# Limits of Acceptable Change • Red River Gorge



# What is the Limits of Acceptable Change Process?

The LAC process has been developed as a means of coping with increasing demands on recreational areas such as the Red River Gorge in a visible logical fashion.

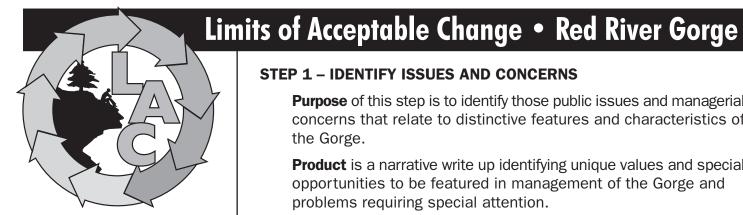


The challenge is not one of how to prevent any human-induced change to the Gorge, but rather one of deciding how much change will be allowed to occur, where, and the actions needed to control it. The process requires deciding what kinds of conditions are acceptable, then prescribing actions to protect or achieve those conditions. If an area does not meet those acceptable conditions, then management actions must be taken to correct the situation. For example, if an area receives very heavy overnight camping that causes unacceptable damage to the resource, then the area may be closed and rehabilitated.

The LAC process consists of nine steps:

- **Step 1** Identify area issues and concerns
- Step 2 Define and describe opportunity zones
- **Step 3** Select indicators of resource and social conditions
- Step 4 Inventory existing resource and social conditions
- **Step 5** Specify measurable standards for the resource and social indicators selected for each opportunity zone
- Step 6 Identify alternative Opportunity Zone allocations
- **Step 7** Identify what management actions would be needed for each alternative From Step 6
- **Step 8** Evaluate and select a preferred alternative. This determines an action plan.
- **Step 9** Implement actions for preferred alternative and monitor conditions





# **Further Explanation** of the Nine Steps

The LAC process has been developed as a means of coping with increasing demands on recreational areas such as the Red River Gorge in a visible logical fashion.



### STEP 1 - IDENTIFY ISSUES AND CONCERNS

**Purpose** of this step is to identify those public issues and managerial concerns that relate to distinctive features and characteristics of the Gorge.

**Product** is a narrative write up identifying unique values and special opportunities to be featured in management of the Gorge and problems requiring special attention.

#### STEP 2 - DEFINE AND DESCRIBE OPPORTUNITY ZONES

**Purpose** of this step is to define a series of opportunity zones for the Gorge. An opportunity zone provides a qualitative description of the kinds of resource and social conditions acceptable for that class and the type of management activity considered appropriate. Opportunity zones are not on-the-ground allocations, nor are they derived from specific conditions found within the area. They are hypothetical descriptions of the range of conditions that managers consider likely to be maintained or restored in the area. The designation of opportunity zones often follows the basic Recreation Opportunity Spectrum (ROS) system.

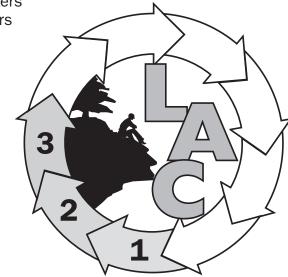
**Product** is a narrative description of resource, social, and managerial conditions defined as appropriate and acceptable for each opportunity zone.

#### STEP 3 - SELECT INDICATORS OF RESOURCE AND SOCIAL **CONDITIONS**

**Purpose** of this step is to identify indicators-specific variables-that, singly or in combination, are taken as indicative of the condition of the overall opportunity class. These indicators must be measurable, such as numbers of damaged trees per campsite or

number of trail encounters per day. These indicators will suggest were and when management action may be needed.

Product is a list of measurable resource and social indicators (preferably quantifiable).





# Further Explanation of the Nine Steps

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#### STEP 4 - INVENTORY EXISTING RESOURCE AND SOCIAL CONDITIONS

**Purpose** of this step is to inventory conditions in the Gorge. Baseline data is needed before meaningful standards can be developed. An inventory of resource conditions is usually conducted in the field by assessing conditions of resources. These may include campsites, system trails, user-created trails, cultural sites, and rare plant sites. An inventory of social conditions is often obtained via a visitor use survey. Data collected may include visitors perception of crowding, visitor use numbers, and visitor preferences for a variety of management techniques.

**Product** is a map and/or list of existing conditions of each indicator throughout the Gorge.

# STEP 5 – SPECIFY MEASURABLE STANDARDS FOR THE RESOURCE AND SOCIAL INDICATORS SELECTED FOR EACH OPPORTUNITY CLASS

**Purpose** of this step is to assign quantitative or highly specific measures to the indicators. This greater specifity is obtained by establishing standards-measurable aspects of the indicators defined in step 3. Standards are often best expressed in terms of probabilities. For example, a standard for daily contacts while traveling in a certain opportunity class might be expressed as: "Contact between different groups on a trail will not exceed four per day on at least 90 percent of the days".

**Product** is a table of specific (quantified where possible) measures of acceptable conditions for each indicator in each opportunity zone.

#### STEP 6 – IDENTIFY ALTERNATIVE OPPORTUNITY ZONE ALLOCATIONS

**Purpose** of this step is to decide what resource and social conditions are to be maintained or achieved in specific areas of the Gorge. This is a prescriptive step (it is concerned with establishing what should be), and input from both the Forest Service and the public should be used to make these decisions. Step 6 involves an analysis of inventory data

collected in step 4, along with area issues and concerns identified in step 1. Some issues might prove mutually contradictory ("increase opportunities for easier access into most portions of the wilderness" and "provide greater opportunities for solitude").

**Products** are maps and tabular summaries of alternative opportunity zone allocations.







# Further Explanation of the Nine Steps

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#### STEP 7 - IDENTIFY MANAGEMENT ACTIONS FOR EACH ALTERNATIVE

**Purpose** of this step is to identify the differences, if any, that exist between current conditions (inventoried in step 4) and the standards (identified in step 5). This will identify places where problems exist and what management actions are needed.

**Product** is a list or maps of all places where existing conditions are worse that standard and identification of what management actions would best bring conditions up to standard.

#### STEP 8 – EVALUATION AND SELECTION OF A PREFERRED ALTERNATIVE

**Purpose** of this step is to select a preferred alternative.

**Product** is the final allocation of opportunity zones and selection of a management program.

#### STEP 9 - IMPLEMENT ACTIONS AND MONITOR CONDITIONS

**Purpose** of this step is to implement a management program to achieve the objectives of the selected alternative and to provide periodic, systematic feedback regarding the performance of the management program.

**Product** is recommendations of needed changes in management program in order to obtain progress toward bringing existing conditions up to standard.



