United States Department of Agriculture
Forest Service

ROS
Primer and Field Guide

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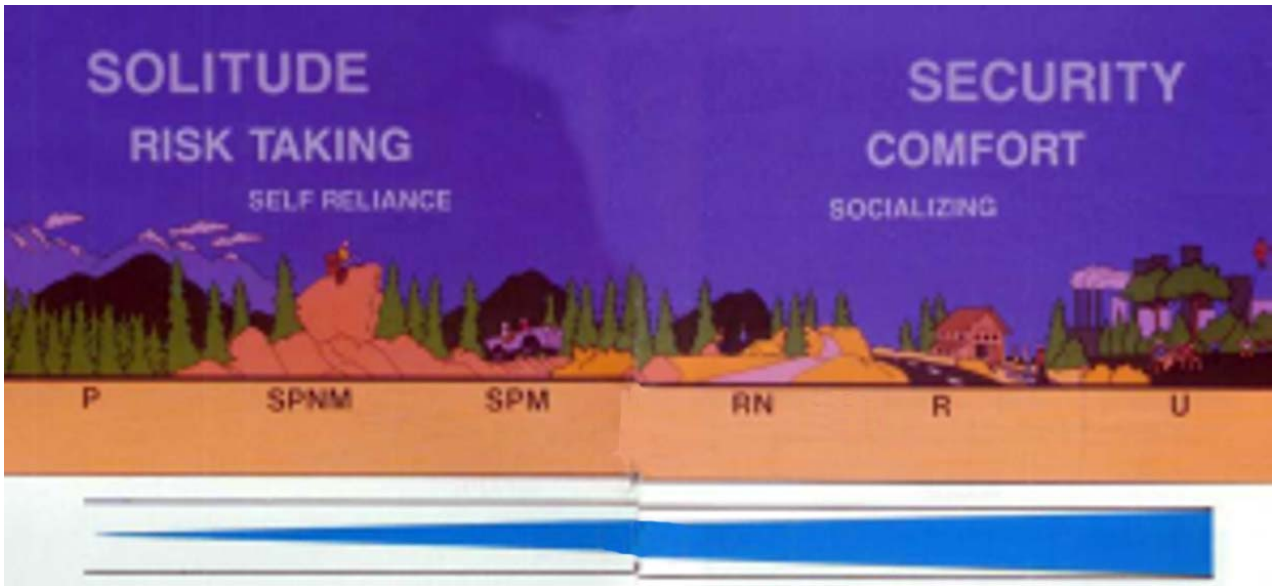


The Recreation Opportunity Spectrum

Recreation on our National Forests is more than just camping, fishing, and hiking Research has shown that people choose a specific setting for each of these activities in order to realize a desired set of experiences. For example, camping in a large undeveloped setting with difficult access and few facilities offers a sense of solitude, challenge, and self-reliance In contrast, camping in a setting having easy access and highly developed facilities offers more comfort, security, and social opportunities.

The Recreation Opportunity Spectrum (ROS) offers a framework for understanding these relationships and interactions. The Spectrum has been divided into six major classes for Forest Service use Urban (U), Rural (R), Roaded Modified (RM) in some areas, Roaded Natural (RN), Semi-Primitive Non-Motorized (SPNM), Semi-primitive Motorized (SPM), and Primitive (P). Maintaining a broad spectrum of these classes is very important to provide people with choices ROS is also flexible; it can be further subdivided into subclasses as the need arises.

You will find that ROS is an indispensable tool for recreation planning on your Forest ROS can be used to

- Inventory existing opportunities.
- Analyze the effects of other resource activities.
- Estimate the consequences of management decisions on planned opportunities.
- Link user desires with recreation opportunities
- Identify complementary roles of all recreation suppliers.
- Develop standards and guidelines for planned settings and monitoring activities.
- Help design integrated project sets for Forest Plan implementation.

The end product of recreation management is the experience people have. The key to providing most experience opportunities is the setting and how it is managed. As a land manager, you can facilitate (or hamper) many desired experiences by the way you manage such "setting indicators" as access, remoteness, naturalness, facilities, social encounters, visitor impacts, and the visitors themselves.

The matrices presented in this brochure will help you perform many of the ROS planning steps, including integrated project design. The matrices establish limits of acceptable change for each indicator in a given setting. The "norm" in the matrices describes normal conditions found in the setting. "Fully compatible" describes conditions that meet or exceed the

norm. "Inconsistent" (INCON) represents conditions that are not generally compatible with the norm, but may be necessary under some circumstances to meet overall management objectives. "Unacceptable" defines conditions that, under any circumstance, do not permit the creation or maintenance of a given setting. Where unacceptable conditions are unavoidable, a change in setting will often result, which must be handled appropriately in the Forest planning NEPA process.

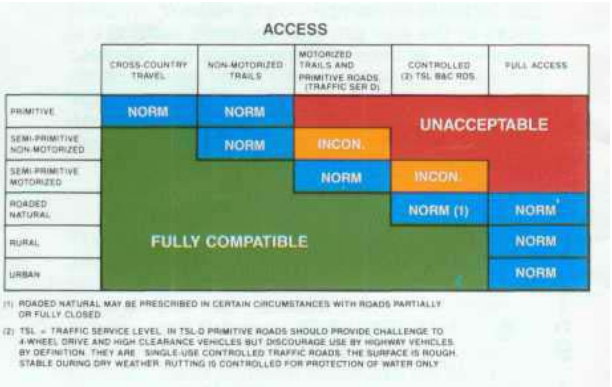
For inventory guidelines and additional details on evaluating inconsistencies, consult Chapter 20 of the USDA ROS Users Guide. The complete process for using ROS in plan implementation can be found in Chapter 60 Other ROS references are listed in the red 1986 ROS book on pages III-59-76.

As branches brush the sides of a jeep, and the wheel tracks become faint, this "primitive" road on the Cherokee NF offers the opportunity to feel some challenge and self-reliance.

ACCESS

Access includes type and mode of travel. Highly developed access generally reduces the opportunities for solitude risk, and challenge. However, it can enhance opportunities for socializing, and feelings of safety and comfort Accessibility for persons with disabilities can be organized along the ROS framework Access in Rural and Urban settings should be completely barrier-free Increasing difficulty should be designed into travelways as one moves toward the Primitive end of the spectrum to elicit greater feelings of challenge and achievement.

The opportunity to feel more challenge and self-reliance on driving skills can be built into "primitive" roads on steeper terrain. This example was constructed to user specifications on the Wenatchee NF. The key is to provide challenging opportunities at differing levels of difficulty where conditions permit.



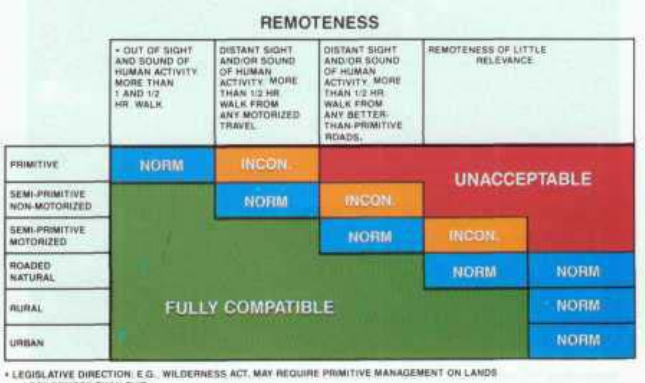
(1) ROADED NATURAL MAY BE PRESCRIBED IN CERTAIN CIRCUMSTANCES WITH ROADS PARTIALLY OR FULLY CLOSED.

(2) TSL = TRAFFIC SERVICE LEVEL. IN TSL-D PRIMITIVE ROADS SHOULD PROVIDE CHALLENGE TO 4-WHEEL DRIVE AND HIGH CLEARANCE VEHICLES BUT DISCOURAGE USE BY HIGHWAY VEHICLES. BY DEFINITION, THEY ARE: SINGLE-USE CONTROLLED TRAFFIC ROADS. THE SURFACE IS ROUGH. STABLE DURING DRY WEATHER. RUTTING IS CONTROLLED FOR PROTECTION OF WATER ONLY.

Nonmotorized Trails are the norm in SPNM settings, but as here in North Carolina, "existing primitive" roads may sometimes be used as nonmotorized travelways.

REMOTENESS

Remoteness refers to the extent to which individuals perceive themselves removed from the sights and sounds of human activity. A lack of remoteness is important for some setting experiences.

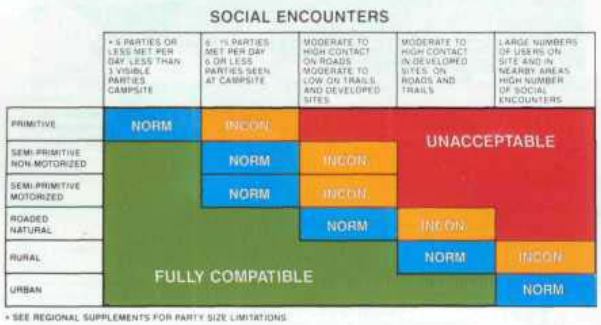


• LEGISLATIVE DIRECTION: E.G., WILDERNESS ACT, MAY REQUIRE PRIMITIVE MANAGEMENT ON LANDS LESS REMOTE THAN THIS.

This model exemplifies the way in which the opportunity for a sense of remoteness is maintained in a Wilderness or backcountry area (beyond the ridgetop). Cable yarding and loading of logs is performed on a road at the bottom of the slope, rather than at the ridgetop, to maintain distance and landform screens from motorized activity.

SOCIAL ENCOUNTERS

This factor refers to the number and type of other recreationists met along travelways, or camped within sight or sound of others. This setting indicator measures the extent to which an area provides experiences such as solitude, or the opportunity for social interaction. Increasing the number of visitors to an area changes the kind of recreation experience offered, attra-



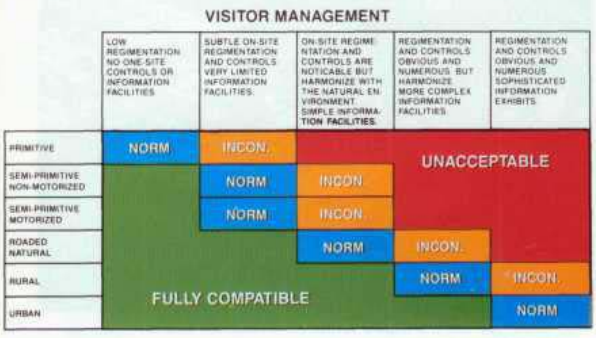
Minimizing the number of parties visible from campsites is one of the most critical social encounter elements to users of Primitive and Semi-Primitive settings. This example represents the ultimate in solitude; no other parties are visible.

VISITOR MANAGEMENT

This includes the degree to which visitors are regulated and controlled as well as the level of information and services provided for visitor enjoyment In some opportunity settings, controls are expected and appropriate. For instance, people sometimes seek developed settings for security and safety. Elsewhere, on-site controls may detract from desired experiences, such as independence, self-reliance, and risk-taking.

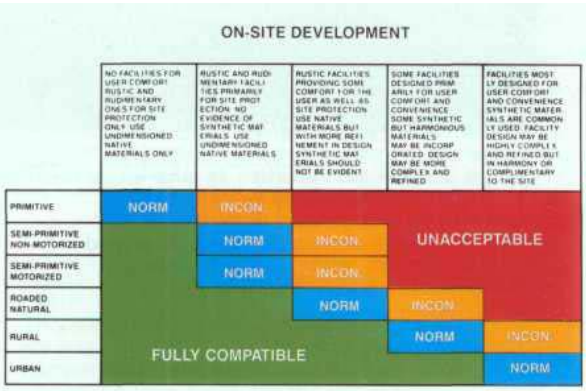
The type and level of information, and where it is provided to the visitor, may facilitate or hinder a desired experience. On-site interpretive and directional signing may adversely affect the visitor where experiences such as self-discovery, challenge, and risk are important. In other situations, on-site information may be essential to achieve desired experiences. Generally, on-site information is more appropriate at the developed end of the spectrum, while off-site sources are preferable at the primitive end.

Learning by self-discovery is a key experience opportunity provided in Primitive and Semi-Primitive Non-Motorized settings. Visitors learn primarily from observation and information they bring to the site.



FACILITIES AND SITE MANAGEMENT

This indicator refers to the level of site development. A lack of facilities and site modifications can enhance feelings of self-reliance and independence, and can provide experiences with a high degree of naturalness. Highly developed facilities can add feelings of comfort and convenience, and increase opportunities for socializing.



This rustic bridge is constructed of only natural undimensioned materials appropriate for Semi-Primitive settings.

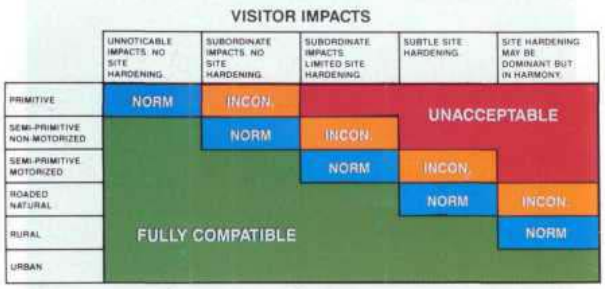
This simple rustic bridge is made of natural, but dimensioned, materials appropriate for a Roaded Natural setting.

This bridge is more complex in design and made of more refined materials appropriate for Rural settings.

Urban facilities such as the Portage Glacier Visitor Center may be appropriate nodes in such setings as Roaded Natural or Rural as long as they do not adversely affect the desired experiences in those settings surrounding the facility.

VISITOR IMPACTS

This factor refers to the impacts of visitor use on the environment. The relevant question for managers is not "how can impacts be prevented", but rather, "how much change will be allowed and which actions are appropriate for control." The matrix on the following page suggest appropriate actions for controlling impacts on soil and vegetation. Impacts on wildlife habitat, and on air, water, and sound quality affect the visitor's experience as well. Visitor impacts can alter wildlife habitat or displace wildlife species, including indicator species, which provide an important means of monitoring recreation related impacts on fish and other wildlife. Maintaining air, water, and noise quality standards in the face of visitor impacts is important in all ROS classes.



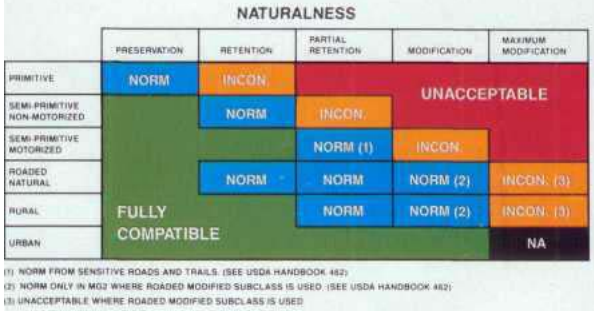
This southern California campground illustrates site hardening appropriate to an Urban facility. Curb cuts and a ramp to each unit should be provided for disabled campers.

NATURALNESS

Refers to the degree of naturalness of the setting it affects psychological outcomes associated with enjoying nature. This indicator is portrayed by using a compatible visual quality objective (VQO) for each setting as shown in the matrix on the next page. The USDA Landscape Management Handbook series can provide further guidance.

Along Semi-Primitive Non-Motorized trails, very small openings such as this may be appropriate to add sunlightand fall color. Except for a few stumps, negative elements are not evident achieving the retention VQO.

In this eastern middleground landscape the evident timber harvest maintains vegetative texture to accomplish partial retention.



Providing basic human habitat needs is important in each setting, particularly in dispersed parts of Roaded settings. Like the other animals, people desire protection from the elements, hiding cover to screen out other individuals and activities, close proximity to water, natural-appearing edges, and an unencumbered, flat site for camping, picnicking, etc.

ROS offers a unique way of thinking about recreation opportunities--they are more than just activities or areas. Clearly, ROS can play an integral role in all aspects of recreation planning on your Forest. You can use it to inventory recreational resources, to estimate the consequences of management decisions, and to match experiences desired by recreationists with available opportunities.

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