

## RESOLUTION NO. 82-11

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### TABLE OF AMENDMENTS

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

## ATTACHMENT 1 RESOLUTION NO. 82-11

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

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

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

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

3. The Compact defines "environmental threshold carrying capacity" as "an environmental standard necessary to maintain a significant scenic, recreational, educational, scientific or natural value of the region or to maintain public health and safety within the region".

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (a) two or more threshold standards are mutually exclusive; or
- (b) substantial evidence to provide a basis for a threshold standard does not exist; or
- (c) a threshold standard cannot be achieved; or
- (d) a threshold standard is not sufficient to maintain a significant value of the Region or additional threshold standards are required to maintain a significant value.

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

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

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

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

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

- (b) Nothing in the adoption of these Environmental Threshold Carrying Capacities is intended to increase or decrease the rights of any property owner under the Constitution of California, Nevada or the United States.
- (c) It is the intent of the Governing Body that the Environmental Threshold Carrying Capacities will provide the basis for the adoption and enforcement of a regional plan and implementing ordinances which will achieve and maintain such capacities while at the same time providing opportunities for orderly growth and development consistent with such capacities. It is further the intent of the Governing Body that the regional plan will provide for carrying out all of the policies expressed in Article I of the compact.

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

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

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

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

Nays: None

Abstain: None

Absent: None



Bennie D. Ferrari, Chairman

EXHIBIT A  
TO RESOLUTION NO. 82-11  
AS AMENDED

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

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**WATER QUALITY**

Deep Water (Pelagic) Lake Tahoe

NUMERICAL STANDARDS

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

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

POLICY

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

MANAGEMENT STANDARD

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

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

Littoral Lake Tahoe

NUMERICAL STANDARD

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

MANAGEMENT STANDARD

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



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

### **NUMERICAL STANDARD**

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

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

### **Nearshore Attached Algae MANAGEMENT STANDARD**

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

### **Aquatic Invasive Species MANAGEMENT STANDARD**

Prevent the introduction of new aquatic invasive species into the region's waters and reduce the abundance and distribution of known aquatic invasive species. Abate harmful ecological, economic, social and public health impacts resulting from aquatic invasive species.

## Tributaries

### **NUMERICAL STANDARD**

Attain applicable state standards for concentrations of dissolved inorganic nitrogen, dissolved phosphorus, and dissolved iron. Attain a 90 percentile value for suspended sediment concentration of 60 mg/l.

### **MANAGEMENT STANDARD**

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

## Surface Runoff

### **NUMERICAL STANDARD**

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

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

### **MANAGEMENT STANDARD**

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

## Groundwater

### **MANAGEMENT STANDARD**

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

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

### Other Lakes

#### NUMERICAL STANDARD

Attain existing water quality standards.

## SOIL CONSERVATION

### Impervious Cover

#### MANAGEMENT STANDARD

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

### Stream Environment Zones

#### NUMERICAL STANDARD

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

## AIR QUALITY

### Carbon Monoxide

#### NUMERICAL STANDARD

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

#### MANAGEMENT STANDARD

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

### Ozone

#### NUMERICAL STANDARD

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

Maintain oxides of nitrogen (NO<sub>x</sub>) emissions at or below the 1981 level.

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### Regional Visibility<sup>§</sup>

#### NUMERICAL STANDARDS

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

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

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

### Subregional Visibility

#### NUMERICAL STANDARD<sup>§</sup>

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

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

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

#### Respirable and Fine Particulate Matter

##### NUMERICAL STANDARD

Particulate Matter<sub>10</sub> 24-hour Standard: Maintain Particulate Matter<sub>10</sub> at or below  $50 \mu\text{g}/\text{m}^3$  measured over a 24-hour period in the portion of the Region within California, and maintain Particulate Matter<sub>10</sub> at or below  $150 \mu\text{g}/\text{m}^3$  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.

##### NUMERICAL STANDARD

Particulate Matter<sub>10</sub> Annual Arithmetic Average - Maintain Particulate Matter<sub>10</sub> at or below annual arithmetic average of  $20 \mu\text{g}/\text{m}^3$  in the portion of the Region within California, and maintain Particulate Matter<sub>10</sub> at or below annual arithmetic average of  $50 \mu\text{g}/\text{m}^3$  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.

##### NUMERICAL STANDARD

Particulate Matter<sub>2.5</sub> 24-hour Standard - Maintain Particulate Matter<sub>2.5</sub> at or below  $35 \mu\text{g}/\text{m}^3$  measured over a 24-hour period using gravimetric or beta attenuation methods or any equivalent procedure which can be shown to provide equivalent results at or near the level of air quality standard.

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<sup>§</sup> Amended 03/22/00

<sup>§</sup> Amended 03/22/00

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### NUMERICAL STANDARD

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 STANDARD

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

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

### Odor

#### POLICY STATEMENT

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

## VEGETATION PRESERVATION

### Common Vegetation

#### MANAGEMENT STANDARD

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

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

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

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

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

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

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

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

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

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

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

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

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1. Maintain at least four percent meadow and wetland vegetation.
  2. Maintain at least four percent deciduous riparian vegetation.
  3. Maintain no more than 25 percent dominant shrub association vegetation.
  4. Maintain 15-25 percent of the Yellow Pine Forest in seral stages other than mature.
  5. Maintain 15-25 percent of the Red Fir Forest in seral stages other than mature.
- Pattern - Provide for the proper juxtaposition of vegetation communities and age classes by:
    1. Limiting acreage size of new forest openings to no more than eight acres.
    2. Adjacent openings shall not be of the same relative age class or successional stage to avoid uniformity in stand composition and age.

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

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

### POLICY STATEMENT

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

### Late Seral and Old Growth Forest Ecosystems

#### NUMERICAL STANDARD

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

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

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

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

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

### Uncommon Plant Communities

#### NUMERICAL STANDARD<sup>§§</sup>

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

### Sensitive Plants

#### NUMERICAL STANDARD

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

<u>Species<sup>§§</sup></u>	<u>Number of Population Sites</u>
<u>Lewisia pygmaea longipetala</u>	2
<u>Draba asterophora v. macrocarpa</u>	2
<u>Draba asterophora v. asterophora</u>	5
<u>Rorippa subumbellata</u>	26
<u>Arabis rigidissima v. demote</u>	7

## WILDLIFE

### Special Interest Species

#### NUMERICAL STANDARD

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

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

<sup>§§</sup> Amended 04/24/02

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### Habitats of Special Significance

#### MANAGEMENT STANDARD

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

## FISHERIES

### Stream Habitat

#### NUMERICAL STANDARD

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

### Instream Flows

#### MANAGEMENT STANDARD

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

#### POLICY STATEMENT

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

### Lahontan Cutthroat Trout

#### POLICY STATEMENT

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

### Lake Habitat

#### MANAGEMENT STANDARD

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

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§ Amended 5/28/97

## Appendix B: Resolution 82-11

### NOISE

#### Single Noise Events

#### NUMERICAL STANDARD

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

Source	Threshold – dBA			Monitoring Distances
	Overall	Less Than 35 MPH	Greater Than 35 MPH	
Aircraft	80 <sup>1</sup>	--	--	6,500 m-start of takeoff roll 2,000 m-runway threshold approach
	77.1 <sup>2</sup>	--	--	6,500 m-start of takeoff roll 2,000 m-runway threshold approach
Watercraft <sup>3§</sup>				
1. Pass-By Test	82 L <sub>max</sub>	--	--	50 ft.-engine at 3,000 rpm
2. Shoreline Test	75 L <sub>max</sub>	--	--	Microphone 5 ft. above water, 2 ft., above curve of shore, dock or platform. Watercraft in Lake, no minimum distance.
3. Stationary Test	88 dBA L <sub>max</sub> for boats manufactured before January 1, 1993;	--	--	Microphone 3.3 feet from exhaust outlet - 5 feet above water.
	90 dBA L <sub>max</sub> for boats manufactured after January 1, 1993	--	--	
Motor Vehicles Less Than 6,000 GVW	--	76	82	50 ft.
Motor Vehicles Greater Than 6,000 GVW	--	82	86	50 ft.
Motorcycles	--	77	86	50 ft.
Off-Road Vehicles	--	72	86	50 ft.
Snowmobiles	--	82	--	50 ft.
<p>1. <sup>§§</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.</p> <p>2. Between the hours of 8 p.m. and 8 a.m.</p> <p>3. Failure to meet any one of these three test standards exceeds the single noise event threshold for watercraft.</p>				

§ Amended 7/23/03

§§ Amended 08/26/92



**Appendix B: Resolution 82-11**

Cumulative Noise Events<sup>§</sup>

**NUMERICAL STANDARD**

Background noise levels shall not exceed the following levels:

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

**POLICY STATEMENT**

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

**RECREATION**

**POLICY STATEMENT**

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

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

**SCENIC RESOURCES**

Roadway and Shoreline Units

**NUMERICAL STANDARD**

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

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

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

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<sup>§</sup> Amended 5/28/97

## **Appendix B: Resolution 82-11**

### Other Areas<sup>§</sup>

#### NUMERICAL STANDARD

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

### Built Environment

#### POLICY STATEMENT

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

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<sup>§</sup> Amended 09/22/93