

NOTE TO ALL READERS:

The following pages were not included in the November 01, 2006 packet mailed to APC members and other interested parties. These pages, regarding the Soil Conservation and Stream Environment Zone Thresholds, have not been reviewed by the Forum, nor have they been unanimously accepted by the Pathway Core Group on Soils / SEZs. These pages represent some of the latest thinking for these resource areas. It is anticipated that alternative proposals may be formulated in the EA scoping process.

SOIL CONSERVATION AND STREAM ENVIRONMENT ZONE SUPPLEMENT

Collaborative Alternative Environmental Threshold Carrying Capacity Update

Proposed Threshold/Adaptive Management Format

Key:

Vision

Statement of the overall desired future conditions of the Resource.

Threshold Value Statement
(Desired Condition)

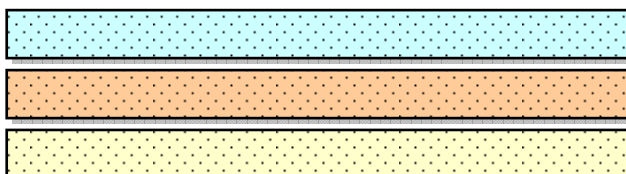
Statement of a Compact "significant Scenic, Recreational, Educational, Scientific or Natural Value of the Region" (a.k.a. Threshold Value Statement)

Threshold Assessment Indicator
(Indicator)

An Assessment Measurement of Threshold Attainment

Threshold Standard
(Standard)

The Assessment Measurement Standard that signifies Threshold Attainment (a.k.a. Threshold Standard)



Other Desired Conditions, Indicators and Standards to be tracked in the Adaptive Management System but are not recommended to be TRPA Thresholds.

Soil Conservation (not yet reviewed by Forum)

Soil Conservation Vision: For the betterment of the environment and public, soil resources are conserved and restored to naturally functioning condition. Land and societal uses are compatible with the soil resource and watershed limitations. Risks associated with fire, floods, landslides and other catastrophes are minimized to protect life, property and ecological balance.

Proposed Desired Conditions

1. Land Coverage and Disturbance Desired Condition

The effects of impervious cover and increased runoff are attenuated to enhance and protect soil resources on a storm water zone basis.

3. Urban Soil Functioning Desired Condition

For Urban lands, soil functioning is enhanced and land-use activities do not exceed soil capacity to adsorb the effects of disturbance on a parcel and/or storm water zone basis.

4. Rural/Forest Soil Functioning Desired Condition

For Forest lands, soils function naturally and land-use activities do not exceed soil capacity to adsorb the effects of disturbance on a project basis.

Proposed Indicators

Land Coverage and Disturbance Indicators

Impervious cover (Type I)
 Permanent disturbance (remote sensing analysis, Type III)
 BMP implementation (Type II)

Urban Soil Functioning Indicators

Ground cover (Type III)
 Saturated hydraulic conductivity (Type II)
 BMP implementation (Type I)

Note: All indicators defined by the 2006 soil survey update and supplemental field studies.

Rural/Forest Soil Functioning Indicators

Porosity/density (Type II)
 Organic matter and topsoil (Type II)
 Saturated hydraulic conductivity (Type II)
 Soil erosion (Type II)
 BMP implement. (Type I)

Note: All indicators defined by the 2006 soil survey update.

Proposed Standards

Land Coverage and Disturbance Standard

Urban subwatersheds* shall not exceed 10 percent** of impervious cover and permanent disturbance without an improved and implemented soil conservation/storm water management plan.*** Land coverage on intervening, sensitive lands and rural lands shall not exceed the capacity of the soils to mitigate the effects of impervious cover without an approved and implemented soil conservation/storm water management plan.

This standard to be completed in 2007 and calibrated in 2008. Until this is completed, existing SC-1 standard applies.

Urban Land Soil Functioning Standard

Soil erosion, nutrient export, and runoff on Urban lands and SEZs do not exceed natural rates on a parcel and/or storm water zone basis.

Note: This is a site-specific management standard. The Functional Open Space concept would be one of the management strategies applicable to this standard.

Rural/Forest Land Soil Functioning Standard

Soil resources on Forest lands meet or exceed naturally functioning conditions on a project basis.

Note: This is a site-specific management standard. The Functional Open Space concept would be one of the management strategies applicable to this standard.

* Subwatershed as defined by Lahontan WQCB (183, plus intervening areas)

** Numeric value to be refined upward or downward from 10 percent using basin-specific data.

*** Soil conservation / storm water plans may include, but not be limited to, implementing local and regional Best Management Practices (BMPs), regulating and/or reducing land cover, sustaining and/or restoring appropriate ground cover, rehabilitation of lands, and storm water management.

Existing Soil Conservation Standard (SC-1): "Impervious cover shall comply with the Land Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide to Planning (Bailey 1974)."

Stream Environment Zone (SEZ) (not yet reviewed by Forum)

Stream Environment Zone Vision: Stream environment zones and associated resources are conserved and restored to naturally functioning condition. Land and societal uses are compatible with the SEZ resource and watershed limitations. Where beneficial and attainable, fluvial and littoral processes function similar to their natural condition.

Proposed Desired Conditions

4. Watershed and Fluvial Functioning Desired Condition

Watershed characteristics, such as stream dynamics, are restored to natural conditions. Fluvial and littoral processes are restored to an aggradation status or steady-state condition.

5. SEZ Functioning Desired Condition

SEZ physical, chemical and biological functioning is restored to naturally occurring conditions, where beneficial and attainable.

Proposed Indicators

Watershed and Fluvial Functioning

Natural hydrologic regime (Type III)
Detention implementation (Type III)
Fluvial (channel) stability (Type III)
Littoral benchmarks (Type III)

SEZ Functioning Indicators

Saturation frequency and duration (Type III)
Stream Condition Inventory (Type III)
Fine sediment and nutrient storage (Type III)
Native plant condition and density (Type III)

Proposed Standards

Watershed and Fluvial Functioning Standard*

Watershed peak flows and streambank condition restored to 75 percent of natural condition in 10 years. Watershed peak flows and streambank condition restored to 90 of natural condition in 20 years. 75 percent of littoral transport and accumulation restored to natural condition in 20 years.

This standard to be completed in 2009. Until this is completed, existing SC-2 standard applies.

SEZ Functioning Standard

SEZ saturation characteristics, fine sediment accumulation, and native plant composition meet or exceed the natural rates that occur in undisturbed SEZs at similar elevation and/or gradient.

Note: This is a site-specific management standard. The goal of preserving, enhancing and maintaining existing naturally functioning SEZ lands is achieved when these measurable standards are met.

*Existing SEZ Standard (SC-2): "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 five (5) percent increase in the area of naturally functioning SEZ lands."