

Forest Plan Revision

Lake Tahoe Basin Management Unit November 12, 2008 Public Workshop

Physical Resources Desired Conditions

Physical resources – soil, water and air – provide the natural physical infrastructure that supports the wide variety of life forms that inhabit the Lake Tahoe Basin - plants, animals, insects, microbes, and others. Ecosystem health is dependent on maintaining the quality of all these resources and on maintaining adequate stream flows, lake levels, and groundwater.

The following are excerpted from the Proposed LTBMU Forest Plan. The Proposed Plan will include additional desired conditions for water use.

Air Quality

1. Air quality in the Lake Tahoe Basin is healthy for humans and ecosystems. (Pathway)

Soil Quality

- 1. Soils function commensurate with their land use to sustain native plant and animal life, regulate water flow, flooding and infiltration, cycle nutrients, and filter pathogens, excess nutrients and other pollutants.(Pathway)
- 2. Land coverage does not exceed the capability of the soil resources to offset the effects of impervious cover. The effects of impervious cover and disturbance are fully mitigated on a storm water zone basis. (Pathway)
- 3. Soils accept (infiltration), transmit (hydraulic conductivity), and store water at rates and in quantities commensurate with the soil and ecosystem type.
- 4. Soil productivity is adequate to sustain healthy populations of native and desired non-native plant communities appropriate to the soil type.
- 5. Accelerated (human-caused) soil erosion and resultant sediment and nutrient transport to surface waters do not impact soil productivity or water quality.

Water Quality

- 1. Lake Tahoe's status as one of the few large, deep, ultraoligotrophic lakes in the world with unique transparency, color, and clarity is preserved. (adapted from Pathway)
- 2. Water quality conditions in the Lake Tahoe Basin protect human and environmental health. (Pathway)
- 3. Water quality provides for all designated beneficial uses of waters and meets the goals of the Clean Water Act and Safe Drinking Water Act; it is fishable, swimmable, and suitable for drinking after normal treatment.

Stream Environment Zone Desired Conditions

Stream environment zones are areas that owe their biological and physical characteristics to the presence of surface or ground water. Stream environment zones include perennial, intermittent and ephemeral streams, meadows and marshes, and other areas of near-surface water influence. This concept is specifically defined by the TRPA and is generally accepted by Tahoe Basin land management agencies, regulatory agencies, and the general public.

SEZs are a land management concept, as well as an ecological concept. They comprise a set of ecotypes, and the ecological and human values of these ecotypes drive use and management policy and regulation. While SEZs constitute a relatively small percentage of the Tahoe Basin's total land area, they are highly valued for their role in providing wildlife habitat, water purification, and flood control, as well as recreational and scenic resources.

The following is a sample of the desired conditions for SEZs. The Proposed LTBMU Forest Plan will include additional desired conditions that expand on the concepts below, as well as a set of aquatic habitat desired conditions for fish, wildlife, and plants.

- 1. SEZ physical and chemical processes function naturally within the constraints and dynamics of the watershed, including, but not limited to, natural hydrologic processes, water quality, and stormwater treatment capacity. (Pathway)
- 2. Watershed characteristics, such as hydrologic, fluvial, and littoral geomorphic processes, approximate natural conditions where attainable. (Pathway)
- 3. SEZ biological processes function naturally within the constraints and dynamics of the watershed. Vegetation, terrestrial wildlife, and aquatic communities are healthy and sustainable. (Pathway)
- 4. Beneficial uses of SEZ lands for water management, cultural and scientific purposes, limited agriculture, and recreation are compatible with the naturally functioning conditions, as stated by desired conditions for physical, chemical, and biological functioning. (Pathway)