

## DEVELOPMENT OF A RECREATIONAL USE MODEL FOR THE SAN JUAN RIVER

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### Objectives

The objective of this project is to develop management alternatives to reduce campsite and attraction crowding along the San Juan River and to specifically address overcrowding at two sites, Grand Gulch and Slickhorn Canyons. In addition, once the model is operational it can be used to assist in the development of a general river management plan.

### Methods

Analysis of past river permit data has been used to develop 12 hypothetical river trips. These hypothetical trips reflect actual river usage including trip length, campsite use and type of craft used. This, and other data already developed, are entered into the Wilderness Simulation Model at the U.S.D.A. Ft. Collins Computer Center.

The Model "runs" the river trips according to an established schedule. The Model keeps track of visual encounters, one raft passing another, and campsite encounters, camping with another group, for each segment of the river for each day of the duration of the model run.

Variations in the output results can be seen by varying the input data. For example, currently the hypothetical trips may all leave in the mornings. By arranging the trips so half leave in the morning and half leave in the afternoon, use may be dispersed with a resultant lowering of the frequency of visual and campsite encounters. This could then be considered as a management alternative to disperse use on the river.

### Results

An extended fire season has impacted the amount of time able to be dedicated to this project. Billing arrangements for computer time have also been difficult to arrange. Both of these difficulties have been resolved and data entry is continuing.