



Recreational Opportunity Spectrum

Description

Recreational Opportunity Spectrum (ROS) is a means of identifying and determining the diversity of recreation opportunities for a natural area or a group of natural areas. It is based on the idea that visitor services quality is best assured by providing an array of opportunities suited to the full range of expected visitors. However, not all visitors seek the same experience or want to join in the same set of activities when they visit a natural area. Also, the activities must be scheduled, otherwise conflict results when too many activities can occur at the same site at the same time.

A ROS provides a means for classifying the range of recreational opportunities and managing that range. It has been widely applied to recreation planning internationally, but particularly in natural areas in the United States, Australia and New Zealand. It has been applied both directly and as a component of other planning systems (see below).

The steps in the basic application process for natural area visitor planning are as follows:

1. Define the categories of opportunities along the ROS (see below).
2. Estimate the demand for opportunities along the ROS for the area(s) of interest.
3. Assess potential recreation capabilities of the area(s) to provide for different recreation opportunities using a resource capability analysis.
4. Identify current patterns of recreation provision and use along the ROS in the area(s).
5. Using the demand and capability data, determine where and how different opportunities should be provided.
6. Integrate recommendations from the previous step with those from other aspects of management (other uses).
7. Implement chosen alternatives.

The process is heavily dependent on collecting and analysing biophysical and social information for the first two steps. This information sets up a spectrum of recreation opportunity classes, ranging from the “primitive” to the highly developed, which can then be analysed against a range of biophysical, social or managerial management factors. The resulting matrix provides a wealth of information which can be used for management planning. The end point of implementation is usually some kind of [zoning](#) system. Information-gathering is integral to the analysis process that follows the definition of ROS classes, and monitoring is required as part of any implementation process.

How and when the tool is used

In New Zealand ROS is extensively used by the Department of Conservation (DOC) as a basis for recreation planning. ROS is defined by DOC in its Visitor Strategy as “a combination of an activity, a setting and an experience.” Every regional Conservation Management Strategy in the [Conservation Act framework](#) contains a ROS assessment of sites in the Conservancy, based on a New Zealand spectrum of ROS classes: Urban and urban fringe; Rural; Back country drive-in; Back country 4-wheel drive access; Back country walk in; Remote; and Wilderness. Based on the likely use of these different ROS classes, all visitors to the public conservation estate are divided into one of seven groups: Short stop travellers; Day visitors; Overnighters; Back country comfort seekers; Back country adventurers; Remoteness seekers; and Thrill seekers.

DOC’s Visitor Strategy lists the characteristics of each visitor class according to setting (place of use), accessibility and nature of visit, activities undertaken, experience and degree of risk sought, facilities and services sought, make-up of visitor and visitor numbers, and projected numbers. All sites are placed within the matrix formed by the ROS and [visitor classes](#), and the provision of services and management zoning or other types of prescription can then be defined based on the matrix and the characterisation of types of visitor.





RECOGNISING AND SETTING LIMITS Recreational Opportunity Spectrum

The concepts behind ROS have been embedded in DOC's 2005 General Policies for Conservation and National Parks. The basis of recreation planning under General Policy are policies is that a range of recreation opportunities will be provided on public conservation lands and waters, consistent with the values and outcomes planned for places.

ROS has also been used by other recreation providers than DOC. For example, a Visitor Opportunity Spectrum was prepared for the Hauraki Gulf area for the agencies involved in Project Hauraki in the late 1990s. This exercise set up a spectrum of four Visitor Opportunities classes - Remote, Living Heritage, Interactive Heritage, and Developed - and a guide to communities to use the tool to allocate areas in the Hauraki Gulf to the range of Visitor Opportunities.

Applications

A simple example for planning overnight accommodation provision in a range of areas would see analysis of factors such as: ease of access, remoteness, naturalness, size of area, habitat requirements of sensitive flora and fauna species (biophysical); contacts with other visitors, acceptability of visitor impacts (social); level of site developments, infrastructure requirements, and applicable regulation (managerial). The resulting matrix would come up with a range of accommodation sites ranging from small freedom campsite in a wilderness area (wild end of spectrum) to built resort village on edges of outside a natural areas at the most developed end of the spectrum.

ROS concepts lie behind several other widely-used planning frameworks. For example, the Limits of Acceptable Change (LAC ) framework includes a step of defining ROS (or zones based on ROS) as part of the basic process. Similarly, ROS is a component of several other processes for [visitor impact management](#) , such as the Visitor Activity Management Process (VAMP) used in Canada, which includes a description of visitor opportunities. In most applications of ROS, classes are interpreted and applied as zones.

Evaluation

Setting and applying ROS is based on the powerful central premise of providing a diversity of visitor experiences, in order to fulfil both the requirements of different types of visitor, and environmental needs. As such, ROS has been widely applied in natural area management and has also been an important component of many other planning approaches. It is a flexible and adaptable approach and the spectrum of recreation opportunities defined can be very variable, depending on the size and characteristics of an area. It is valuable for integrated planning, particularly so for analysis and planning in a region with a range of natural areas. Its main weakness has stemmed from its interpretation and over-use. The setting of ROS classes or zones was not intended to be the endpoint of management, but appears to have been widely assumed to be so, without providing additional guidance to managers on how to deal with the complexity of the settings and experiences available within single ROS classes. The ROS framework does not necessarily provide explicit guidance for linking uses of different ROS classes with the impacts of use and managing those impacts - high use areas are not necessarily the most resilient. Further problems in New Zealand application stem from the lack of an explicit information-gathering component in the setting of ROS classes, and the lack of recognition of stakeholder values, but it can be used by a range of stakeholders to be actively involved in visitor planning in their communities.