing soil compaction or disturbance due to equipment and human trampling. It will also reduce the need for revegetation and landscaping.

**VEG-1.6 THE MANAGEMENT OF VEGETATION IN URBAN AREAS SHALL BE IN ACCORDANCE WITH THE POLICIES OF THIS PLAN AND SHALL INCLUDE PROVISIONS THAT ALLOW FOR THE PERPETUATION OF THE NATURAL-APPEARING LANDSCAPE.**

The beauty of the Tahoe Region depends, in part, on the successful "blending" of the natural environment with the built environment. Vegetation in urban areas shall be preserved to the maximum extent feasible so as to avoid sharp contrasts between the urban and non-urban portions of the Region. Conditions of project approval for all grading, harvesting, landscaping, and other project proposals shall be required, as necessary, to implement the intent of this policy.

**VEG-1.7 MAINTAIN FOREST LITTER FOR ITS EROSION CONTROL AND NUTRIENT CYCLING FUNCTIONS IN NATURALLY-VEGETATED AREAS EXCEPT TO THE EXTENT IT POSES A FIRE HAZARD.**

The fungi associated with decaying plant material act as nutrient "sinks" by picking up plant nutrients that would otherwise be lost to adjacent water bodies during spring runoff.

**VEG-1.8 PROMOTE USE OF NATIVE, WATER-EFFICIENT, NUTRIENT-EFFICIENT, FIRE-RESISTANT AND NON-INVASIVE VEGETATION IN URBAN AREAS AND DURING REVEGETATION OF DISTURBED SITES.**

Native plants are adapted to the special altitude, climate, and soil characteristics of the Region. Use of non-native species often requires constant care and artificial amounts of water and fertilizer. Revegetation of disturbed sites will require the use of native plants whenever practical, but other approved species

also may be appropriate.

**VEG-1.9 ALL PROPOSED ACTIONS SHALL CONSIDER THE CUMULATIVE IMPACT OF VEGETATION REMOVAL WITH RESPECT TO PLANT DIVERSITY AND ABUNDANCE, WILDLIFE HABITAT AND MOVEMENT, SOIL PRODUCTIVITY AND STABILITY, AND WATER QUALITY AND QUANTITY.**

The piecemeal and incremental removal of vegetation may have significant cumulative impacts on the natural resource values of the Region. Project review should consider both the direct and indirect impacts of all development, as well as fire safety.

**VEG-1.10 WORK TO ERADICATE AND PREVENT THE SPREAD OF INVASIVE SPECIES.**

**VEG-1.11 ENCOURAGE LOCAL GOVERNMENTS TO DEVELOP URBAN FORESTRY COMPONENTS WITHIN THEIR AREA PLANS. URBAN FORESTRY PROGRAMS SHOULD SEEK TO REESTABLISH NATURAL FOREST CONDITIONS IN A MANNER THAT DOES NOT INCREASE THE RISK OF CATASTROPHIC WILDFIRE.**

**GOAL VEG-2**

**PROVIDE FOR THE PROTECTION, MAINTENANCE AND RESTORATION OF SUCH UNIQUE ECO-SYSTEMS AS WETLANDS, MEADOWS, AND OTHER RIPARIAN VEGETATION.**

Riparian vegetation is a critical component of the Tahoe Region's natural vegetation. These communities serve a variety of useful functions especially related to water quality and quantity. Riparian plant communities also significantly contribute to plant and animal diversity, recreation, and scenic quality. Strategies to protect these qualities are developed within the framework of adopted environmental thresholds for soils, vegetation, and wildlife.

**POLICIES:**

**VEG-2.1 RIPARIAN PLANT COMMUNITIES SHALL BE MANAGED FOR THE BENEFICIAL USES OF PASSIVE RECREATION, GROUNDWATER RECHARGE, AND NUTRIENT CATCHMENT, AND AS WILDLIFE HABITATS.**

The preservation of riparian zones in their natural states should be emphasized over more intensive uses. These plant communities serve a variety of natural functions that benefit the scenic, wildlife, and water resources of the Tahoe Region.

**VEG-2.2 RIPARIAN PLANT COMMUNITIES SHALL BE RESTORED OR EXPANDED WHENEVER AND WHEREVER POSSIBLE. WHEN COMPLETE RESTORATION IS NOT FEASIBLE, RESTORATION PROGRAMS SHALL FOCUS ON RESTORING THE NATURAL FUNCTION OF RIPARIAN AREAS TO THE GREATEST EXTENT PRACTICAL.**

Riparian plant communities are the single most important habitat for wildlife in the Region and provide the most cost-effective means of water cleansing. Existing functioning riparian plant communities shall be maintained in their

natural conditions to promote such beneficial functions. The schedule for restoration, as required by the thresholds, will correspond to the schedule for restoring Stream Environment Zones outlined in the Environmental Improvement Program.

### **GOAL VEG-3**

#### **CONSERVE THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES AND UNCOMMON PLANT COMMUNITIES OF THE LAKE TAHOE REGION.**

A few examples of rare plants and uncommon plant communities can be found in the Lake Tahoe Region. These resources are a real part of the Region's natural endowment and need to be protected from indiscriminant loss or destruction. Otherwise, the danger of extinction can become a reality. Direction for preservation is provided by adopted environmental thresholds.

#### **POLICIES:**

##### **VEG-3.1 UNCOMMON PLANT COMMUNITIES SHALL BE IDENTIFIED AND PROTECTED FOR THEIR NATURAL VALUES.**

Rare examples of Lake Tahoe's natural vegetation should be preserved for their ecological and local significance. Indiscriminate loss of uncommon plant communities shall be avoided. This policy applies specifically to those plant communities for which thresholds were adopted, but also may be extended to other communities later identified as significant by TRPA in cooperation with resource agencies. Attainment of the vegetation thresholds and implementation of this policy require close cooperation between this Agency and other agencies responsible for the protection and management of the Region's natural resources.

##### **VEG-3.2 THE POPULATION SITES AND CRITICAL HABITAT OF ALL SENSITIVE PLANT SPECIES IN THE LAKE TAHOE REGION SHALL BE IDENTIFIED AND PRESERVED.**

The Tahoe Region provides a favorable habitat for a few species of exceptionally scarce plants. Without proper protection, these sensitive plants may become extinct. Monitoring and evaluation programs will be necessary, in cooperation with the U.S. Forest Service and other interested agencies and individuals, to implement this policy.

##### **VEG-3.3 THE CONSERVATION STRATEGY FOR TAHOE YELLOW CRESS IN THE LAKE TAHOE REGION SHALL FOSTER STEWARDSHIP FOR THIS SPECIES BY:**

- A. Providing education to landowners;
- B. Providing technical and planning assistance to landowners with Tahoe Yellow Cress to develop stewardship plans;
- C. Streamlining the Tahoe Yellow Cress project review process, while protecting the species and its habitat; and
- D. Support propagation efforts.

## **GOAL VEG-4**

### **PROVIDE FOR AND INCREASE THE AMOUNT OF LATE SERAL/OLD GROWTH STANDS WITHIN THE LAKE TAHOE REGION.**

Late seral/old growth forest stands provide unique habitat for many wildlife and plant species. Late seral/old growth stands also have an increased resistance to tree mortality due to catastrophic wildfire, thereby providing an on-site seed source for natural reforestation. Today, late seral/old-growth forest stands are fragmented and less common than would naturally occur due to clear-cut activities in the late 1800s followed by wildfire exclusion policies through most of the twentieth century. The forested lands in the Region are now dominated by overstocked, second growth, even-aged stands. Fir trees have replaced many naturally occurring pine tree stands. The future condition of forested lands within the Region should reflect natural conditions as much as realistically possible. Active management is necessary to increase the amount of late seral/old growth forest and help restore natural conditions.

#### **POLICIES:**

##### **VEG-4.1 STANDS EXHIBITING LATE SERAL/OLD GROWTH CHARACTERISTICS SHALL BE MANAGED TO ALLOW THESE STANDS TO SUSTAIN THESE CONDITIONS.**

The existing forest stands that exhibit late seral/old growth characteristics are rare in the Region and should be protected. These stands act as a refuge for late seral/old growth species and will be critical for future restoration of additional late seral/old growth stands.

##### **VEG-4.2 STANDS NOT EXHIBITING LATE SERAL/OLD GROWTH CHARACTERISTICS SHALL BE MANAGED TO PROGRESS TOWARDS LATE SERAL/OLD GROWTH.**

Forest stands that do not currently exhibit late seral/old growth characteristics, and that can reasonably be expected to produce late seral/old growth characteristics, should be managed to move the stand towards increasing late seral/old growth characteristics. Active management is the primary vehicle for producing the desired future conditions. Management may entail thinning of smaller trees, alteration of the species composition, and other ecosystem manipulations.

##### **VEG-4.3 PRESCRIPTIONS FOR TREATING THESE STANDS SHALL BE PREPARED BY LICENSED FORESTERS OR OTHERWISE QUALIFIED INDIVIDUALS ON A STAND-BY-STAND BASIS. EACH PRESCRIPTION SHALL DEMONSTRATE/ EXPLAIN HOW IT WILL PROMOTE LATE SERAL OR OLD GROWTH CHARACTERISTICS PRIOR TO APPLYING ANY MECHANICAL TREATMENT OR PRESCRIBED FIRE. STAND-SPECIFIC PRESCRIPTIONS WILL BE DEVELOPED USING THE BEST AVAILABLE FOREST AND ECOSYSTEM MANAGEMENT SCIENCE, STRATEGIES, STANDARDS AND GUIDELINES AS WELL AS ALL APPLICABLE REGULATIONS.**

The management of late seral/old growth forests requires the application of the best available scientific methods by qualified individuals, as well as compliance with applicable forest management policies and regulations. Such documents provide requirements and management strategies to maintain current late seral/old growth stands and promote the recruitment of new stands.

**VEG-4.4 RETAIN LARGE TREES AS A PRINCIPAL COMPONENT OF LATE SERAL/OLD GROWTH ECOSYSTEMS.**

Large trees are one of the defining components of late seral/old growth ecosystems. Without large trees present a forest stand cannot be classified as late seral/old growth. Many of the other components of late seral/old growth ecosystems are derived from large trees, including snags, down woody material, and soil conditions. The retention of large trees is a critical management strategy to achieve the late seral/old growth threshold.

**VEG-4.5 RETAIN TREES OF MEDIUM AND SMALL SIZE SUFFICIENT TO PROVIDE FOR LARGE TREE RECRUITMENT OVER TIME, AND TO PROVIDE STRUCTURAL DIVERSITY. PREFERABLY, THESE TREES WILL BE THE MOST VIGOROUS IN THE STAND USING ONE OF THE STANDARD TREE CLASSIFICATIONS. IN ADDITION, SPECIES COMPOSITION SHOULD BE KEY CONSIDERATION IN TREE RETENTION.**

The forests of the Lake Tahoe Region are largely even-aged as a result of forest regeneration after logging followed by discovery of the Comstock Lode. The large trees of today have finite life spans, and must eventually be replaced. Additionally, appropriate diversity of small, medium and large trees provides vertical structural diversity for wildlife.

Tree species composition is an important characteristic of forests, affecting wildlife uses and forest health. Promoting and perpetuating late seral/old growth forest conditions requires the future provision for a desired species composition, now and in the future. Prior to settlement, natural events provided a well-adapted species mix. Today, forest planning for future conditions is needed because humans have changed the balance of forces in the forest that produce the desired future conditions.

**VEG-4.6 USE OF PRESCRIBED FIRE IS PREFERRED TO REDUCE FIRE HAZARD AND PERPETUATE DESIRED NATURAL ECOLOGICAL PROCESSES. MANUAL AND MECHANICAL TREATMENT MAY BE USED TO REDUCE FOREST FUEL LEVELS AND TO IMPROVE LATE SERAL FOREST CONDITIONS IN ADDITION TO, OR IN LIEU OF, PRESCRIBED FIRE.**

Fire is an effective and efficient tool to reduce forest fuels and thus fire risk. Additionally, fire is a natural ecological process that historically shaped the distribution and structure of vegetation and wildlife communities in the Sierra Nevada and Lake Tahoe Region. Use of prescribed fire or mechanical treatment to control and reduce forest fuel buildup will benefit forested communities by reducing the potential for catastrophic stand replacing fire events.

**GOAL VEG-5**

**THE APPROPRIATE STOCKING LEVEL AND DISTRIBUTION OF SNAGS AND COARSE WOODY DEBRIS SHALL BE RETAINED IN THE REGION'S FORESTS TO PROVIDE HABITAT FOR ORGANISMS THAT DEPEND ON SUCH FEATURES AND TO PERPETUATE NATURAL ECOLOGICAL PROCESSES.**

Relatively large snags (standing dead trees) and large downed woody debris (decaying logs on the forest floor) provide essential habitat features for a wide diversity of forest dwelling organisms. Decaying snags and coarse woody debris provide soil amendments and recycle nutrients necessary to perpetuate improved forest health. Upland sources of dead wood



contribute to slope stability and soil surface stability, which prevent soil erosion and control storm surface runoff. In Stream Environment Zones, dead wood plays a major role in the development of streambed morphology and thus the creation and maintenance of required aquatic and riparian habitat.

#### **POLICIES:**

**VEG-5.1 ALLOW FOR A SUFFICIENT NUMBER AND AN APPROPRIATE DISTRIBUTION OF SNAGS THROUGHOUT THE REGION'S FORESTS TO PROVIDE AND MAINTAIN HABITAT FOR SPECIES DEPENDENT ON SUCH FEATURES.**

Tree mortality is a natural process in properly functioning forest ecosystems. This process is stochastic, can take several decades to occur in nature, and is not easily mimicked by humans. Retaining necessary habitat features that benefit a wide diversity of species is economically appropriate because it will circumvent the need for costly and intrusive habitat management programs, and will aid in achieving wildlife threshold goals and to afford a reasonable level of fire protection safety.

**VEG-5.2 ALLOW FOR AN APPROPRIATE AMOUNT, LEVEL AND DISTRIBUTION OF COARSE WOODY DEBRIS (DOWNED WOODY MATERIAL) THROUGHOUT THE REGION'S FORESTS TO MAINTAIN BIOLOGICAL INTEGRITY, TO STABILIZE SOIL, AND TO AFFORD A REASONABLE LEVEL OF FIRE SAFETY.**

Large downed woody debris (fallen logs) in various stages of decay contribute to structural diversity of forest ecosystems, which is required by a wide variety of terrestrial, semi-terrestrial and aquatic species. Additionally, as logs decompose, organic matter is slowly incorporated into the soil, which replenishes the productive capability of the soil and perpetuates a functioning forest ecosystem.

#### **GOAL VEG-6**

**TRPA SHALL WORK WITH FIRE PROTECTION AGENCIES IN THE REGION TO REDUCE THE RISK OF CATASTROPHIC WILDFIRE.**

The prevention of catastrophic wildfire requires active forest management and coordination with fire protection agencies in the Region.

**VEG 6.1 PROMOTE HAZARDOUS FUELS REDUCTION IN ORDER TO REDUCE THE INTENSITY OF NATURALLY OCCURRING WILDFIRE AND PREVENT CATASTROPHIC WILDFIRE.**

**VEG-6.2 PROMOTE CREATION OF DEFENSIBLE SPACE USING FOREST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH STATE DEFENSIBLE SPACE CODES AND COMMUNITY WILDFIRE PROTECTION PLANS.**

# WILDLIFE

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The Tahoe Region provides a habitat for many different species of wildlife. However, the existing habitat mix is not generally favorable for supporting large numbers of many different species. This situation developed due to urban expansion and forest modification activities since the late 1800s. The Bi-State Compact recognizes *"The Region exhibits unique environmental and ecological values which are irreplaceable."* The Wildlife Subelement seeks to minimize the effects of urbanization on wildlife resources by focusing on maintaining suitable habitats and habitat diversity.

## GOAL WL-1

**MAINTAIN SUITABLE HABITATS FOR ALL INDIGENOUS SPECIES OF WILDLIFE WITHOUT PREFERENCE TO GAME OR NON-GAME SPECIES THROUGH MAINTENANCE AND IMPROVEMENT OF HABITAT DIVERSITY.**

The emphasis of wildlife management in the Region should be on maintaining and improving the functional and biological characteristics of the ecosystem to support the needs of wildlife.

### POLICIES:

#### **WL-1.1 ALL PROPOSED ACTIONS SHALL CONSIDER IMPACTS TO WILDLIFE.**

The impacts of development to wildlife can often be easily mitigated when wildlife are considered early in the project review process. Consideration should be given to the movement, water, food, and cover needs of wildlife.

#### **WL-1.2 RIPARIAN VEGETATION SHALL BE PROTECTED AND MANAGED FOR WILDLIFE.**

Riparian vegetation is the single most important habitat for wildlife in the Region. Riparian plant communities need to be preserved to help protect the wildlife resource and to attain environmental thresholds for vegetation, wildlife, and soils. This policy requires an on-going program of management and regulated use of riparian vegetation.

#### **WL-1.3 NON-NATIVE WILDLIFE AND EXOTIC SPECIES SHALL BE CONTROLLED AND RELEASE OF SUCH ANIMALS INTO THE WILD SHALL BE PROHIBITED.**

Indigenous wildlife species have adapted to the special habitat characteristics of the Region. Non-native species can "invade" the niches of local wildlife and unfairly compete for scarce resources needed for survival. Introduction of disease and population control of exotic species are other issues of concern.

#### **WL-1.4 DOMESTIC ANIMALS AND PETS SHALL BE CONTROLLED AND APPROPRIATELY CONTAINED.**

Domestic animals impact native wildlife species through harassment and physical harm. A combination of domestic animal control and a habitat maintenance program will provide for the long-term health of local wild life

populations.

- WL-1.5 ENCOURAGE LOCAL GOVERNMENTS TO DEVELOP AND ENFORCE AN URBAN BEAR STRATEGY ADDRESSING BEAR RESISTANT SOLID WASTE FACILITIES AND RELATED MATTERS WITHIN THEIR AREA PLANS.**

## **GOAL WL-2**

**PRESERVE, ENHANCE, AND, WHERE FEASIBLE, EXPAND HABITATS ESSENTIAL FOR THREATENED, ENDANGERED, RARE, OR SENSITIVE SPECIES FOUND IN THE REGION.**

Animals that are particularly scarce or vulnerable to extirpation require special management emphasis. Management usually includes programs to protect or enhance critical habitats. Other strategies would include buffering critical habitats from conflicting land uses and activities. Strategies are developed within the framework of adopted environmental thresholds.

### **POLICIES:**

- WL-2.1 ENDANGERED, THREATENED, RARE, AND SPECIAL INTEREST SPECIES SHALL BE PROTECTED AND BUFFERED AGAINST CONFLICTING LAND USES.**

Species in the above categories need extra protection to ensure their longevity in the Region. Critical habitat sites of these animals need to be protected and buffered from disturbing land uses. This will be accomplished by regulating uses within the disturbance and influence zones of species for which thresholds have been adopted

## FISHERIES

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A popular recreational activity in the Tahoe Region is fishing. Some of the larger streams and lakes provide excellent opportunities to catch rainbow, brown, cutthroat, and brook trout. The lakes offer a wider choice of fishing opportunities. The entire fishery is highly sensitive to habitat disturbance. Maintenance of the fishery must focus on preserving prime fish habitats in the lakes and streams and ensuring access to spawning and feeding habitats.

### GOAL FI-1

#### **IMPROVE AQUATIC HABITAT ESSENTIAL FOR THE GROWTH, REPRODUCTION, AND PERPETUATION OF EXISTING AND THREATENED FISH RESOURCES IN THE LAKE TAHOE REGION.**

The fishery habitat in the Tahoe Region has experienced significant alteration and degradation since the late 1800s. Much like the wildlife resource, management emphasis should be on the maintenance of essential habitats. For lakes, management focus should be on nearshore substrate quality as it pertains to feeding, cover, and spawning habitats. Stream management should emphasize instream flow needs and maintenance of spawning habitat. Policies to achieve this goal are consistent with the adopted environmental thresholds.

#### **POLICIES:**

##### **FI-1.1 DEVELOPMENT PROPOSALS AFFECTING STREAMS, LAKES AND ADJACENT LANDS SHALL EVALUATE IMPACTS TO THE FISHERY.**

The population potential of the Tahoe fishery largely depends on the availability and quantity of suitable spawning and feeding habitats. Past practices have significantly damaged the fishery resource through habitat modification or destruction. Future detrimental impacts can be avoided and the fishery improved if the resource is given due consideration in water related developments. All proposals that may impact the fishery shall be assessed pursuant to consultation with fishery biologists of the Nevada Department of Wildlife, California Department of Fish and Game, and/or the U.S. Fish and Wildlife Service.

##### **FI-1.2 UNNATURAL BLOCKAGES AND OTHER IMPEDIMENTS TO FISH MOVEMENT SHALL BE PROHIBITED AND REMOVED WHEREVER APPROPRIATE.**

Many different species of fish spawn in the Region's tributaries. This often requires movement into the streams from the lakes. Unnatural blockages (e.g., bridge culverts, man-made dams, marinas) can prevent the upstream migration and thereby seriously impact the population potential of certain fishes. Remedial measures will be accomplished in tandem with conditions of project approval, voluntary cooperation, and restoration projects as part of remedial water quality programs.

**FI-1.3 AN INSTREAM MAINTENANCE PROGRAM SHOULD BE DEVELOPED AND IMPLEMENTED.**

A variety of problems can build up over time in stream channels. These problems require annual remedial attention before the situation becomes too burdensome to deal with in a timely and cost-efficient manner. Instream monitoring could include an inventory and removal program for undesirable debris build-up in the stream channel.

**FI-1.4 STANDARDS FOR BOATING ACTIVITY SHALL BE ESTABLISHED FOR THE SHALLOW ZONE OF LAKE TAHOE.**

There are numerous uses associated with the shorezone of Lake Tahoe. However, some of those activities do not depend on the exclusive use of the nearshore. Boating activity in the nearshore should be permitted only to the extent that it is compatible with shorezone-dependent uses such as swimming and fishing. To minimize impacts to these and other shorezone users, and to reduce the risk of accidents, excessive boat speeds and motor noise should be avoided in the nearshore. Strict enforcement of regulations for boat speed and noise close to shore will also benefit the fishery which can be affected by the noise and associated activities of boats. Operating standards for boating should be in accordance with U.S. Coast Guard regulations. Specific areas of habitat may require additional regulations to help prevent unacceptable disruption of critical life cycle activities such as spawning.

**FI-1.5 HABITAT IMPROVEMENT PROJECTS ARE ACCEPTABLE PRACTICES IN STREAMS AND LAKES.**

Considerable potential exists to improve or expand the fishery habitat of lakes and streams in the Region. Any improvements are likely to solicit a corresponding improvement to the local fishery and should be encouraged.

**FI-1.6 INSTREAM FLOWS SHALL BE REGULATED, WHEN FEASIBLE, TO MAINTAIN FISHERY VALUES.**

The maintenance of a minimal level of water throughout the year in streams is necessary to protect instream fishery values. Diversions which artificially lower stream flows beyond a level capable of supporting fish or their food organisms is not desirable and should be avoided. This policy would only apply to those creeks with artificial diversions and be accomplished, in part, with implementation of Policy FI-1.7.

**FI-1.7 EXISTING POINTS OF WATER DIVERSION FROM STREAMS SHALL BE TRANSFERRED TO LAKES, WHENEVER FEASIBLE, TO HELP PROTECT INSTREAM BENEFICIAL USES.**

Many of the Region's tributaries are subject to extreme low flows in late summer. Withdrawals from low flow streams aggravate the problem and may even dry out some creeks. A more constant and dependable supply of water would be available from Lakes and such transfers should be encouraged through the use of incentives and cooperation with state agencies responsible for regulating water use.

**FI-1.8      SUPPORT, IN RESPONSE TO JUSTIFIABLE EVIDENCE, STATE AND FEDERAL EFFORTS TO REINTRODUCE LAHONTAN CUTTHROAT TROUT IN APPROPRIATE REMOTE LOCATIONS.**

The Lahontan cutthroat trout is, in all probability, extinct in the Region. Any efforts to reintroduce this particular strain of cutthroat should be encouraged. Reintroducing Lahontan cutthroat trout to Lake Tahoe, itself appears to be infeasible. However, it appears that it may be possible to reintroduce the Lahontan cutthroat trout to specific isolated lakes or streams.

**FI-1.9      PROHIBIT THE RELEASE OF NON-NATIVE AQUATIC INVASIVE SPECIES IN THE REGION IN COOPERATION WITH PUBLIC AND PRIVATE ENTITIES. CONTROL OR ERADICATE EXISTING POPULATIONS OF THESE SPECIES AND TAKE MEASURES TO PREVENT ACCIDENTAL OR INTENTIONAL RELEASE OF SUCH SPECIES.**

# SOILS

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In addition to serving as a growth medium for plants, soil provides numerous chemical, physical, and biological functions that are critical to sustaining healthy ecosystems and maintaining environmental quality, including water quality. Accordingly, the Bi-State Compact identifies the need to establish and adopt environmental standards for soil conservation. The Soils Subelement establishes Goals and Policies intended to maintain and enhance the soil resource environmental thresholds.

## GOAL S-1

### MINIMIZE SOIL EROSION AND THE LOSS OF SOIL PRODUCTIVITY.

Protection of the Region's soil is important for maintaining soil productivity and vegetative cover and preventing excessive sediment and nutrient transport to the streams and lakes. Soil protection is especially critical in the Region where the soils are characteristically shallow and highly susceptible to erosion. Strategies for soil conservation are consistent with thresholds established for soil, water, and vegetation.

#### POLICIES:

##### **S-1.1 ALLOWABLE IMPERVIOUS LAND COVERAGE SHALL BE CONSISTENT WITH THE THRESHOLD FOR IMPERVIOUS LAND COVERAGE.**

The Land Use Subelement establishes policies which limit impervious land coverage consistent with the impervious land coverage limits set forth in the *"Land-Capability Classification of the Lake Tahoe Basin, California-Nevada, a Guide for Planning," Bailey, 1974.*

##### **S-1.2 NO NEW LAND COVERAGE OR OTHER PERMANENT DISTURBANCE SHALL BE PERMITTED IN LAND CAPABILITY DISTRICTS 1-3 EXCEPT FOR THOSE USES AS NOTED IN A, B, AND C BELOW:**

- A. Single family dwellings may be permitted in land capability districts 1-3 when reviewed and approved pursuant to the individual parcel evaluation system (IPES).
- B. Public outdoor recreation facilities may be permitted in land capability districts 1-3 if:
  - i. The project is a necessary part of a public agency's long range plans for public outdoor recreation;
  - ii. The project is consistent with the recreation element of the Regional Plan;
  - iii. The project, by its very nature must be sited in land capability districts 1-3;
  - iv. There is no feasible alternative which avoids or reduces the extent of encroachment in land capability districts 1-3;
  - v. The impacts are fully mitigated;

- vi. Land capability districts 1-3 lands are restored in the amount of 1.5 times the area of land capability districts 1-3 which is disturbed or developed beyond that permitted by the Bailey coefficients; and
- vii. Alternatively, because of their public and environmental benefits, special provisions for non-motorized public trails may be allowed and defined by ordinances.

To the fullest extent possible, recreation facilities must be sited outside of Land Capability Districts 1-3. However, the six-part test established by the policy allows encroachment of these lands where such encroachment is essential for public outdoor recreation, and precautions are taken to ensure that such lands are protected to the fullest extent possible. The restoration requirements of this policy can be accomplished on-site or off-site, and shall be in lieu of any coverage transfer or coverage mitigation provisions elsewhere in this plan.

- C. Public service facilities are permissible uses in land capability districts 1-3 if:
  - i. The project is necessary for public health, safety or environmental protection;
  - ii. There is no reasonable alternative, which avoids or reduces the extent of encroachment in land capability districts 1-3;
  - iii. The impacts are fully mitigated;
  - iv. Land capability districts 1-3 lands are restored in the amount of 1.5 times the area of land capability districts 1-3 which is disturbed or developed beyond that permitted by the Bailey co-efficients; and
  - v. Alternatively, because of their public and environmental benefits, special provisions for non-motorized public trails may be allowed and defined by ordinances.

Development within Land Capability Districts 1-3 is not consistent with the goal to manage high hazard lands for their natural qualities and shall generally be prohibited except under extraordinary circumstances involving public works. Each circumstance shall be evaluated based on the above four-point test of this policy. The restoration requirements of this policy can be accomplished on-site or off-site, and shall be in lieu of any coverage transfer or coverage mitigation provisions elsewhere in this plan.

### **S-1.3 THE LAND CAPABILITY MAP MAY BE REVIEWED AND UPDATED.**

TRPA shall provide for a procedure to allow land capability challenges for reclassification of incorrectly mapped areas.

### **S-1.4 TRPA SHALL DEVELOP SPECIFIC POLICIES TO LIMIT LAND DISTURBANCE AND REDUCE SOIL AND WATER QUALITY IMPACTS OF DISTURBED AREAS.**

Like impervious surfaces, disturbed and compacted areas result in increased soil loss and surface runoff. The Regional Plan sets policies designed to reduce existing surface disturbance and avoid new disturbance. TRPA shall set guidelines defining "disturbance" and determine what types of disturbed and compacted areas should be counted as impervious surfaces for purposes of applying land coverage limits. Coverage limits shall not be applied so as to prevent application of best management practices to existing disturbed areas.

### **S-1.5 PRIORITIZE WATERSHEDS OR OTHER AREAS IMPAIRED BY EXCESS LAND**



**COVERAGE AND INCENTIVIZE THE REMOVAL AND TRANSFER OF COVERAGE FROM APPROPRIATE LOCATIONS WITHIN PRIORITY WATERSHEDS.**

TRPA shall maintain specific programs to address the problem of excess coverage and may include limits on new coverage, coverage removal, and remedial erosion and runoff control projects.

**S-1.6 MAINTAIN SEASONAL LIMITATIONS ON GROUND DISTURBING ACTIVITIES DURING THE WET SEASON (OCTOBER 15 TO MAY 1) AND IDENTIFY LIMITED EXCEPTIONS FOR ACTIVITIES THAT ARE NECESSARY TO PRESERVE PUBLIC HEALTH AND SAFETY OR FOR EROSION CONTROL.**

Impacts related to soil disturbance are highly exaggerated when the soil is wet. For precautionary reasons, all project sites must be adequately winterized by October 15 as a condition for continued work on the site. Exceptions to the grading prohibitions will be permitted in emergency situations where the grading is necessary for reasons of public safety or for erosion control.

**S-1.7 ALL EXISTING NATURAL FUNCTIONING STREAM ENVIRONMENT ZONES SHALL BE RETAINED AS SUCH AND DISTURBED STREAM ENVIRONMENT ZONES SHALL BE RESTORED WHENEVER POSSIBLE AND MAYBE TREATED TO REDUCE THE RISK OF CATASTROPHIC WILDFIRE.**

Stream Environment Zones (SEZs) shall be managed to perpetuate their various functional roles, especially pertaining to water cleansing and nutrient trapment. This requires enforcement of a non-degradation philosophy. This policy is common to the Water Quality, Vegetation, Stream Environment Zone, and Wildlife Subelements and shall be implemented through the Land Use Element and Environmental Improvement Program (EIP).

## SHOREZONE

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The shorezone of Lake Tahoe is of both local and national significance. The scenic quality of the shoreline is enhanced by a diversity of views that range from sandy beaches to isolated coves, rocky shorelines, and steep cliffs. The competing demands for development of the shorezone need to be reconciled in light of the unique qualities that stand to be lost. The Shorezone Plan for Lake Tahoe is the basis for developing guidelines for appropriate uses along the shorezones of Lake Tahoe, Fallen Leaf Lake, and Cascade Lake.

### GOAL SZ-1

**PROVIDE FOR THE APPROPRIATE SHOREZONE USES OF LAKE TAHOE, CASCADE LAKE, AND FALLEN LEAF LAKE WHILE PRESERVING THEIR NATURAL AND AESTHETIC QUALITIES.**

The shorezones of the Region's lakes are inherently suitable to different intensities of use depending on local shorezone characteristics. Both the physical and biological qualities of the shorezone are useful for assessing the development potential of a particular site. Visual quality should be an additional test of an area's capability to accommodate different types of land use. Policies are developed within the framework of TRPA's Shorezone Plan (which is incorporated into this Subelement) and adopted environmental thresholds.

### POLICIES:

**SZ-1.1 ALL VEGETATION AT THE INTERFACE BETWEEN THE BACKSHORE AND FORESHORE ZONES SHALL REMAIN UNDISTURBED UNLESS ALLOWED BY PERMIT FOR USES OTHERWISE CONSISTENT WITH THE SHOREZONE POLICIES.**

Vegetation at the interface between the backshore and the foreshore is significant to buffering the impacts that occur in this zone. It is the last naturally occurring measure for stabilizing soils and absorbing nutrients in the runoff from the backshore. It prevents accelerated shoreline erosion from wave action and reduces the need for engineered structures. Vegetation is an important element of the wildlife and fish habitat that occurs in the zone. The vegetation also screens backshore development, thus preserving the natural appearance of the shoreline. Well-established, native vegetation is adapted to the zone and provides a strong binding root system and a protective cover of foliage and branches. The interface is defined as the zone that includes backshore cliffs and other unstable lands influenced, in part or in total, by littoral or wave processes.

**SZ-1.2 CONSTRUCTION ACTIVITY SHOULD BE SET BACK TO ENSURE NO DISTURBANCE OF THE INTERFACE BETWEEN HIGH CAPABILITY BACKSHORE AND UNSTABLE CLIFF AREAS.**

Building setbacks from the edge of unstable or potentially unstable areas are necessary so as to minimize the risk of accelerated erosion, cliff collapse, or slumping. Retention of a natural buffer to minimize impacts of backshore development is preferred over engineering solutions to backshore instability.

**SZ-1.3 THE USE OF LAWNS OR ORNAMENTAL VEGETATION IN THE SHOREZONE SHALL BE DISCOURAGED.**

The land area adjacent to water bodies is susceptible to intensive erosion forces such as undercutting. Deep root systems associated with trees and shrubs help stabilize the backshore by binding soil and rock material. Lawns are less effective for this purpose in unstable areas and fertilizer necessary for their maintenance may contribute nutrients directly to the lake. Plant species approved by the Agency shall be selected when revegetating disturbed sites.

**SZ-1.4 CLASS 1 CAPABILITY SHOREZONES SHALL BE MANAGED CONSISTENT WITH THE GOALS AND POLICIES OF THE STREAM ENVIRONMENT ZONE SUBELEMENT.**

Class 1 shorezones (barrier beaches) are particularly vulnerable to both natural and unnatural perturbations. These areas typically support backshore wetlands and are usually linked hydrologically with the Lake. As such, Class 1 shorezones typically exhibit the characteristics of Stream Environment Zones. New development in Class 1 shorezones will be regulated to be consistent with policies of the Stream Environment Zone Subelement. These policies generally prohibit new development except for unusual circumstances involving the siting of public outdoor recreation facilities and public works projects. Replacement of existing coverage in barrier shorezones may be permitted in accordance with the policy for replacement of existing coverage in the Stream Environment Zone Subelement.

**SZ-1.5 DISTURBANCE OF CLASS 2 AND CLASS 3 CAPABILITY SHOREZONES SHALL BE MINIMIZED TO AVOID ACCELERATED BACKSHORE EROSION OR CLIFF COLLAPSE.**

Class 2 and Class 3 shorezones are typically steep and have high erosion potential. No activity should be undertaken which is likely to accelerate or initiate backshore erosion.

**SZ-1.6 LOW TO MODERATE INTENSITY DWELLING AND RECREATIONAL USES SHOULD BE ALLOWED IN THE STABLE AND HIGH CAPABILITY BACKSHORE AREAS OF CLASS 4 AND 5 CAPABILITY SHOREZONES.**

The overall capability of Class 4 shorezones is severely limited by the unstable nature of the actual shoreline, beaches, and crumbling cliffs. Vegetation preservation and restricted development are the best means for protecting the unstable rock and soil materials. The erosion, mass movement potential, and rocky ground of Class 5 shorezones limit the construction potential of these sites. Low to moderate recreational development is the best use, where gradual slopes permit.

**SZ-1.7 WATER DEPENDENT RECREATIONAL FACILITIES AND RESIDENTIAL BUILDINGS ARE ACCEPTABLE USES IN CLASS 6, 7, AND 8 CAPABILITY SHOREZONES SO LONG AS SUCH USES (1) PROVIDE FOR THE NATURAL EQUILIBRIUM OF THE SHORELINE INTERFACE, (2) DO NOT ACCELERATE NEARSHORE SHELF EROSION, (3) MINIMIZE DISTURBANCE OF VEGETATION, (4) CONSIDER VISUAL AMENITIES, AND (5) COMPLY WITH OTHER RELEVANT POLICIES OF THIS SUBELEMENT.**

Class 8 shorezones offer the highest capability for development due to their relative resilience to perturbations. Class 6 and Class 7 shorezones are less capable of tolerating disturbances, but still provide suitable development potential when the uses allow for minimum site disturbance.

**SZ-1.8      STREAM CHANNEL ENTRANCES TO THE LAKE SHALL BE MAINTAINED TO ALLOW UNOBSTRUCTED ACCESS OF FISHES TO UPSTREAM SPAWNING SITES.**

Barriers to upstream migration of fish may arise either from actual physical barriers or from disturbances. Activities or structures that pose as upstream barriers are not permitted uses in stream mouths.

**SZ-1.9      THE AGENCY SHALL REGULATE THE PLACEMENT OF NEW PIERS, BUOYS, AND OTHER STRUCTURES IN THE FORESHORE AND NEARSHORE TO AVOID DEGRADATION OF FISH HABITATS, CREATION OF NAVIGATION HAZARDS, INTERFERENCE WITH LITTORAL DRIFT, INTERFERENCE WITH THE ATTAINMENT OF SCENIC THRESHOLDS, AND OTHER RELEVANT CONCERNS.**

The Agency shall conduct studies, as necessary, to determine potential impacts to fish habitats and apply the results of those studies and previous studies on shoreline erosion and shorezone scenic quality in determining the number of, location of, and standards of construction for facilities in the nearshore and foreshore.

**SZ-1.10     PROVISIONS SHOULD BE MADE TO ALLOW MULTIPLE-USE PIERS WHEN SUCH USES ARE INTENDED TO REDUCE THE NUMBER OF SINGLE-USE PIERS EXISTING ON ADJOINING PROPERTIES.**

Fish habitat in the nearshore can be improved if habitat modifications and disturbances are minimized. Centralized activity centers are preferred to numerous points of activity dispersed along the entire shoreline.

**SZ-1.11     THE AGENCY SHALL REGULATE THE MAINTENANCE, REPAIR, AND MODIFICATION OF PIERS AND OTHER STRUCTURES IN THE NEARSHORE AND FORESHORE.**

Piers and other shoreline structures are particularly subject to damage and deterioration caused by the elements. Some fail to conform to the standards of the Agency. Maintenance, repair, and modification projects provide opportunities to remedy existing deficiencies. Ordinances shall set requirements, appropriate for the situation, to correct environmental and navigation problems.

**SZ-1.12     CASCADE AND FALLEN LEAF LAKES SHOULD BE EVALUATED AND CONSIDERED FOR LOW INTENSITY USES TO INCLUDE RESTRICTIONS ON THE USE AND SIZE OF BOAT MOTORS.**

Both of these lakes are relatively small when compared to Lake Tahoe and are, themselves, located in small basins. Use of powerboats on these lakes impacts a greater portion of the shorezone users because of the small size of the lakes and the fact that the noise is accentuated due to the bowl-shaped topography. Restrictions on motor size and use is a strategy to provide for the best use of these lakes while preserving their many different recreational qualities. El Dorado County, in cooperation with the USFS, private land owners, and other agencies, should evaluate the best uses for each lake.

**SZ-1.13 ALLOW PUBLIC ACCESS TO THE SHOREZONE WHERE LAWFUL AND FEASIBLE ON PUBLIC LANDS.**

There is considerable demand for public use of the Lake Tahoe shoreline. Increased opportunities to use the shoreline shall be provided when consistent with the tolerance levels of the shorezone. Improved access to the shorezone should be provided through public lands from expanded public ownership. Trails and support facilities in the backshore should be consistent with the goals and policies of the Recreation Element.

**SZ-1.14 PRIVATE MARINAS SHALL BE ENCOURAGED TO PROVIDE PUBLIC BOAT LAUNCHING FACILITIES.**

Boating access to Lake Tahoe would be increased under this strategy by encouraging all marina facilities to provide public launching facilities, where practical, and by providing incentives for those facilities which improve or provide such services.

**SZ-1.15 TRPA MAY DESIGNATE SHOREZONES AS MAN-MODIFIED. THE ASSIGNMENT OF A MAN-MODIFIED STATUS REQUIRES THE FOLLOWING FINDINGS:**

- A. Further development will not exacerbate the problems caused by development in shorezones that the original capability rating was meant to avoid;
- B. The area no longer exhibits the characteristics of the original shorezone capability rating;
- C. Restoration is infeasible;
- D. Further development can be mitigated off-site; and
- E. Mitigation is provided to at least partially offset the losses which were caused by modification of the shorezone.

## SCENIC

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Scenic quality is perhaps the most often identified natural resource of the Lake Tahoe Region. The Region affords views of a magnificent lake setting within a forested mountainous environment. The unique combination of visual elements provides for exceptionally high aesthetic values. The Bi-State Compact declares *"Maintenance of the social and economic health of the region depends on maintaining the significant scenic ... values provided by the Lake Tahoe Basin."* The Scenic Subelement establishes Goals and Policies intended to preserve and enhance the Region's unique scenic resources by advancing the scenic threshold standards.

### GOAL SR-1

#### **MAINTAIN AND RESTORE THE SCENIC QUALITIES OF THE NATURAL APPEARING LANDSCAPE.**

As with many of the Region's natural resources, the scenic qualities of the Region are vulnerable to change. Modifying the natural scenic features of the Region is a by-product of development, but such impacts can be minimized and mitigated. A coordinated effort that incorporates architectural design and location considerations in plan development and the project review process is a useful means for promoting scenic and aesthetic values. Policies to achieve this goal are consistent with the adopted environmental thresholds.

#### **POLICIES:**

##### **SR-1.1 ALL PROPOSED DEVELOPMENT SHALL EXAMINE IMPACTS TO THE IDENTIFIED LANDSCAPE VIEWS FROM ROADWAYS, BIKE PATHS, PUBLIC RECREATION AREAS, AND LAKE TAHOE.**

The impact of development on the landscape views and scenic qualities of the Tahoe Region should be considered as part of the project review process. Conditions should be placed on project approval in a manner capable of mitigating any likely impacts. Impacts shall be evaluated against specific management directions provided for each identified landscape view in the *Lake Tahoe Basin Scenic Resource Evaluation, 1983, Wagstaff and Brady*. In addition, the Scenic Quality Improvement Program (SQIP, adopted September, 1989) and *Design Review Guidelines for Scenic Quality (September, 1989)* are to provide direction for the design, review, and implementation of projects reviewed from identified roadways, bike paths, public recreation areas, and Lake Tahoe.

##### **SR-1.2 ANY DEVELOPMENT PROPOSED IN AREAS TARGETED FOR SCENIC RESTORATION OR WITHIN A UNIT HIGHLY SENSITIVE TO CHANGE SHALL DEMONSTRATE THE EFFECT OF THE PROJECT ON THE 1982 TRAVEL ROUTE RATINGS OF THE SCENIC THRESHOLDS.**

Projects proposed in areas sensitive to scenic degradation shall be analyzed to ensure that the scenic quality of the area is maintained or improved.

- SR-1.3 THE FACTORS OR CONDITIONS THAT CONTRIBUTE TO SCENIC DEGRADATION, AS SPECIFIED IN THE SCENIC QUALITY IMPROVEMENT PROGRAM (SQIP), NEED TO BE RECOGNIZED AND APPROPRIATELY CONSIDERED IN RESTORATION PROGRAMS, PLAN DEVELOPMENT, AND DURING PROJECT REVIEW TO IMPROVE SCENIC QUALITY.**

## **GOAL SR-2**

### **IMPROVE THE ACCESSIBILITY OF LAKE TAHOE FOR PUBLIC VIEWING.**

Lake Tahoe is the dominant landscape feature in the Region and opportunities to view the Lake from roadways should be improved.

#### **POLICIES:**

- SR-2.1 ENHANCE THE OPPORTUNITIES TO VIEW LAKE TAHOE BY DESIGNING VIEW CORRIDORS FROM HIGHWAYS.**

View corridors to the Lake should be incorporated into the design of urban areas as a strategy for preserving open space areas and improving views to the Lake.

- SR-2.2 SCENIC VIEWPOINTS FROM ROADWAYS SHOULD BE IDENTIFIED AND PULL-OFF FACILITIES PROVIDED ON PUBLIC PROPERTY, WHEREVER DESIRABLE.**

TRPA should work with California and Nevada Departments of Transportation and local governments to increase opportunities for motorists to park and view Lake Tahoe in order to limit the tendency or need to pull-off onto unimproved shoulders of roadways.

- SR-2.3 SIGNS SHOULD BE PLACED ALONG THE ROADWAYS, AS APPROPRIATE, TO IDENTIFY PHOTO SITES AND SCENIC TURNOUTS.**

Signing of photo sites and scenic viewpoints adequately notifies travelers of opportunities to view Lake Tahoe. This information will help visitors plan for stops and also will help reduce traffic congestion associated with slow moving vehicles.

- SR-2.4 TIME LIMITS FOR PARKING AT ROADSIDE TURNOUTS SHOULD BE ESTABLISHED.**

The length of stay at roadside turnouts should be limited depending upon the purpose of the turnout. For viewing and picture-taking purposes, parking should be short-term, as necessary, to minimize the number of parking spaces and provide for quick turnover.

## OPEN SPACE

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Open space is not a separate land use district but is a descriptive term that distinguishes land areas void of development and reserved for their natural values. Stream Environment Zones and forested lands in public ownership often adopt the title of open space. Such distinction is important for identifying land areas necessary to protect a particular resource or to provide a public benefit. On private lands, open space is a generic term that describes the undeveloped portion of lots where impervious coverage is not permitted as determined through the policies of this plan and its implementing ordinances. Important roles of open space in the Tahoe Region include preservation of vegetation, maintenance of scenic qualities, and watershed protection. The Bi-State Compact specifically requires open space to be included within the Agency's Conservation Plan.

### GOAL OS-1

#### **MANAGE AREAS OF OPEN SPACE TO PROMOTE CONSERVATION OF VEGETATION AND PROTECTION OF WATERSHEDS.**

Achieving this goal requires that open space be managed for its appropriate resource value or function so that vegetation preservation and water quality thresholds can be met.

#### **POLICIES:**

**OS-1.1     MANAGEMENT PRACTICES IN OPEN SPACE THAT PROVIDE FOR THE LONG TERM HEALTH AND PROTECTION OF THE RESOURCE(S) SHALL BE PERMITTED WHEN CONSISTENT WITH THE OTHER GOALS AND POLICIES OF THIS PLAN.**

Managing open space for its natural qualities and potential will generate numerous benefits related to such valuable resources as water, vegetation, wildlife, soil, and air. Management criteria are set forth by the other goals and policies of this plan.

**OS-1.2     THE BENEFICIAL USES OF OPEN SPACE SHALL BE PROTECTED BY REGULATING USES AND RESTRICTING ACCESS AS NECESSARY TO MAINTAIN SOIL PRODUCTIVITY AND ACCEPTABLE VEGETATIVE COVER.**

This policy restricts vehicular access and other intensive uses to those areas of authorized use or existing impervious coverage. Barriers will be required as necessary to prevent additional disturbance to the soil and vegetation resources.



## STREAM ENVIRONMENT ZONE

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**S**tream Environment Zones (SEZs) and related hydrologic zones consist of the natural marsh and meadowlands, watercourses and drainageways, and floodplains which provide surface water conveyance from upland areas into Lake Tahoe and its tributaries. Stream Environment Zones are determined by the presence of riparian vegetation, alluvial soil, minimum buffer strips, water influence areas, and floodplains. The plant associations of Stream Environment Zones constitute only a small portion of the Region's total land area, but are perhaps the single most valuable plant communities in terms of their role in providing for wildlife habitat, purification of water, and scenic enjoyment. Protection and restoration of Stream Environment Zones are essential for improving and maintaining the environmental amenities of the Lake Tahoe Region and for achieving environmental thresholds for water quality, vegetation preservation, and soil conservation.

### GOAL SEZ-1

#### **PROVIDE FOR THE LONG-TERM PRESERVATION AND RESTORATION OF STREAM ENVIRONMENT ZONES.**

The preservation of SEZs is a means for achieving numerous environmental thresholds. Policies that promote their maintenance, protection, and restoration are listed below.

#### **POLICIES:**

##### **SEZ-1.1 RESTORE ALL DISTURBED STREAM ENVIRONMENT ZONE LANDS IN UNDEVELOPED, UNSUBDIVIDED LANDS, AND RESTORE 25 PERCENT OF THE SEZ LANDS THAT HAVE BEEN DISTURBED, DEVELOPED, OR SUBDIVIDED.**

Many acres of SEZ lands were modified or disturbed before adoption of the Regional Plan. Considerable progress has been made to restore disturbed SEZ lands. TRPA shall continue to monitor the status of SEZ lands and identify restoration priorities and activities through actions and programs including the Environmental Improvement Program.

##### **SEZ-1.2 SEZ LANDS SHALL BE PROTECTED AND MANAGED FOR THEIR NATURAL VALUES.**

SEZ lands are scarce, as is associated riparian vegetation when compared to other plant communities. Because SEZs provide many beneficial functions (especially pertaining to water quality) only forest management practices, stream improvement programs, habitat restoration projects and those special provisions provided for in Policy SEZ-1.5 below are permissible uses.

**SEZ-1.3 GROUNDWATER DEVELOPMENT IN SEZ LANDS SHALL BE DISCOURAGED WHEN SUCH DEVELOPMENT COULD POSSIBLY IMPACT ASSOCIATED PLANT COMMUNITIES OR INSTREAM FLOWS.**

Withdrawal of water from SEZ lands may lower surface and ground waters and, by so doing, alter plant composition of the riparian vegetation and reduce instream flows. Groundwater proposals in SEZs and riparian plant communities will be evaluated against those concerns.

**SEZ-1.4 GOLF COURSES IN STREAM ENVIRONMENT ZONES SHALL BE ENCOURAGED TO RETROFIT COURSE DESIGN AND IMPLEMENT FERTILIZER MANAGEMENT PLANS TO PREVENT RELEASE OF NUTRIENTS TO ADJOINING GROUND AND SURFACE WATERS.**

A combination of strategies to include fertilizer application standards and course redesign may be necessary to control off-site nutrient release from golf course fairways and greens.

**SEZ-1.5 NO NEW LAND COVERAGE OR OTHER PERMANENT LAND DISTURBANCE SHALL BE PERMITTED IN STREAM ENVIRONMENT ZONES EXCEPT FOR THOSE USES AS NOTED IN A, B, C, D, E AND F BELOW:**

- A. Public outdoor recreation facilities not specified in subsection F below are permissible uses in Stream Environment Zones if:
  - i. The project is a necessary part of a public agency's long range plans for public outdoor recreation;
  - ii. The project is consistent with the recreation element of the Regional Plan;
  - iii. The project, by its very nature, must be sited in a Stream Environment Zone;
  - iv. There is no feasible alternative which would reduce the extent of encroachment in Stream Environment Zones;
  - v. The impacts are fully mitigated;
  - vi. Stream Environment Zone lands are restored in the amount of 1.5 times the area of Stream Environment Zone which is disturbed or developed by the project.

To the fullest extent possible, recreation facilities must be sited outside of Stream Environment Zones. Some recreation facilities, such as river access points or stream crossings for hiking trails, by their very nature require some encroachment of Stream Environment Zones. However, the six-part test established by this policy allows encroachment into SEZs where such encroachment is essential for public outdoor recreation and precautions are taken to ensure that Stream Environment Zones are protected to the fullest extent possible. The restoration requirements of this policy can be accomplished on-site or off-site, and shall be in lieu of any coverage transfer or coverage mitigation provisions elsewhere in this plan.

- B. Public service facilities are permissible uses in Stream Environment Zones if:
- i. The project is necessary for public health, safety, or environmental protection;
  - ii. There is no reasonable alternative, including spans, which avoids or reduces the extent of encroachment in Stream Environment Zones;
  - iii. The impacts are fully mitigated; and
  - iv. Stream Environment Zone lands are restored in the amount of 1.5 times the area of Stream Environment Zone which is disturbed or developed by the project.

Development within Stream Environment Zones is not consistent with the goal of managing Stream Environment Zones for their natural qualities and shall generally be prohibited except under extraordinary circumstances involving public works. Each circumstance shall be evaluated based on the conditions of this policy. The restoration requirements of this policy can be accomplished on-site or off-site, and shall be in lieu of any coverage transfer or coverage mitigation provisions elsewhere in this plan.

- C. Projects which require access across Stream Environment Zones to otherwise buildable sites are permissible in SEZs if:
- i. There is no reasonable alternative, which avoids or reduces the extent of encroachment in the SEZ;
  - ii. The impacts are fully mitigated; and
  - iii. SEZ lands are restored in the amount of 1.5 times the area of Stream Environment Zone which is disturbed or developed by the project.

The restoration requirements can be accomplished on-site or off-site, and shall be in lieu of any coverage transfer or coverage mitigation provisions elsewhere in this plan.

- D. New development may be permitted in man-modified Stream Environment Zones where:
- i. The area no longer exhibits the characteristics of a Stream Environment Zone;
  - ii. Further development will not exacerbate the problems caused by development in Stream Environment Zones;
  - iii. Restoration is infeasible; and
  - iv. Mitigation is provided to at least partially offset the losses which were caused by modification of the Stream Environment Zones.

- E. Stream Environment Zone restoration projects and erosion control projects.
- F. Non-Motorized Public trails are allowed in Stream Environment Zones, subject to siting and design requirements that minimize and mitigate impacts, as specified in the Code of Ordinances.

**SEZ-1.6 REPLACEMENT OF EXISTING COVERAGE IN STREAM ENVIRONMENT ZONES MAY BE PERMITTED WHERE THE PROJECT WILL REDUCE IMPACTS ON STREAM ENVIRONMENT ZONES AND WILL NOT IMPEDE RESTORATION EFFORTS.**

Existing structures in Stream Environment Zones may be repaired or rebuilt.

Minor reconstruction may be permitted so long as drainage improvements, protection of the Stream Environment Zone from disturbances, or other measures are carried out which provide a net benefit to the area's capacity to serve as a naturally-functioning Stream Environment Zone. Major reconstruction or replacement may also be permitted if there is a net benefit to the Stream Environment Zone and if the replacement or reconstruction is consistent with Stream Environment Zone restoration programs.

**SEZ-1.7 WHERE FEASIBLE, ENCOURAGE AND INCENTIVIZE THE REMOVAL OR RETROFITTING OF EXISTING STREAM CORRIDOR IMPEDIMENTS TO HELP REESTABLISH NATURAL CONDITIONS AND ALLOW FOR THE EVOLUTION OF NATURAL FLUVIAL PROCESSES (SUCH AS STREAM MIGRATION) WITHIN SEZ LANDS.**

**SEZ-1.8 ENCOURAGE AND SUPPORT PUBLIC ACQUISITION OF SEZ LANDS BY LAND BANKS AND PUBLIC ENTITIES IN ORDER TO RESTORE, RETIRE COVERAGE ON, AND DEED RESTRICT SEZ LANDS FOR PROTECTION FROM FUTURE DEVELOPMENT AND DISTURBANCE.**

## CULTURAL

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**T**he Tahoe Region has a rich historical background that began prior to the arrival of Caucasian settlers. Remnants of Tahoe's past exist in the form of Native American camps and trails, way stations, mansions, and resorts that were built by early settlers. These and other historical resources often come in conflict with competing interests that threaten their preservation. Tahoe's landmarks are valuable examples of its past and should be appropriately preserved.

### GOAL C-1

#### **IDENTIFY AND PRESERVE SITES OF HISTORICAL, CULTURAL AND ARCHITECTURAL SIGNIFICANCE WITHIN THE REGION.**

The Tahoe Region has a heritage that should be recognized and appropriately protected. Due to the harsh weather conditions, changing development standards, and changing uses of the Region, many structures that had significant historical or architectural value have been destroyed or lost.

#### **POLICIES:**

**C-1.1 HISTORICAL OR CULTURALLY SIGNIFICANT LANDMARKS IN THE REGION SHALL BE IDENTIFIED AND PROTECTED FROM INDISCRIMINATE DAMAGE OR ALTERATION.**

TRPA will confer with local, state and federal agencies to maintain a list of significant historical, architectural, and archaeological sites within the Region that have been identified by applicable agencies. Special review criteria will be established to protect such designated sites in cooperation with property owners.

**C-1.2 SITES AND STRUCTURES DESIGNATED AS HISTORICALLY, CULTURALLY, OR ARCHAEOLOGICALLY SIGNIFICANT SHALL BE GIVEN SPECIAL INCENTIVES AND EXEMPTIONS TO PROMOTE THE PRESERVATION AND RESTORATION OF SUCH STRUCTURES AND SITES.**

# ENERGY

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Conservation is important in order to decrease the consumption and cost of our non-renewable energy resources, such as fossil fuels. Development of alternative energy sources also represents a solution to the supply/cost dilemma. This Subelement promotes conservation programs and adjusting to alternative energy sources in the Region.

## GOAL E-1

### **PROMOTE ENERGY CONSERVATION PROGRAMS AND DEVELOPMENT OF ALTERNATIVE ENERGY SOURCES TO LESSEN DEPENDENCE ON SCARCE AND HIGH-COST ENERGY SUPPLIES.**

There are a number of ways to address the energy issue. Acceptable strategies are those that promote energy conservation while maintaining the natural qualities of the Tahoe Region.

#### **POLICIES:**

##### **E-1.1 ENCOURAGE RECYCLING OF WASTE PRODUCTS.**

Reusable waste products such as newspaper and aluminum cans should be targeted for recycling by providing a coordinated program of collection.

##### **E-1.2. DEVELOPMENT OF ALTERNATIVE ENERGY SOURCES SHOULD BE ENCOURAGED WHEN SUCH DEVELOPMENT IS BOTH TECHNOLOGICALLY AND ENVIRONMENTALLY FEASIBLE.**

A variety of techniques for providing alternative energy sources are both technologically and economically feasible. Environmentally acceptable techniques are encouraged.

##### **E-1.3. ENVIRONMENTAL IMPACTS TO THE FISHERY, INSTREAM FLOWS, AND SCENIC QUALITY OF ALL PROPOSED HYDROELECTRIC PROJECT SITES SHALL BE CONSIDERED TOGETHER WITH OTHER ENVIRONMENTAL CONSIDERATIONS.**

Dams and other water diversion facilities often impact the stream fishery. Project proposals must consider the impact on the resident and migratory fishery and adequately mitigate all significant adverse impacts.

##### **E-1.4 IMPLEMENT ENERGY SAVING MEASURES OF THE AIR QUALITY SUBELEMENT.**

These policies complement goals to improve the Region's air quality and to reduce local consumption of energy.



# CHAPTER 5

## Recreation

## Element

**T**he Recreation Element of the Regional Plan provides for the development, utilization, and management of the recreational resources of the Region, among which include wilderness and forested lands, parks, riding and hiking trails, beaches, playgrounds, marinas, skiing areas, and other recreational facilities. Specific activities occur as a part of the recreational opportunity provided within the Lake Tahoe Region. While many activities may take place in dispersed areas without benefit of constructed facilities, other activities require the use of developed facilities. Dispersed recreational activities include hiking, riding, cross country skiing, and back country camping. Developed recreational facilities include such facilities as campgrounds, visitor information centers, boat launching and marina facilities, and downhill ski areas. Urban recreation includes such facilities as day use areas, recreation centers, and golf courses, participant sports facilities and sport assembly. Urban recreation is normally provided in urban areas and is primarily intended to serve local needs. Dispersed recreation use normally takes place in the rural portions of the Region while developed recreation is provided in both rural and urban settings.

Policy direction for recreational development in the Lake Tahoe Region is provided, in part, by policy statements adopted as environmental thresholds by the TRPA Governing Board:

### **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 Region capacity for outdoor recreation is available to the general public.**

The goals and policies of the Recreation Element are expected to achieve the intent of the thresholds over the life of the plan by ensuring that recreational opportunities keep pace with public demand, that recreational facilities remain high on the development priority list, and that the quality of the outdoor recreational experience will be maintained.

## **GOAL R-1**

### **ENCOURAGE OPPORTUNITIES FOR DISPERSED RECREATION WHEN CONSISTENT WITH ENVIRONMENTAL VALUES AND PROTECTION OF THE NATURAL RESOURCES.**

Dispersed recreation involves such activities as hiking, jogging, primitive camping, nature study, fishing, cross country skiing, rafting/kayaking, and swimming. All these activities require a quality resource base and some degree of solitude. Achieving this goal will require commitments to develop support facilities and provide access such as trails, trailheads, restrooms in heavily used areas, and some hardening to protect the land.

#### **POLICIES:**

##### **R-1.1 LOW DENSITY RECREATIONAL EXPERIENCES SHALL BE PROVIDED ALONG UNDEVELOPED SHORELINES AND OTHER NATURAL AREAS, CONSISTENT WITH THE TOLERANCE CAPABILITIES AND CHARACTER OF SUCH AREAS.**

Consistent with attainment and maintenance of environmental thresholds, use and access to undeveloped publicly owned segments of Lake Tahoe's shoreline, such as the U. S. Forest Service beaches in Carson and Washoe Counties, can be increased by providing or utilizing transportation systems such as buses, shuttles, and parking and pull-out facilities which link to trail systems along the public owned portions of the shoreline. The establishment of trails and transportation facilities must be compatible with the tolerance capability and special resource and recreation values of the planning area. In some instances, it may be desirable to decrease the use in areas where those values are threatened.

##### **R-1.2 AREAS SELECTED FOR NATURE STUDY AND WILDLIFE OBSERVATION SHALL BE APPROPRIATELY REGULATED TO PREVENT UNACCEPTABLE DISTURBANCE OF THE HABITAT AND WILDLIFE.**

To prevent losing resource areas for study or observation, of attraction by disturbances that would either directly or indirectly impact the habitat or influence the behavior of the wildlife shall be limited. Controls might include observation boundaries, limits on the number of users, or total exclusion.

##### **R-1.3 TRAIL SYSTEMS FOR HIKING AND HORSEBACK RIDING SHALL BE EXPANDED TO ACCOMMODATE PROJECTED DEMANDS AND PROVIDE A LINK WITH MAJOR REGIONAL OR INTERSTATE TRAILS.**

Local and regional surveys suggest that additional trails may be necessary to satisfy public demand. New trail construction for purposes of hiking, horseback riding, and walking shall be allowed throughout the Lake Tahoe Region in planning areas where there is allowable land coverage and base facilities. Trails will be accommodated in areas of excess coverage through a coverage replacement program.



**R-1.4 EXISTING TRAILS THAT ARE EITHER UNDERUTILIZED OR LOCATED IN ENVIRONMENTALLY-SENSITIVE AREAS SHALL BE RELOCATED TO ENHANCE THEIR USE AND TO PROTECT NATURAL RESOURCES.**

Trails that adversely impact a valuable resource or aggravate other environmental concerns should be either redesigned to mitigate impacts or relocated. Trails that are underutilized or not maintained should be appropriately restored.

**R-1.5 OFF-ROAD VEHICLE USE IS PROHIBITED IN THE LAKE TAHOE REGION EXCEPT ON SPECIFIED ROADS, TRAILS, OR DESIGNATED AREAS WHERE THE IMPACTS CAN BE MITIGATED.**

Off-road vehicles are creating erosion and trailhead road maintenance problems throughout the Region. This policy would prohibit the use of motorized vehicles in areas other than those designated for such use. Areas for this form of recreation shall be determined in cooperation with off-road vehicle clubs, the U.S. Forest Service, county and state governments, and this Agency. Continued use of designated areas will depend on compliance with this policy and the ability to mitigate significant impacts.

## **GOAL R-2**

### **PROVIDE HIGH-QUALITY RECREATIONAL OPPORTUNITIES.**

Numerous opportunities exist in the Tahoe Region to provide varied and quality recreational experiences. High-quality recreational opportunities often depend on limiting conflicts between uses and ensuring that uses are compatible with affected resources.

#### **POLICIES:**

**R-2.1 WILDERNESS AND OTHER UNDEVELOPED AND ROADLESS AREAS SHALL BE MANAGED FOR LOW-DENSITY USE.**

Natural areas with limited road access are ideal for dispersed recreational activities keyed to solitude and appreciation of wilderness values. Such areas offer unique qualities best suited to such activities as primitive camping, hiking, fishing, and nature study.

**R-2.2 SEPARATE USE AREAS SHALL BE ESTABLISHED FOR THE DISPERSED WINTER ACTIVITIES OF SNOWMOBILING, CROSS-COUNTRY SKIING AND SNOWSHOEING WHEN CONFLICTS OF USE EXIST.**

Conflicts of interest and competition for limited resources can detract from the recreational experience. The most vivid example of such a conflict involves the simultaneous use of snow-covered meadows by both cross country skiers and snowmobiles. This policy will establish separate use zones as a strategy to minimize conflicts.

**R-2.3 NEARSHORE/FORESHORE STRUCTURES SHOULD BE APPROPRIATELY LOCATED TO MINIMIZE IMPACTS TO RECREATIONAL BOATING AND TOP LINE FISHING.**

Excellent recreational fishing is possible in the nearshore of Lake Tahoe. Fish concentrate in this zone due to favorable habitat conditions. To the extent feasible, buoys and other nearshore structures in areas of prime fish habitats should be located to provide for safe navigation through this zone.

**GOAL R-3**

**PROVIDE A FAIR SHARE OF THE TOTAL BASIN CAPACITY FOR OUTDOOR RECREATION.**

This goal addresses the need to reserve capacity for recreation-oriented types of development. Capacity will be reserved in terms of water supply, land coverage, and air and water quality. Public roads and transportation systems shall be managed to provide service to outdoor recreation areas.

**POLICIES:**

**R-3.1 ALL EXISTING RESERVATIONS OF SERVICES FOR OUTDOOR RECREATION SHALL CONTINUE TO BE COMMITTED FOR SUCH PURPOSES.**

The purpose of this policy is to recognize existing reserve commitments for outdoor recreation, such as the reservation of sewage capacity by the U. S. Forest Service, and to ensure such commitments are not lost or diverted to interests other than recreation.

**R-3.2 WHEN REVIEWING PROJECTS THAT COMMIT SIGNIFICANT RESOURCES OR SERVICES TO NON-OUTDOOR RECREATIONAL USES, TRPA SHALL BE REQUIRED TO MAKE WRITTEN FINDINGS THAT SUFFICIENT RESOURCE CAPACITY REMAINS TO OBTAIN THE RECREATION GOALS AND POLICIES OF THIS PLAN.**

Based on estimated recreational development permitted by this plan, the Agency shall specify "fair share" estimates for the Region and for local areas of critical services and resources. No non-recreational projects may be approved that would rely on the utilization of such reserved capacities.

**R-3.3 PROVISIONS SHALL BE MADE FOR ADDITIONAL DEVELOPED OUTDOOR RECREATION FACILITIES CAPABLE OF ACCOMMODATING 6,114 PAOT IN OVERNIGHT FACILITIES AND 6,761 PAOT IN SUMMER DAY USE FACILITIES AND 12,400 PAOT IN WINTER DAY-USE FACILITIES.**

To assure that the fair share of remaining capacity is allocated to outdoor recreation, agencies that have responsibility for such facilities and activities have collectively estimated the opportunities and needs as reflected in the policy. Ability to build depends on availability of public funds or the willingness of private investors. Therefore, scheduling is not possible for this plan. It is estimated that 11 percent of the capacity may be developed in the first 5 to 10 years.

## **GOAL R-4**

### **PROVIDE FOR THE APPROPRIATE TYPE, LOCATION, AND RATE OF DEVELOPMENT OF OUTDOOR RECREATIONAL USES.**

The appropriate type of outdoor recreational development should depend on demonstrated need. The rate of development should be responsive to demand. The location of facilities should be responsive to both environmental concerns and site amenities.

#### **POLICIES:**

##### **R-4.1 EXPANSION OF RECREATIONAL FACILITIES AND OPPORTUNITIES SHOULD BE IN RESPONSE TO DEMAND.**

This strategy provides for expansion of existing recreational facilities and opportunity for development of new facilities if they meet environmental thresholds. Opportunity may be expanded to respond to public need if physical resources are available and traffic mitigation measures can be implemented.

##### **R-4.2 BIKE TRAILS SHALL BE EXPANDED TO PROVIDE ALTERNATIVES FOR TRAVEL IN CONJUNCTION WITH TRANSPORTATION SYSTEMS.**

This strategy would encourage construction of additional trail systems for bicycling. Emphasis would be on expansion near urban areas to help establish alternative modes of travel to help reduce vehicle miles of travel.

##### **R-4.3 PUBLIC BOAT LAUNCHING FACILITIES SHALL BE EXPANDED, WHERE APPROPRIATE, AND WHEN CONSISTENT WITH ENVIRONMENTAL CONSTRAINTS.**

There is a need for additional boat launching capacity on Lake Tahoe. This policy would encourage expansion of existing facilities or conversion of private facilities to allow public use. Incentives for redevelopment or conversion of existing facilities to provide expansion of public use will be provided in areas where these opportunities exist.

##### **R-4.4 PRIVATE MARINAS SHALL BE ENCOURAGED TO PROVIDE PUBLIC BOAT LAUNCHING FACILITIES.**

This policy would increase boat access to Lake Tahoe by encouraging marina facilities to provide public launching facilities, where practical, and provide incentives to those facilities which improve or provide such services.

##### **R-4.5 NEW CAMPGROUND FACILITIES SHALL BE LOCATED IN AREAS OF SUITABLE LAND CAPABILITY AND IN PROXIMITY TO THE NECESSARY INFRASTRUCTURE.**

This strategy would promote the siting of new campgrounds where the least environmental impact can be expected and where the necessary roads and services are easily accessible. Actual site selection will be guided by the policies of this plan and the other plans of federal and state agencies.

**R-4.6 EXISTING RECREATIONAL FACILITIES IN SOME SENSITIVE AREAS, EXCEPT THOSE THAT ARE SLOPE DEPENDENT SUCH AS DOWNHILL SKIING, SHALL BE ENCOURAGED, THROUGH INCENTIVES, TO RELOCATE TO HIGHER CAPABILITY LANDS.**

This strategy would allow all existing recreational facilities located in sensitive areas (Land Capability Districts 1a, 1b, 1c, 2, and 3) to relocate in better capability areas. This action is intended to reduce coverage on sensitive lands and eliminate associated impacts.

**R-4.7 DEVELOPMENT OF DAY-USE FACILITIES SHALL BE ENCOURAGED IN OR NEAR ESTABLISHED URBAN AREAS, WHENEVER PRACTICAL.**

Day-use facilities are generally in high demand close to urban areas. The proximity to urban services provides the user with nearby conveniences such as stores and overnight accommodations. Residents also are able to take advantage of these day-use facilities without travelling excessive distances from their homes. This policy would encourage the siting of additional day-use facilities near population centers or where the particular use or service is best suited.

**R-4.8 VISITOR INFORMATION FACILITIES SHALL BE LOCATED, TO THE EXTENT FEASIBLE, NEAR ENTRY POINTS TO THE REGION OR CLOSE TO URBAN AREAS.**

These facilities provide a valuable service to the general public through the exchange of information and by providing travelers with directions to major attractions. The siting of these facilities should complement objectives to reduce the vehicle miles of travel in the Region.

**R-4.9 PARKING ALONG SCENIC CORRIDORS SHALL BE RESTRICTED TO PROTECT ROADWAY VIEWS AND ROADSIDE VEGETATION.**

This policy would reduce roadside parking by providing off-road parking "satellites" in conjunction with roadside barriers.

**R-4.10 TRANSIT OPERATIONS, INCLUDING SHUTTLE-TYPE BOAT SERVICE, SHOULD SERVE MAJOR RECREATION FACILITIES AND ATTRACTIONS.**

Vehicle trips related to the use of recreation areas or facilities can be mitigated by the use of transit systems. In some areas, the availability of parking is the limiting factor to recreational use of the area. Transit service could allow more people to utilize existing areas without expanding of auto parking or increasing vehicle trips. Decreased auto use in many areas would enhance the recreational experience.

**R-4.11 EXPANSION OF EXISTING SKI FACILITIES MAY BE PERMITTED BASED ON A MASTER PLAN FOR THE ENTIRE SKI AREA. THE PLAN MUST DEMONSTRATE (1) CONSISTENCY WITH THE OTHER GOALS AND POLICIES OF THIS PLAN AND THE REQUIREMENTS OF THE BI-STATE COMPACT, (2) THAT THE EXPANSION IS CONSISTENT WITH THE AVAILABILITY OF ACCOMMODATIONS AND INFRASTRUCTURES TO SUPPORT VISITORS WHEN THEY ARE OFF THE SKI AREA, AND (3) EXPANSION OF EXISTING PARKING FACILITIES FOR DAY USE DOES NOT OCCUR.**

The Lake Tahoe Region excels in snow and topographic conditions for alpine skiing. Existing tourist accommodations can adequately support large numbers of destination skiers. Also in place is a transportation network that is being expanded and improved to handle the large summer time population. This transportation system also could be managed to accommodate wintertime use in the Region. Development of recreation opportunities emphasizing winter sport activities can, therefore, improve the year-round efficiency of both the transportation system and tourist accommodations. However, alpine skiing does impact large areas of low capability land. Often the areas include over-steepened slopes, fragile soils, sparse vegetation, and Stream Environment Zones. In addition, day use skiers, in particular, contribute significantly to local and area-wide traffic congestion. Plans to increase skiing capacity would therefore require careful consideration of on-site impacts as well as off-site impacts on transportation systems.

All ski area expansion will be evaluated based on a Master Plan which, at a minimum, includes consideration of each item listed in the policy. The Master Plan will assist in designing the most efficient operation with the least environmental disturbance, and will direct phased development where it is appropriate. Since automobile access to and parking at ski area base facilities has been the source of many problems, new facilities should be planned to avoid these problems. Enlargement or construction of new facilities to provide shelter, sanitation, food service, and first aid would be permitted to serve skiers on the mountain, but enlarged parking lots would not be permitted.

Although there are numerous undeveloped areas suitable for skiing, a finding has been made that expansion of existing areas within and adjacent to the Region can meet future demand. This would not preclude construction of satellite parking provided it is part of the transportation facilities otherwise provided for in this plan.

## **GOAL R-5**

### **PROTECT NATURAL RESOURCES FROM OVERUSE AND RECTIFY INCOMPATIBILITY AMONG USES.**

Overcrowding of facilities or areas can lead to the deterioration of the recreation resource and recreational experience. In the same manner, the quality of the recreational experience can be affected by conflicting uses within the same area. Strategies that address these issues are listed below.

#### **POLICIES:**

##### **R-5.1 RECREATION DEVELOPMENT IN THE TAHOE REGION SHALL BE CONSISTENT WITH THE SPECIAL RESOURCES OF THE AREA.**

The physical and biological characteristics of the Tahoe Region combine to create a unique variety of recreational opportunities. These qualities define the types of recreational activities that are compatible with the Region's natural features. Those activities that can best be served elsewhere or which are incompatible with the Region's natural qualities should be avoided.

**R-5.2 REGULATE INTENSITY, TIMING, TYPE, AND LOCATION OF USE TO PROTECT RESOURCES AND SEPARATE INCOMPATIBLE USES.**

This policy would regulate the intensity and type of recreation use in specific locations. Regulations will be adopted and enforced dealing with the types of use and numbers of people at one time permitted for various activities. Timing of permitted uses would be closely regulated to avoid conflict with other resources required by fish, wildlife, and vegetation. Incompatible activities between visitors would be separated by establishing use areas for dispersed recreation separate from developed recreation areas. This strategy would examine overall demand and planned capacity and determine site specific areas within the Region for the various demands to be met.

**GOAL R-6**

**PROVIDE FOR THE EFFICIENT USE OF OUTDOOR RECREATION RESOURCES.**

Some recreation attractions in the Region, such as ski areas, beaches, campgrounds, and picnic areas, experience wide fluctuations in seasonal and weekday use. This goal would attempt to promote a more balanced use of certain facilities and sites on a year-round and weekly basis.

**POLICIES:**

**R-6.1 PROMOTE THE USE OF UNDERUTILIZED RECREATION AREAS THROUGH PROGRAMS THAT IMPROVE THE PUBLIC AWARENESS OF RECREATION OPPORTUNITIES AND THROUGH AN EXPANDED WATER AND INLAND TRANSIT SYSTEM.**

Visitor centers and other public information sources can help inform visitors of the recreation opportunities in the Region and regular transit service can help facilitate the use of lesser known or accessible sites.

**R-6.2 SEASONAL FACILITIES SHOULD PROVIDE OPPORTUNITIES FOR ALTERNATIVE USES IN THE OFF-SEASON, WHEREVER APPROPRIATE.**

Seasonal facilities tend to be busy only during a particular time of year. Ski areas, for example, are busy in the winter, but much of the associated infrastructure is idle and unused during the summer. This policy would attempt to buffer the variations in use by permitting alternative uses of the facilities during the off-season.

**GOAL R-7**

**PROVIDE SUFFICIENT CAPACITY FOR LOCAL-ORIENTED FORMS OF OUTDOOR AND INDOOR RECREATION IN URBAN AREAS.**

The Tahoe Region has an abundance of recreational facilities that would more than accommodate the needs of local residents. However, these facilities are more regional in nature and cater to the visitors. The specialized recreational needs of the Tahoe resident need to be considered apart from the more general demands of the tourist.

**POLICIES:**

**R-7.1 RESERVE SUFFICIENT PUBLIC SERVICE AND FACILITY CAPACITY TO ACCOMMODATE ALL FORMS OF URBAN RECREATION.**

Urban-oriented types of recreation facilities require space and services much like any other developed facility. Areas that are suitable for these specialized facilities need to be identified, appropriately acquired, and managed by local government or service districts. The demand for such forms of recreation must be determined by local residents and local government.

**R-7.2 URBAN OUTDOOR RECREATIONAL FACILITIES LOCATED IN SENSITIVE AREAS SHOULD BE ENCOURAGED TO RELOCATE TO OTHER SUITABLE SITES.**

This strategy would provide incentives to relocate existing facilities outside sensitive areas such as Land Capability Districts 1a, 1b, 1c, 2, and 3.



# CHAPTER 6

## Public Services & Facilities Element

Existing residential, tourist, commercial, and other development in the Tahoe Region requires supporting infrastructure including water, sewer, and public health and safety programs. Additional development permitted under this plan creates the need for additional services. The Regional Plan must provide for an adequate level of public services and facilities consistent with the environmental thresholds and the other elements of the plan.

Under *Article (V)(C)(1)* of the *Tahoe Regional Planning Agency Bi-State Compact*, the Regional Plan must establish the location and scale, and means of providing the necessary services and public facilities.



## **GOAL PS-1**

### **PUBLIC SERVICES AND FACILITIES SHOULD BE ALLOWED TO UPGRADE AND EXPAND TO SUPPORT EXISTING AND NEW DEVELOPMENT CONSISTENT WITH THE REGIONAL PLAN.**

The intent of the Regional Plan is neither to stimulate nor to hinder development through the provision of public services and facilities. Rather, the plan attempts to provide for supportive public services and facilities consistent with the development anticipated under the plan.

#### **POLICIES:**

**PS-1.1 PUBLIC SERVICES AND FACILITIES SHOULD BE ALLOWED TO UPGRADE AND EXPAND CONSISTENT WITH THE LAND USE ELEMENT OF THE REGIONAL PLAN AND FEDERAL, STATE, AND LOCAL STANDARDS.**

**PS-1.2 EXPANSION OF PUBLIC SERVICES AND FACILITIES SHOULD BE PHASED IN TO MEET THE NEEDS OF NEW DEVELOPMENT WITHOUT CREATING INEFFICIENCIES FROM OVER-EXPANSION OR UNDER-EXPANSION.**

The Regional Plan provides for periodic evaluations of the capital improvements plan and attainment of environmental thresholds. These evaluations may lead to adjustments in the development management system which could affect the need for, and the timing of, expansion of public services and facilities. For this reason, prudent staging or phasing of expansion programs should be employed to minimize the risk of errors in sizing.

**PS-1.3 ALL NEW DEVELOPMENT SHALL EMPLOY APPROPRIATE DEVICES TO CONSERVE WATER AND REDUCE WATER CONSUMPTION. EXISTING DEVELOPMENT SHALL BE RETROFITTED WITH WATER CONSERVATION DEVICES ON A VOLUNTARY BASIS IN CONJUNCTION WITH A PUBLIC EDUCATION PROGRAM OPERATED BY THE UTILITY DISTRICTS.**

Water conservation will be necessary to comply with the limits of the Bi-state Compact (1969). The ability of the water purveyors in the Region to provide adequate water for domestic and other uses depends on water conservation programs. Coordination involving water issues should be pursuant to local, state, and federal law.

## **GOAL PS-2**

### **CONSIDER THE EXISTENCE OF ADEQUATE AND RELIABLE PUBLIC SERVICES AND FACILITIES IN APPROVING NEW DEVELOPMENT UNDER THE PLAN.**

To prevent the over-burdening of public services and facilities, all new development approvals consistent with the development priorities and the planning area statements also should consider the adequacy of services and facilities. It also will be necessary to monitor the ability of utility districts and other entities to provide public services and facilities.

## **POLICIES:**

### **PS-2.1 NO ADDITIONAL DEVELOPMENT REQUIRING WATER SHOULD BE ALLOWED IN ANY AREA UNLESS IT CAN BE DEMONSTRATED THAT THERE IS ADEQUATE WATER SUPPLY WITHIN AN EXISTING WATER RIGHT.**

This policy is necessary to prevent conflicts from arising between approved development and state water law. Conditional approvals may be appropriate in situations where the existence of a water right is uncertain.

### **PS-2.2 TRPA, WATER PURVEYORS, AND THE STATES SHOULD MONITOR THE USE OF WATER WITHIN THE TAHOE REGION AND EVALUATE CONFORMANCE WITH BI-STATE COMPACT (1969) WHICH ADDRESSES WATER DIVERSIONS IN THE REGION.**

It will be impossible to assess compliance with the California-Nevada Compact without a regular monitoring program. Such a program should be a cooperative venture of TRPA, the states, and the water purveyors.

### **PS-2.3 NO ADDITIONAL DEVELOPMENT REQUIRING WATER SHALL BE ALLOWED IN ANY AREA UNLESS THERE EXISTS ADEQUATE STORAGE AND DISTRIBUTION SYSTEMS TO DELIVER AN ADEQUATE QUANTITY AND QUALITY OF WATER FOR DOMESTIC CONSUMPTION AND FIRE PROTECTION.**

The simple existence of a water supply does not, by itself, guarantee the ability of the water purveyor to deliver adequate quantities of good quality water for domestic consumption and fire protection. These aspects are most commonly a function of system design, involving the distribution and storage of water. System design should take into account peak demands and necessary fire flows, pursuant to local, state, federal and utility district standards or Agency standards where no other standards apply.

## **GOAL PS-3**

### **PREVENT LIQUID AND SOLID WASTES FROM DEGRADING LAKE TAHOE AND THE SURFACE AND GROUNDWATERS OF THE REGION.**

Although this goal pertains to many of the policies included in the Water Quality Subelement, it also applies to the provision of public services and facilities.

## **POLICIES:**

### **PS-3.1 THE DISCHARGE OF MUNICIPAL OR INDUSTRIAL WASTEWATERS TO THE SURFACE AND GROUNDWATERS OF THE TAHOE REGION IS PROHIBITED, EXCEPT FOR EXISTING DEVELOPMENT DISCHARGING WASTEWATERS UNDER A STATE- OR TRPA-APPROVED DISPOSAL PLAN.**

This policy is a reiteration of state laws and existing TRPA policy to prevent the degradation of the water quality of the Region due to sewage discharges. Certain minor facilities already in existence have exemptions from this policy. TRPA will study the feasibility of minor reuse programs within the Region.

**PS-3.2 ALL SOLID WASTES SHALL BE EXPORTED FROM THE REGION. CONSOLIDATION AND TRANSFER METHODS SHALL BE DEVELOPED TO ACHIEVE A REDUCTION IN THE VOLUME OF WASTES BEING TRANSPORTED TO LANDFILLS.**

Because of their potentially harmful effects on water quality, solid wastes should be exported from the Region. To minimize the impacts of the requirement on air quality, a reduction in the volume of wastes should be achieved to bring about a corresponding reduction in the vehicle miles travelled by the export vehicles.

**PS-3.3 GARBAGE PICK-UP SERVICE SHALL BE MANDATORY THROUGHOUT THE REGION, AND WILL BE SO STRUCTURED AS TO ENCOURAGE CLEAN-UPS AND RECYCLING.**

Because of the fragile environment of the Tahoe Region, certain waste disposal practices may be required to ensure the maintenance of air quality, water quality, and scenic values. Waste disposal programs should be reviewed by local governments (e.g., TBAG) to provide incentives and remove disincentives for clean-up programs, composting, and recycling.

**GOAL PS-4**

**TO ENSURE PROTECTION OF THE PUBLIC HEALTH, SAFETY AND GENERAL WELFARE OF THE REGION, EDUCATIONAL AND PUBLIC SAFETY SERVICES SHOULD BE SIZED TO BE CONSISTENT WITH PROJECTED GROWTH LEVELS IN THIS PLAN.**

The Regional Plan will encourage educational and public safety services including police, fire, educational and health services to provide for protection of the public health safety and welfare. TRPA will coordinate programs with appropriate local, state and federal agencies to ensure that the planned growth will also be consistent with the ability to provide these services.

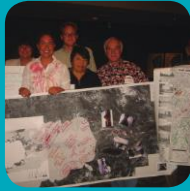
**POLICIES:**

**PS-4.1 THE IMPACT ON EDUCATIONAL AND PUBLIC SAFETY SERVICES SHALL BE CONSIDERED WHEN REVIEWING PROJECTS AND PLAN AMENDMENTS PROPOSED WITHIN THE REGION. TO THE EXTENT FEASIBLE, ADVERSE IMPACTS SHOULD BE MITIGATED AS PART OF THE REVIEW PROCESS.**

TRPA shall attempt to coordinate a Region-wide review process that will include the above considerations. Except for environmentally related impacts, TRPA intends to rely on local, state and federal agencies of expertise to ensure implementation of this policy.

**PS-4.2 EDUCATIONAL AND EMERGENCY SERVICE ORGANIZATIONS SHOULD ANTICIPATE AND PLAN FOR PROJECTED DEMANDS AND NEEDS CONSISTENT WITH THE REGIONAL PLAN AND ARE ENCOURAGED TO ADVISE THE AGENCY WHEN DEVELOPMENT POTENTIALS EXCEED CURRENT OR ANTICIPATED SERVICE CAPABILITIES OR CAPACITIES.**

TRPA and other relevant agencies will coordinate with social service agencies to help identify future demands and needs anticipated with implementation of the Plan. That information will be used to identify possible deficiencies and to develop appropriate strategies to maintain an acceptable level of service.



# CHAPTER 7

## Implementation Element

Implementation of the Regional Plan depends upon the success of multi-sector participants (federal, bi-state, local, and private) and a broad inter-agency partnership to support it. The Implementation Element provides for necessary commitment, coordination and development of collaborative management and financial programs. The Element also outlines a monitoring program to measure progress of plan implementation. The Subelements are: 1) Inter-Agency Partnerships, 2) Development and Implementation Priorities, 3) Financing, and 4) Monitoring and Evaluation.

## INTER-AGENCY PARTNERSHIPS

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The institutional responsibilities of plan development and implementation are shared among numerous agencies and individuals. This Subelement establishes a framework for the coordination, responsibilities, and commitments necessary to implement the goals and policies of the plan. The partnerships needed to perform planning, design, contracting, cost sharing, and evaluation can shift over time with the needs of each Plan Element and each Program.

### GOAL IAP-1

#### **COORDINATE ALL PLANNING AND DEVELOPMENT REVIEW ACTIVITIES WITH THE AFFECTED JURISDICTIONS AND AGENCIES.**

Implementation of the Regional Plan follows two broad approaches. The approaches range from establishing and enforcing regulatory standards of TRPA and other jurisdictions to establishing regional programs to be carried out by the affected jurisdictions and agencies. Successful implementation of the plan requires coordination of all phases of planning and program implementation among TRPA, the affected jurisdictions and the public.

#### **POLICIES:**

##### **IAP-1.1 TRPA SHALL IDENTIFY THE PLANNING AND REVIEW RESPONSIBILITIES OF LOCAL, STATE, AND FEDERAL JURISDICTIONS.**

This policy is consistent with Article VI(a) of the Bi-State Compact which states: *"Whenever possible, without diminishing the effectiveness of the Regional Plan, TRPA ordinances, rules, regulations and policies shall be confined to matters which are general and regional in application, leaving to the jurisdiction of the respective states, counties, and cities the enactment of specific and local ordinances, rules, regulations, and policies which conform to the Regional Plan."* General planning and implementation responsibilities are shared among TRPA, and local, state, and federal agencies as set forth in the Bi-State Compact, the Regional Plan, the Code of Ordinances or a Memorandum of Understanding.

##### **IAP-1.2 THE AGENCY SHALL PRESCRIBE BY ORDINANCE THOSE ACTIVITIES WHICH HAVE NO SUBSTANTIAL EFFECT ON THE LAND, AIR, SPACE, OR ANY OTHER NATURAL RESOURCES OF THE REGION. SUCH IDENTIFIED ACTIVITIES WILL BE EXEMPT FROM TRPA REVIEW AND APPROVAL.**

##### **IAP-1.3 THE AGENCY SHALL COORDINATE WITH LOCAL, STATE AND FEDERAL AGENCIES TO DEVELOP AREA PLANS AND CODES THAT CONFORM WITH THE REGIONAL PLAN. AREA PLANS MAY DELEGATE REVIEW AND APPROVAL AUTHORITY FOR ADDITIONAL DEVELOPMENT ACTIVITIES TO LOCAL, STATE AND FEDERAL AGENCIES, SUBJECT TO PROVISIONS OF POLICY LU-4.12 AND THE CODE OF ORDINANCES.**

**IAP-1.4 ALL PROJECTS PROPOSED IN THE REGION OTHER THAN THOSE TO BE REVIEWED AND APPROVED UNDER THE SPECIAL PROVISIONS OF THE BI-STATE COMPACT RELATING TO GAMING SHALL OBTAIN THE REVIEW AND APPROVAL OF THE AGENCY.**

This policy is consistent with Article VI(b) of the Bi-State Compact which states: *"No project other than those to be reviewed and approved under the special provisions of subdivisions (d), (e), (f) and (g) may be developed in the Region without obtaining the review and approval of the agency and no project may be approved unless it is found to comply with the Regional Plan and with the ordinances, rules and regulations enacted pursuant to subdivision (a) to effectuate that Plan."* A project is defined by the Bi-State Compact as... *"an activity undertaken by any person, including any public agency, if the activity may substantially affect the land, water, air, space or any other natural resources of the region."* However, it is the intent of the TRPA within the limits of the Bi-State Compact to coordinate project review functions with local, state, and federal agencies.

**IAP-1.5 NO PROJECT MAY BE APPROVED UNLESS IT IS FOUND TO COMPLY WITH THE REGIONAL PLAN; WITH ANY ORDINANCES, RULES, AND REGULATIONS ENACTED TO EFFECTUATE THE REGIONAL PLAN; AND NOT EXCEED THRESHOLDS.**

*Articles V (g) and VI (b)* of the Bi-State Compact, require findings to be adopted by ordinance, as set forth above, to ensure that projects under consideration will not adversely affect implementation of the Regional Plan and will not cause the environmental thresholds to be exceeded.

**IAP-1.6 TRPA, IN CONJUNCTION WITH OTHER AGENCIES OF JURISDICTION, SHALL DEVELOP AND ACTIVELY PURSUE AN EFFECTIVE ENFORCEMENT PROGRAM TO ENSURE COMPLIANCE WITH THE PLAN AND ORDINANCES OF THE AGENCY.**

**GOAL IAP-2**

**LEAD THE REGIONAL MULTI-SECTOR PARTNERSHIP TO IMPLEMENT THE ENVIRONMENTAL IMPROVEMENT PROGRAM AND OTHER PROGRAMS IDENTIFIED IN THIS PLAN.**

TRPA will collaborate with regional partners to seek commitments among the individuals and agencies responsible for specific functions pertaining to capital improvements and remedial programs. Memorandum of Understanding (MOUs) or other forms of agreements between TRPA and implementing agencies or partners will provide the coordination necessary to ensure efficient implementation of the plan.

**POLICIES:**

**IAP-2.1 APPROPRIATE ROLES AND RESPONSIBILITIES OF VARIOUS AGENCIES FOR IMPLEMENTING THE PLAN SHALL BE IDENTIFIED AND VERIFIED THROUGH PARTNERSHIP AGREEMENTS.**

## DEVELOPMENT AND IMPLEMENTATION PRIORITIES

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The Development and Implementation Priorities Subelement coordinates the implementation provisions to provide for effective management of the Region's resources and attain environmental thresholds. Reductions in fine sediments and nutrient loads to Lake Tahoe from remedial programs will improve water quality only if remedial measures keep pace with new loads from land coverage and disturbance permitted by the Plan. The timing and phasing of new development, redevelopment and remedial measures must be carefully linked to ensure steady progress toward the environmental thresholds. If BMPs and other water quality enhancement measures prove to be less effective than originally thought, further adjustments to development and remedial priorities will be required. The Monitoring and Evaluation Subelement provides for periodic monitoring of progress toward threshold standards and effectiveness of control strategies.

The plan also must provide incentives for correcting existing problems within the Region. Properly structured incentives can provide for broader participation in meeting regional goals and expedite desired improvements.

### GOAL DP-1

**DIRECT ALL RESIDENTIAL DEVELOPMENT FIRST TO THOSE AREAS MOST SUITABLE FOR DEVELOPMENT IN ACCORDANCE WITH ENVIRONMENTAL THRESHOLD CARRYING CAPACITIES AND OTHER CONSIDERATIONS, SUCH AS INFRASTRUCTURE CAPACITY AND PROGRESS TOWARD ACCOMPLISHING WATER QUALITY IMPROVEMENT PROGRAMS.**

#### POLICIES:

**DP-1.1 COMMENCING ON JANUARY 1, 1989, NEW SINGLE-FAMILY DWELLING CONSTRUCTION SHALL BE EVALUATED IN ACCORDANCE WITH IPES. THIS SYSTEM SHALL RANK ALL VACANT RESIDENTIAL PARCELS WITH RESPECT TO THEIR RELATIVE ENVIRONMENTAL SUITABILITY FOR DEVELOPMENT.**

**NEW RESIDENTIAL CONSTRUCTION SHALL BE SUBJECT TO THE ALLOCATION LIMITS SET FORTH IN POLICY DP-2.2 OF THIS SUBELEMENT.**

Details of IPES, including a rating system, shall be included in implementing ordinances.

**DP-1.2 TO APPROVE A PROJECT ON A PARCEL RATED AND RANKED BY IPES THE PARCEL MUST BE SERVED BY A PAVED ROAD, WATER SERVICE, SEWER SERVICE AND AN ELECTRICAL SERVICE. ORDINANCES SHALL SET FORTH PROVISIONS FOR THE WAIVER OF THE PAVED ROAD CRITERIA.**

### GOAL DP-2

**MANAGE DEVELOPMENT AND REDEVELOPMENT CONSISTENT WITH PROGRESS TOWARD MEETING ENVIRONMENTAL THRESHOLDS.**



**POLICIES:**

**DP-2.1 EVERY FOUR YEARS, TRPA SHALL CONDUCT AN IN DEPTH EVALUATION OF THE REGIONAL PLAN IN COMPARISON WITH PROGRESS TOWARD MEETING THE ENVIRONMENTAL THRESHOLD CARRYING CAPACITIES.**

It is the intent of this Plan to comply with the directives of the Compact and to be responsive to new evidence and changing conditions. Therefore, periodic evaluation is required. If progress toward the environmental threshold standards is not being made, TRPA shall consider making adjustments in one or more of the following areas: (1) rate of growth; (2) types of development permitted; (3) development requirements; (4) environmental improvement programs; (5) enforcement programs; (6) financial programs; and (7) any other appropriate element of the plan. These evaluations shall be conducted pursuant to established procedures and criteria set forth in this plan and the implementing ordinances. This review shall ensure that the Regional Plan, and all of its associated parts, are proceeding in conformance with the directives of the Bi-State Compact.

**DP-2.2 THE MAXIMUM AMOUNT OF RESIDENTIAL ALLOCATIONS, COMMERCIAL FLOOR AREA, TOURIST BONUS UNITS AND RESIDENTIAL BONUS UNITS THAT MAY BE RELEASED BEFORE DECEMBER 31, 2032 IS OUTLINED IN THE TABLE BELOW.**

| ALLOCATION AND DEVELOPMENT RIGHTS ACCOUNTING <sup>4</sup>   |                |                                       |                      |
|---|----------------|---------------------------------------|----------------------|
| ALLOCATIONS/ DEVELOPMENT RIGHTS   | USED 1987-2012 | REMAINING FROM 1987 PLAN <sup>1</sup> | 2013 ADDITIONS       |
| Residential Allocations   | 5,973          | 114                                   | 2600                 |
| Residential Bonus Units   | 526            | 874                                   | 600 <sup>2</sup>     |
| Tourist Bonus Units   | 58             | 342                                   | 0                    |
| Commercial Floor Area (Total square feet))  | 416,421        | 383,579                               | 200,000 <sup>3</sup> |
| Placer County   | 128,623        | 72,609                                |                      |
| Washoe County   | 87,906         | 2,000                                 |                      |
| Douglas County  | 45,300         | 36,250                                |                      |
| El Dorado County  | 15,250         | 36,150                                |                      |
| City of South Lake Tahoe  | 77,042         | 52,986                                |                      |
| TRPA Special Project and CEP Pool   | 62,300         | 183,584                               |                      |
| <b>Note 1:</b> 158,816 sq. ft. of Commercial Floor Area, 245 Residential Bonus Units and 90 Tourist Bonus Units have been reserved or allocated to projects (e.g., Community Enhancement Projects) that have not been permitted or permitted but not built are accounted for in the "Remaining from 1987 Plan" column. The 114 remaining residential allocations were distributed to local governments in 2011 and 2012, but have not been built. |                |                                       |                      |
| <b>Note 2:</b> 600 Residential Bonus Units shall be used only in Centers.   |                |                                       |                      |
| <b>Note 3:</b> 200,000 sf of CFA shall only be made available after the 383,579 sf of remaining CFA is exhausted.   |                |                                       |                      |
| <b>Note 4:</b> The columns "Used 1987-2012" and "Remaining from 1987" are estimates and not regulatory  |                |                                       |                      |

**REMAINING 1987 ALLOCATIONS ARE AVAILABLE FOR USE IN ACCORDANCE WITH REGIONAL PLAN AND CODE OF ORDINANCE PROVISIONS.**

**SUBJECT TO COMPLIANCE WITH REGIONAL PLAN POLICIES AND CODE OF ORDINANCES INCLUDING NOTE 3 ABOVE, TRPA WILL MAKE AVAILABLE UP**

**TO 20 PERCENT OF THE 2013 RESIDENTIAL AND COMMERCIAL LAND USE ALLOCATIONS EVERY FOUR YEARS, IN CONJUNCTION WITH THE 2012 REGIONAL PLAN UPDATE AND FUTURE UPDATES OF THE REGIONAL PLAN AND RTP.**

**TWO YEARS AFTER EACH RELEASE, TRPA SHALL MONITOR EXISTING AND NEAR-TERM LEVELS OF SERVICE ("LOS") AT INTERSECTIONS AND ROADWAYS TO EVALUATE COMPLIANCE WITH APPLICABLE POLICIES. SHOULD LOS PROJECTIONS INDICATE THAT APPLICABLE LEVEL OF SERVICE GOALS AND POLICIES WILL NOT BE MET, ACTIONS SHALL BE TAKEN TO MAINTAIN COMPLIANCE WITH LOS STANDARDS.**

**TO ENSURE THAT THE "VEHICLE MILES TRAVELLED" THRESHOLD STANDARD IS MAINTAINED, TWO YEARS AFTER EACH RELEASE, THE AGENCY SHALL MONITOR ACTUAL ROADWAY TRAFFIC COUNTS AND FORECAST VEHICLE MILES TRAVELLED FOR THE NEXT RELEASE OF ALLOCATIONS. NEW CFA AND RESIDENTIAL ALLOCATION RELEASES WILL BE CONTINGENT UPON DEMONSTRATING, THROUGH MODELING AND THE USE OF ACTUAL TRAFFIC COUNTS, THAT THE VEHICLE MILES TRAVELLED THRESHOLD STANDARD SHALL BE MAINTAINED OVER THE SUBSEQUENT FOUR-YEAR PERIOD.**

**DP-2.3 THE ANNUAL RELEASE RATE FOR RESIDENTIAL ALLOCATIONS AND COMMERCIAL FLOOR AREA SHALL BE IDENTIFIED IN THE CODE OF ORDINANCES AND SHALL UTILIZE A SYSTEM THAT MODIFIES THE RATE OF RELEASE BASED ON PERFORMANCE TOWARDS ENVIRONMENTAL IMPROVEMENTS.**

**DP-2.4 THE DEVELOPMENT OF ADDITIONAL OUTDOOR RECREATIONAL USES SHALL BE PURSUANT TO SHORT- AND LONG-RANGE PROGRAMS. CRITERIA FOR INCLUSION IN THESE PROGRAMS SHALL BE IDENTIFIED IN THE CODE OF ORDINANCES.**

### **GOAL DP-3**

**ENCOURAGE CONSOLIDATION OF DEVELOPMENT AND RESTORATION OF SENSITIVE LANDS THROUGH TRANSFER OF DEVELOPMENT RIGHTS AND TRANSFER OF LAND COVERAGE PROGRAMS.**

#### **POLICIES:**

**DP-3.1 TRANSFERS OF RESIDENTIAL DEVELOPMENT AND RESIDENTIAL DEVELOPMENT RIGHTS TO PARCELS IN AREAS DESIGNATED AS RECEIVING AREAS SHALL BE ENCOURAGED IN ACCORDANCE WITH REGIONAL PLAN POLICIES AND IMPLEMENTING ORDINANCES.**

- A. Residential development and residential development rights may be transferred with approval of TRPA. Residential development rights transferred from undeveloped parcels may only be exercised on a receiving parcel, upon receiving a residential allocation in accordance with the provisions regarding those allocations.
- B. Residential bonus units may be granted to parcels for multi-residential units in conjunction with transfer of development rights from other parcels or other agency incentive programs. Ordinances shall establish detailed provisions which shall provide for bonuses of varying amounts in relation

to a right transferred or implementation of an agency incentive program, depending on the public benefits being provided by the project. Bonuses shall be prioritized for affordable housing projects and projects within community plans and Centers. Other benefits to consider shall include the extent of coverage planned, transportation improvements, water quality improvements, scenic improvements, and proximity to essential services. More bonuses shall be granted for projects designed to house local residents at median income or below.

**DP-3.2 TRANSFERS OF EXISTING TOURIST ACCOMMODATION UNITS INTO DESIGNATED AREAS SHALL BE ENCOURAGED IN ACCORDANCE WITH REGIONAL PLAN POLICIES AND IMPLEMENTING ORDINANCES.**

- A. Existing tourist accommodation units may be transferred to designated areas with approval of TRPA. For bonus Tourist Accommodation Units to be awarded, buildings containing Tourist Accommodation Units to be transferred from the sending parcel shall be removed and the site shall be restored, except in special circumstances of public benefits as set forth by ordinance.
- B. Additional tourist accommodation units may be granted as bonus units in conjunction with transfer of development. Ordinances shall establish detailed provisions which shall allow bonuses of varying amounts in relation to a unit transferred, depending on the public benefits being provided by the project. Bonuses shall be prioritized for development within Community Plans and Centers. Benefits to consider shall include extent of coverage planned, transportation improvements, water quality improvements, scenic improvements, availability of essential services, and accessory services provided.

**DP-3.3 TRANSFERS OF EXISTING COMMERCIAL FLOOR AREA INTO DESIGNATED AREAS SHALL BE ENCOURAGED IN ACCORDANCE WITH REGIONAL PLAN POLICIES AND IMPLEMENTING ORDINANCES.**

- A. Existing commercial floor area may be transferred to designated areas with approval of TRPA. For bonus Commercial Floor Area to be awarded, buildings containing Commercial Floor Area to be transferred from the sending parcel shall be removed and the site shall be restored.
- B. Additional commercial floor area may be granted in conjunction with transfer of development. Ordinances shall establish detailed provisions which shall allow additional commercial floor area of varying amounts in relation to a unit transferred, depending on the public benefits being provided by the project. Additional commercial floor area shall be prioritized for projects within Community Plans and Centers. Benefits to consider shall include extent of coverage planned, transportation improvements, water quality improvements, scenic improvements, and accessory services provided. TRPA shall reserve a portion of available commercial floor area to encourage development transfers.

**DP-3.4 LAND COVERAGE MAY BE TRANSFERRED PROVIDED THE COVERAGE LIMITS SET FORTH IN THE LAND USE SUBELEMENT ARE NOT EXCEEDED.**

The transfer of land coverage may be implemented by parcel consolidation, parcel retirement, land coverage banking systems or other mechanisms approved by the TRPA.

- A. Coverage utilized as mitigation for excess coverage on commercial, mixed-

use and tourist accommodation projects shall be existing hard coverage or soft coverage in the 1b land capability district as defined by ordinance, except where there is an inadequate supply of coverage at a reasonable cost. In that event, the Code of Ordinances may authorize coverage for transfer in the following order of priority: (1) existing soft coverage or disturbed areas within the definition of coverage; and (2) potential coverage. Potential coverage shall be defined as base coverage.

- B. Coverage transferred or used as mitigation to accommodate residential projects, outdoor recreation projects, public service projects, regional public facilities, and public health and safety facilities may be either existing or potential coverage. Potential coverage shall be defined as base coverage.
- C. Linear public facilities projects that require coverage, when transferring or mitigating coverage over base coverage, shall have the option of transferring hard or soft coverage in accordance with these provisions.
- D. TRPA, in cooperation with other agencies, shall establish a land coverage banking system.

TRPA, to the extent possible, shall utilize a land coverage banking system to facilitate the elimination of excess land coverage and to provide transfer mechanisms. TRPA shall certify appropriate entities to acquire land coverage and implement restoration programs pursuant to this policy.
- E. Coverage transfers shall be at a ratio of 1:1 or greater. Each square foot of coverage added by transfer shall require removal of one or more square feet of coverage, as set forth in the Goal LU-2 of Land Use Subelement and the Code of Ordinances.
- F. Coverage transferred for a single-family house shall be from a parcel equal to, or more environmentally sensitive than, the receiving parcel.
- G. In the case of individual parcels containing a Stream Environment Zone (SEZ), the amount of coverage attributable to the SEZ portion of the parcel may be transferred to the non-SEZ portion of the parcel or may be utilized in the SEZ pursuant to the access provision set forth in the Stream Environment Zone Subelement.

**DP-3.5 THE RESIDENTIAL PERMIT ALLOCATION SYSTEM SHALL PERMIT THE TRANSFER OF BUILDING ALLOCATIONS FROM PARCELS LOCATED ON SENSITIVE LANDS TO MORE SUITABLE PARCELS.**

As part of the permit allocation system, TRPA shall permit the transfer of building allocations from parcels in stream environment zones, Land Capability Districts 1-3, lands determined to be sensitive under IPES, or Class 1-4 shorezones, to parcels outside of these areas. However, no allocations shall be transferred to any parcel that is below the current IPES line for the jurisdiction of the receiving parcel. Recipients of allocations may transfer across jurisdictional boundaries so long as the jurisdiction to which allocations are transferred has capacity to serve the additional development, both jurisdictions approve the transfer, and the receiving parcel is in land capability districts 4-7 or has a buildable IPES rating. Such inter-jurisdictional transfers shall be counted against the number of permits allocated to the jurisdiction from which the allocations are transferred.

**DP-3.6 BEFORE TRANSFER OF ANY DEVELOPMENT RIGHT OR LAND COVERAGE UNDER THIS GOAL IS EFFECTIVE, THE SENDING LOT SHALL BE APPROPRIATELY RESTRICTED OR RETIRED. IN THE CASE WHERE AN**

**ALLOCATION HAS BEEN TRANSFERRED, OR ALL THE DEVELOPMENT RIGHTS OR COVERAGE HAS BEEN TRANSFERRED OFF A PARCEL DEEMED INAPPROPRIATE FOR FUTURE DEVELOPMENT, THE ENTIRE PARCEL SHALL BE RETIRED.**

In restricting or retiring a parcel, the implementing ordinances shall consider the retirement of all bonded indebtedness, site restoration, removal of future development potential, disclosure statements, public notice or recordation, and other requirements TRPA deems necessary. All transfers shall be approved by the affected jurisdictions.

**DP-3.7 TRANSFERS AND CONVERSIONS OF DEVELOPMENT RIGHTS, OTHER THAN LAND COVERAGE, SHALL BE ENVIRONMENTALLY NEUTRAL IN ACCORDANCE WITH THE REGIONAL PLAN AND CODE OF ORDINANCES. DEVELOPMENT IMPACTS DUE TO THE RESULTING PROJECTS SHALL BE ADDRESSED AS PART OF THE PROJECT REVIEW PROCESS.**

#### **GOAL DP-4**

**CONDITION APPROVAL OF NEW DEVELOPMENT AND REDEVELOPMENT IN THE TAHOE REGION ON POSITIVE IMPROVEMENTS IN OFF-SITE EROSION AND RUNOFF CONTROL AND AIR QUALITY.**

To generate offsetting mitigation measures, which in turn will accelerate progress toward meeting the environmental thresholds, the Agency will implement the following policies:

#### **POLICIES:**

**DP-4.1 NEW AND REDEVELOPED RESIDENTIAL, COMMERCIAL, AND PUBLIC PROJECTS SHALL COMPLETELY OFFSET THEIR WATER QUALITY IMPACTS THROUGH ONE OF THE FOLLOWING METHODS:**

- A. Implementing on-site and/or off-site erosion and runoff control projects concurrent with the impact from the project as a condition of project approval and subject to Agency concurrence as to effectiveness, or
- B. Contributing to a water quality mitigation fund for implementing off-site erosion and runoff control projects. The amount of such contributions is established by Agency ordinance.

This policy continues the water quality mitigation funds established as part of TRPA's Lake Tahoe Basin Water Quality Management Plan. The fee schedules and distribution formula shall be reviewed and revised as part of the Agency's implementing ordinances and programs.

**DP-4.2 ALL PROJECTS SHALL OFFSET THE TRANSPORTATION AND AIR QUALITY IMPACTS OF THEIR DEVELOPMENT.**

The implementing ordinances for the Regional Plan will define stationary sources of air pollution which may locate in the Region, and define what constitutes a significant environmental impact on air quality from stationary sources. Commercial and residential development contribute indirect impacts to air quality by increasing the number of vehicle trips in the Region. The cumulative impact of such trips is significant.

The ordinances will establish a fee to offset the impacts from minor projects. The

fee will be assessed on both commercial and residential development. The ordinances will also define what projects have significant environmental impacts; these projects will be required to complete an EIS and mitigate air quality and traffic impacts with specific projects or programs.

## FINANCING

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The purpose of this Subelement is to set forth the financing policies and programs to implement the Regional Plan. The Subelement provides for the creation of new revenue sources, the phasing of expenditures to meet performance targets, and coordination of financing programs with other agencies.

Adequate long-term financing is essential to meet the environmental thresholds and protect the values of the Tahoe Region. The Regional Plan creates a linkage between the rate of funding for capital improvements, the development management system, and the environmental thresholds. If progress toward meeting the environmental thresholds is slower than anticipated, the plan calls for adjustments in the rate of both capital improvements and development.

### GOAL FIN-1

**IN COOPERATION WITH A MULTI-SECTOR REGIONAL PARTNERSHIP, SECURE FUNDS TO CARRY OUT THE ENVIRONMENTAL IMPROVEMENT PROGRAM AND OTHER PROGRAMS OF THE REGIONAL PLAN, PROVIDE FOR REVENUE SOURCES THAT DISTRIBUTE COSTS EQUITABLY AMONG THE USERS OF THE BASIN, MEET PERFORMANCE OBJECTIVES, AND ATTAIN ENVIRONMENTAL THRESHOLDS.**

#### POLICIES:

**FIN-1.1 TRPA IN COOPERATION WITH A REGIONAL MULTI-SECTOR PARTNERSHIP, SHALL DEVELOP AND CARRY OUT FINANCIAL PROGRAMS TO PROVIDE THE FUNDING NECESSARY TO IMPLEMENT THE ENVIRONMENTAL IMPROVEMENT PROGRAM.**

**FIN-1.2 FINANCIAL PROGRAMS SHALL PROVIDE FOR AN EQUITABLE DISTRIBUTION OF COSTS AMONG GOVERNMENTAL ENTITIES AND REGION - USER GROUPS.**

Since many people throughout the Region, the nation, and the world enjoy the amenities of the Tahoe Region, the Regional Plan calls for a financial approach that spreads the costs of protecting environmental quality among property owners, businesses, overnight and day visitors, transportation systems users, and local, state, and federal governments.

### GOAL FIN-2

**COORDINATE THE REVENUE PROGRAM FOR IMPLEMENTATION OF THE REGIONAL PLAN WITH OTHER RESPONSIBLE AGENCIES; DIRECT THE**

## **UTILIZATION OF REGIONAL REVENUES TO HIGH-PRIORITY ENVIRONMENTAL IMPROVEMENT PROJECTS CONSISTENT WITH THE REGIONAL PLAN.**

TRPA depends on the actions of local governments, state environmental agencies and transportation departments, and special entities including the Tahoe Transportation District to carry out the Environmental Improvements Program, and other programs (e.g., enforcement). Therefore, the development of a financing approach has been coordinated, and will continue to be coordinated, with these other entities. TRPA will oversee the use of the regional revenue sources to ensure the proper phasing of environmental improvements.

### **POLICIES:**

#### **FIN-2.1 THE AGENCY SHALL CONSULT WITH OTHER RESPONSIBLE AGENCIES AND ESTABLISH REGIONAL ENVIRONMENTAL IMPROVEMENT PROJECT PRIORITIES CONSISTENT WITH THE REGIONAL PLAN.**

Local units of government and other implementing agencies require flexibility in scheduling capital improvements. TRPA in consultation with those entities, will provide guidance on project priorities and, through project review, will ensure that all capital improvements are consistent with the Regional Plan. The detailed capital improvements program will be reviewed and revised periodically in cooperation with all the affected agencies.

#### **FIN-2.2 THE AGENCY SHALL CONSULT WITH OTHER RESPONSIBLE AGENCIES IN THE DEVELOPMENT AND IMPLEMENTATION OF LONG-TERM REVENUE PROGRAMS, TO AVOID DUPLICATION OF EFFORT, AND TO IMPROVE THE EFFICIENCY OF ENVIRONMENTAL IMPROVEMENT PROGRAMS.**

All of the agencies which will carry out water quality and transportation programs under this Plan have similar financial needs. Working in cooperation with these entities, TRPA will identify programs that generate funds efficiently and with minimal administrative burden so as to assist them in fulfilling their capital needs.

#### **FIN-2.2 REGIONAL REVENUE SOURCES SHALL BE APPLIED TO HIGH-PRIORITY ENVIRONMENTAL IMPROVEMENT PROJECTS THROUGHOUT THE REGION.**

Because many of the Tahoe Region's environmental problems are regional in nature, and do not observe jurisdictional boundaries, it is appropriate to develop and administer regional revenue sources (e.g., utility taxes) to pay for high-priority capital improvements, as set forth in the Environmental Improvement Program.

### **GOAL FIN-3**

#### **THROUGH THE ENVIRONMENTAL IMPROVEMENT PROGRAM, MAKE PROGRESS TOWARD AND MEET THE PERFORMANCE TARGETS IDENTIFIED IN THE MONITORING AND EVALUATION SUBELEMENT FOR WATER QUALITY.**

The Environmental Improvements Program identifies the water quality programs necessary to attain and maintain the environmental thresholds. The program specifies projects, costs, and responsible entities.



**POLICIES:**

- FIN3.1 LOCAL GOVERNMENTS, STATE TRANSPORTATION DEPARTMENTS, AND OTHER AGENCIES SHALL BE RESPONSIBLE FOR CARRYING OUT CAPITAL IMPROVEMENTS FOR WATER QUALITY. FUNDING ASSISTANCE FROM REGIONAL REVENUE SOURCES SHALL BE MADE AVAILABLE TO LOCAL GOVERNMENTS WITH OVERSIGHT BY TRPA.**

The primary responsibility for carrying out environmental improvement projects lies with local government, California and Nevada Departments of Transportation, and the U.S. Forest Service. Utility districts also have capital improvement programs related to water quality. A Regional Multi-Sector Partnership shall develop means of assisting local governments with funding.

- FIN3.2 TRPA SHALL COORDINATE WITH LOCAL GOVERNMENTS AND STATE TRANSPORTATION DEPARTMENTS TO GENERALLY OBSERVE THE PRIORITIES SET FORTH IN THE ENVIRONMENTAL IMPROVEMENT PROGRAM TO ENSURE THAT PLANNED IMPROVEMENTS AND AVAILABLE REVENUES ARE CONSISTENT.**

- FIN3.3 ALL ENVIRONMENTAL IMPROVEMENT PROJECTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES HANDBOOK.**

**GOAL FIN-4**

**THROUGH AN ENVIRONMENTAL IMPROVEMENT PROGRAM, MAKE PROGRESS TOWARD AND MEET THE PERFORMANCE TARGETS IDENTIFIED IN THE MANAGEMENT AND EVALUATION SUBELEMENT FOR AIR QUALITY AND TRANSPORTATION.**

**POLICIES:**

- FIN-4.1 THE TAHOE TRANSPORTATION DISTRICT AND LOCAL, STATE, AND FEDERAL UNITS OF GOVERNMENT SHALL BE RESPONSIBLE FOR CARRYING OUT THE TRANSPORTATION PORTION OF THE ENVIRONMENTAL IMPROVEMENT PROGRAM, WITH FUNDING ASSISTANCE FROM REGIONAL REVENUE SOURCES, AND WITH THE COORDINATION AND OVERSIGHT OF TRPA.**

The Tahoe Regional Planning Agency Bi-State Compact designated the Tahoe Transportation District to implement transit and public transportation improvements contained in the Regional Plan. Other related improvements should be the responsibility of local, state, or federal government, depending upon the jurisdiction. The financial program distributes regional revenues to the implementing agencies.

- FIN-4.2 TRPA SHALL COORDINATE WITH THE TAHOE TRANSPORTATION DISTRICT, LOCAL, STATE, AND FEDERAL UNITS OF GOVERNMENT TO PRIORITIZE TRANSPORTATION IMPROVEMENT PROJECTS SET FORTH IN THE ENVIRONMENTAL IMPROVEMENT PROGRAM TO ENSURE THE APPROPRIATE PHASING OF IMPROVEMENTS AND THAT PLANNED IMPROVEMENTS ARE CONSISTENT WITH AVAILABLE FUNDING.**

## MONITORING AND EVALUATION

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The Monitoring and Evaluation Subelement serves three functions. First, it establishes performance standards for evaluating the effectiveness of the Regional Plan and, if necessary, triggering plan revisions. Second, it identifies needs for further study in the area of cause-effect relationships. Third, it establishes a monitoring program to collect and analyze data necessary to evaluate progress toward maintenance of the environmental thresholds.

### GOAL ME-1

**EVALUATE PROGRESS TOWARD ATTAINING AND MAINTAINING THE ENVIRONMENTAL THRESHOLDS THROUGH THE USE OF A DETAILED MONITORING PROGRAM AND PERFORMANCE STANDARDS.**

#### POLICIES:

- ME-1.1 THE AGENCY SHALL PREPARE THRESHOLD EVALUATION REPORTS EVERY FOUR YEARS TO EVALUATE THE STATUS AND TREND OF THRESHOLD STANDARD ATTAINMENT AND PROGRESS IN IMPLEMENTING THE REGIONAL PLAN.**
- ME-1.2 BASED ON THE RESULTS OF THE THRESHOLD EVALUATION REPORTS AND UPDATED STUDIES AND INFORMATION, TRPA SHALL CONSIDER CHANGES TO THRESHOLD ATTAINMENT STANDARDS TO REFLECT THE BEST AVAILABLE DATA AND SCIENTIFIC KNOWLEDGE.**
- ME-1.3 BASED ON DEGREE OF PROGRESS TOWARD ENVIRONMENTAL GOALS, AS MEASURED IN THRESHOLD EVALUATION REPORTS, TRPA SHALL MAKE ADJUSTMENTS IN THE REGIONAL PLAN.**

TRPA shall adjust the Regional Plan periodically on the basis of information reported in the periodic Threshold Evaluation Report.

### GOAL ME-2

**IMPROVE UNDERSTANDING OF CAUSE-EFFECT RELATIONSHIPS FOR LAKE TAHOE AND THE LAKE TAHOE REGION.**

#### POLICIES:

- ME-2.1 TRPA SHALL COMPLETE STUDIES AND UTILIZE DATA FROM OTHER RELEVANT STUDIES TO CONTINUALLY ADVANCE THE UNDERSTANDING OF CAUSE-EFFECT RELATIONSHIPS FOR LAKE TAHOE AND THE LAKE TAHOE REGION. STUDIES THAT RELATE TO AREAS OF THRESHOLD NON-ATTAINMENT SHOULD BE PRIORITIZED.**
- ME-2.2 BASED ON THE RESULTS OF ONGOING STUDIES, TRPA SHALL MAKE ADJUSTMENTS IN THE REGIONAL PLAN TO MORE EFFECTIVELY AND**

**EFFICIENTLY ADDRESS ENVIRONMENTAL CONTAMINANTS AND THE SOURCES OF THOSE CONTAMINANTS.**

**GOAL ME-3**

**IMPLEMENT A MONITORING PROGRAM TO EVALUATE THE ENVIRONMENTAL THRESHOLDS, THE EFFECTIVENESS OF THE REGIONAL PLAN, AND THE IMPLEMENTING ORDINANCES AND PROGRAMS.**

**POLICIES:**

**ME-3.1 IN COLLABORATION WITH FEDERAL, STATE, LOCAL AGENCIES AND OTHER INSTITUTIONS, TRPA SHALL MAINTAIN AN OPERATIONAL MONITORING PROGRAM, CONSISTING OF PLANNING AND ADMINISTRATION, DATA COLLECTION, DATA STORAGE AND RETRIEVAL, AND DATA ANALYSIS. THE AGENCY SHALL USE THE PRODUCTS OF THIS PROGRAM TO IDENTIFY PROBLEMS AND EVALUATE PROGRESS UNDER THE REGIONAL PLAN.**

The monitoring program shall include the following components:

- A. Continuous scientific monitoring of environmental conditions related to the adopted threshold standards.
- B. Periodic evaluations of environmental conditions related to the adopted threshold standards.
- C. Monitoring carried out by TRPA or regional partners of socio-economic data to allow analysis of possible socio-economic impacts of the Regional Plan.
- D. Monitoring of management-related data (e.g., numbers of permits issued, numbers and types of enforcement actions) to allow tracking and analysis of TRPA management functions.
- E. The Agency shall monitor representative tributaries as needed to provide a basis for evaluating the relative health of the watershed within which development is contemplated and progress being made toward meeting thresholds. The monitoring program will monitor stream flows and concentrations of nutrients and sediments to determine annual pollutant loads. This monitoring program shall be in place in a local jurisdiction, and shall establish baseline water quality conditions, before the numerical level defining the top rank for any jurisdiction is lowered.
- F. At least every four years, the Agency shall evaluate the results of its monitoring program. A special component of the monitoring program shall be designed to evaluate the success of IPES. This special component shall be the basis for extending, modifying, or eliminating IPES. The factors for monitoring shall include some non-scientific but readily observable matters, such as the rate of installation of remedial erosion control projects as set forth in the capital improvement program and the extent of retrofitting existing development with BMPs.

**ME-3.2 THE AGENCY SHALL UTILIZE A SCIENCE ADVISORY PANEL TO REVIEW PERIODICALLY THE TECHNICAL ASSUMPTIONS, TECHNIQUES, AND PROCEDURES ASSOCIATED WITH MONITORING AND ANALYSIS EFFORTS.**

The Tahoe Science Consortium, comprised of technical experts in various fields, will assist TRPA staff and the APC in developing and implementing the monitoring program.

**ME-3.3 THE AGENCY WILL PUBLISH PERIODIC REPORTS COVERING PROGRESS ON THRESHOLD ATTAINMENT AND MAINTENANCE, RESEARCH, AND OVERALL MONITORING RESULTS.**

The Agency will publish annual reports on the implementation of the Monitoring and Evaluation Subelement. These reports will generally initiate routine problem assessment and program evaluation functions of the Agency.

**ME-3.4 THE AGENCY SHALL UTILIZE A MULTI-SECTOR BASIN PARTNERSHIP TO HELP DEVELOP A SOCIO-ECONOMIC MONITORING PROGRAM, TO PERIODICALLY REVIEW AND REPORT ON THE STATE OF THE REGION'S ECONOMY AND MAKE RECOMMENDATIONS TO THE GOVERNING BOARD.**

TRPA should consider the impacts of the Regional Plan on the Region's economy and periodically consider adjustments consistent with attainment of environmental threshold carrying capacities.

**ME-3.5 BY DECEMBER 31, 2013, TRPA SHALL IMPLEMENT MITIGATION MEASURES IDENTIFIED IN ATTACHMENT 4 FROM THE ENVIRONMENTAL IMPACT STATEMENT FOR THE 2012 REGIONAL PLAN UPDATE, OR THEIR EQUIVALENT, THAT HAVE NOT OTHERWISE BEEN INCORPORATED INTO THE REGIONAL PLAN OR CODE OF ORDINANCES.**

**ME-3.6 ON AN ANNUAL BASIS TRPA WILL PREPARE A PRELIMINARY LIST OF WORK PRIORITIES. THIS LIST WILL BE DERIVED FROM THE MOST RECENT ANNUAL THRESHOLD REPORT, REGIONAL PLAN AND CODE OF ORDINANCES AMENDMENTS SUGGESTED BY STAFF AND STAKEHOLDERS, THE MOST RECENT ANNUAL ENVIRONMENTAL IMPROVEMENT PROGRAM REPORT, THE ANNUAL REPORTS ON MEMORANDA OF UNDERSTANDING, PRIORITIES IDENTIFIED BY THE ADVISORY PLANNING COMMISSION, AND SIMILAR INFORMATION. THE GOVERNING BOARD SHALL REVIEW THE PRELIMINARY LIST OF WORK PRIORITIES AND ARRANGE THE PROJECTS IN ORDER OF PRIORITY. THE EXECUTIVE DIRECTOR SHALL SUBMIT AN ANNUAL BUDGET AND WORK PLAN THAT INDICATES HOW THE WORK PRIORITIES WILL BE COMPLETED IN ORDER OF PRIORITY TO THE DEGREE POSSIBLE WITH THE RESOURCES AVAILABLE TO THE AGENCY. THE LIST OF PROJECTS AND ORDER OF PRIORITY SHALL BE INCLUDED IN THE REGIONAL PLAN AS ATTACHMENT 5 AND SHALL BE UPDATED AND REPLACED ANNUALLY. FOR THE PERIOD PRIOR TO ADOPTION OF THE NEXT ANNUAL WORK PROGRAM AND BUDGET BUT AFTER INITIAL ADOPTION OF THE REGIONAL PLAN INCLUDING THIS POLICY, THE LIST OF PROJECTS IN ATTACHMENT 5 WILL BE CONSIDERED THE PRELIMINARY LIST OF PRIORITY PROJECTS FOR THE GOVERNING BOARD TO ARRANGE IN ORDER OF PRIORITY AND FOR SUBSEQUENT PREPARATION OF THE ANNUAL AGENCY WORK PROGRAM AND BUDGET.**

