

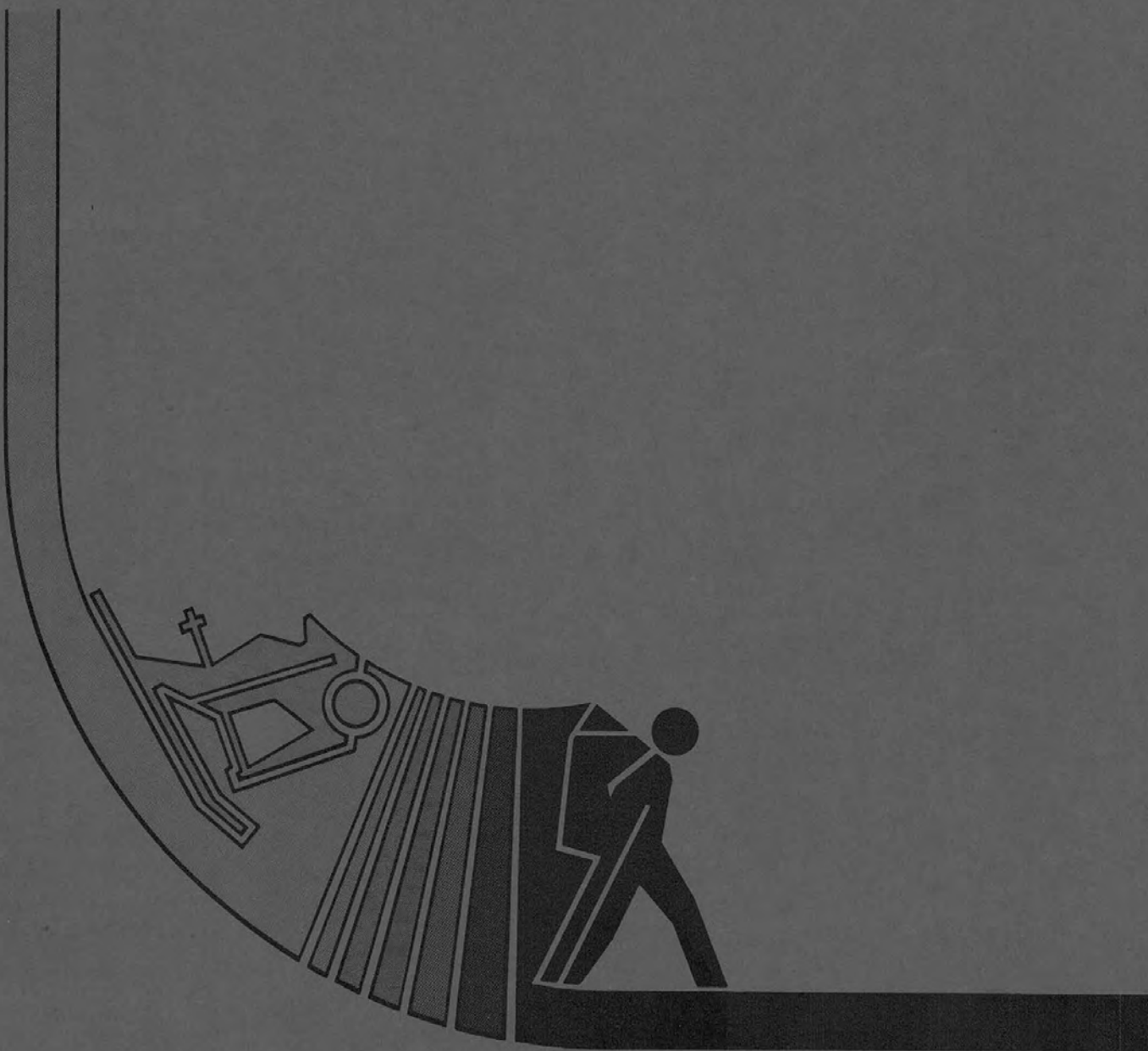


United States
Department of
Agriculture

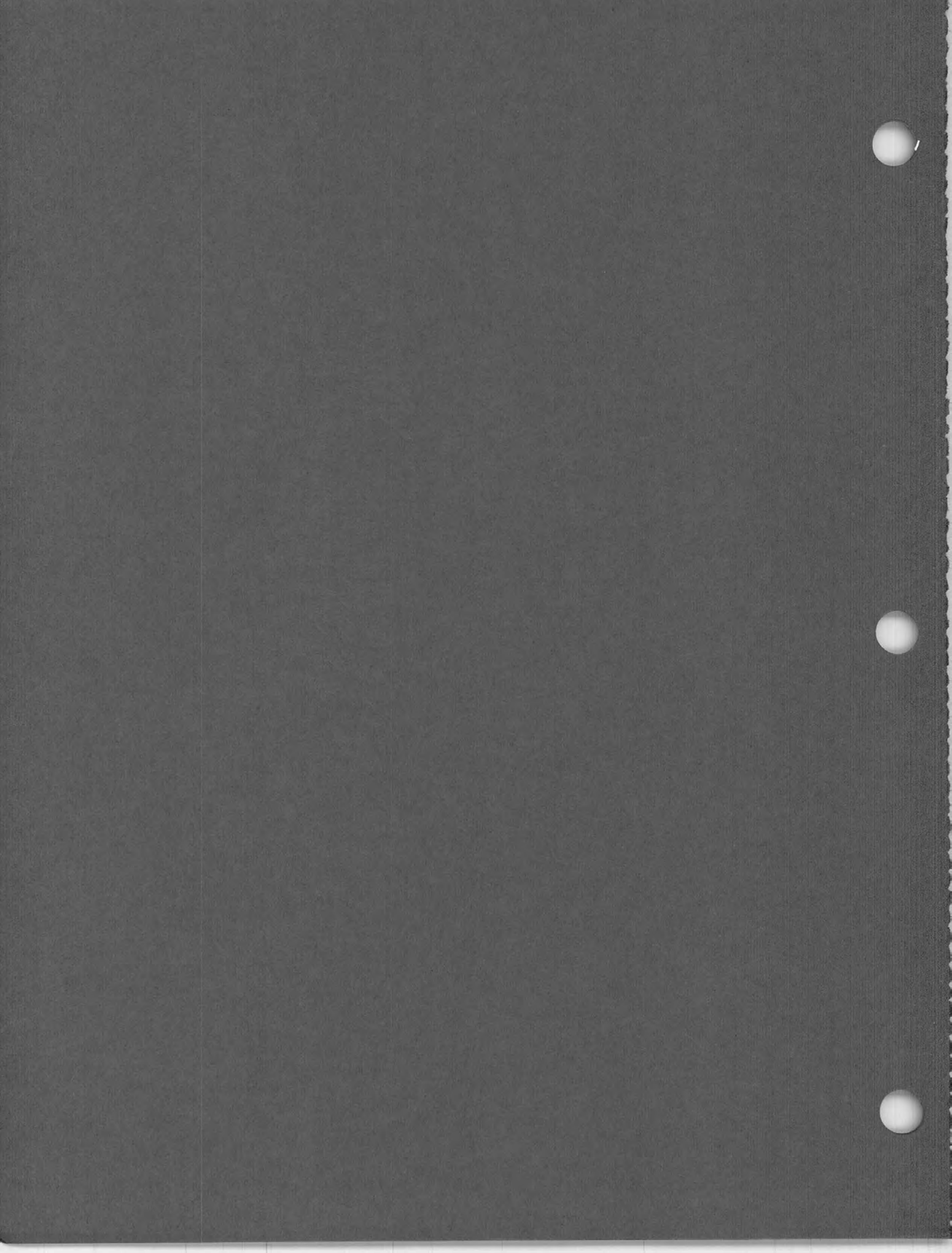
Forest
Service



1986 ROS Book



II BACKGROUND



1986 ROS BOOK

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INTRODUCTION

THE 1986 ROS BOOK has many purposes. Our goal is to gather a variety of Recreation Opportunity Spectrum material into one document, share ideas and concepts, provide LMP/ROS coordination, and update the current ROS situation. This is not a policy document, as ROS is still evolving and needs creative application.

Very little in THE 1986 ROS BOOK is new information, but neither is it well known Service-wide. Pertinent research is highlighted, the out-of-print "ROS Users Guide(82)" is included, the LMP section looks at how ROS has been used, and practical applications are illustrated. The editors strived to have a user-friendly Table of Contents so needed information could be found quickly. We suggest that the Table of Contents be circulated and the document put with your reference material. That should allow all (not just recreation staff) to be aware of the Book's availability and its contents.

A key ROS concept is that it provides a framework which allows administrators to manage for, and users to enjoy, a variety of recreation environments. This variety will more and more become the corner stone of the National Forest System. ROS is not a land classification system; it is a management objective, a way of describing and providing a variety of recreation opportunities, a critical initiative if we are to excel and as balanced land managers.

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UCHTER

Director, Recreation Management

THE NATURE OF THE RECREATION RESOURCE

The following was taken from a draft recreation planning handbook that was never published. It is included as it gives a good feel of why ROS is so important to the nature of the recreation resource.
Authored by Chuck McConnell and Warren Bacon.

RECREATION DEFINITION Many definitions of recreation exist, each emphasizing a slightly different aspect of this enjoyable pursuit. They include "the pleasurable and constructive use of spare time" and "refreshment in mind and body".

OPPORTUNITY FOR EXPERIENCE This sense of creativeness, refreshment, relaxation and pleasure, the experiences of an individual, are realized through participation in recreational activities, preferred surroundings or settings. Therefore, although the recreation resource manager manages settings, he or she does so in order to provide opportunities for recreational experiences. Those experiences are also influenced by many other factors, including the recreationist's own views and expectations.

RECREATION OPPORTUNITY SPECTRUM

THE ROS FRAMEWORK The Recreation Opportunity Spectrum provides a framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences have been arranged along a continuum or spectrum divided into six classes:

SIX CLASSES

Primitive
Semi-primitive non-motorized
Semi-primitive motorized
Roaded Natural
Rural
Urban

ROS is a macro not a micro system.

DESCRIPTIVE The names of the classes were selected because of their descriptiveness and utility in Land Management Planning and other applications. The system has application to all lands regardless of ownership or jurisdiction. However, not all classes of activity would necessarily exist on all land. In other words, it is not expected that the National Forests would provide the entire spectrum, although a few forests may occasionally do so.

Opportunities for experiences along the spectrum represent a range from a very high probability of solitude, self reliance, challenge, and risk to a very social experience where self reliance, challenge, and risk are relatively unimportant.

THE SETTINGS The settings necessary to produce these experience opportunities include physical, social, and managerial attributes and are characterized below. More detailed descriptions can be found in the ROS Users Guide.

SUBUNITS Each class is defined in terms of its combination of activities, setting, and experience opportunities. Where necessary, subclasses may be established to reflect local and Regional conditions as long as they fit within the six major classes for Regional and National summaries. An example of a subclass may be a further breakdown of the roaded natural class into subunits such as roaded natural and roaded modified. These two classes have different user cliental and physical settings. Another breakdown of a primitive class may be based upon aircraft or power boat access.

IMPORTANCE

HOW IMPORTANT How important is resource-based outdoor recreation? Where there are finite resources-financial and physical-how do you measure how much support recreation deserves relative to other needs in society? How do you evaluate the benefits which accrue from it?

A MAJOR ELEMENT Evidence from National surveys, Forest Service research, and other data point to leisure as a-major element in an individual's personal sense of life satisfaction. A perception of phyiscal and psychological wellbeing pervades the survey responses regarding recreation. Recreation activity can vary from passive contemplation to strenuous climbing of sheer rock faces. Recreation settings can range from crowded beaches to isolated mountain streams. Regardless of the type of recreation, across the board benefits were cited--as a tonic for physical and psychological weariness and a respite from the day-to-day of routine of activities. Psychological increments to the individual include the perception of personal development and self-reliance, communion with nature, a sense of renewal, and relaxation from pressures. Significantly, the priority consideration given to outdoor recreation is consistent with persons on all levels of income, education, and occupational status.

A PRIMARY LINK In terms of family and community, central elements in people's lives, recreation is a primary link in building and maintaining these necessary social interactions. Family relationships are enhanced when the opportunity for experiencing outdoor recreation settings together result in eased tensions, better communication, and possible long-term behavioral improvements leading to better family cohension. The shared enjoyments of outdoor recreation cement social relationships between existing and new found friends in the community.

BENEFITS	Benefits to society from such school or community-initiated endeavors as participating in ecology projects, can result in increased future demand for the desired physical setting.
ECONOMIC FACTORS	Economic benefits resulting from outdoor recreation include improved health and job productivity. Increased tax bases for community services and increased Regional income can be brought about by preservation of the resource for recreational activity. Outdoor recreation is a multi-billion dollar industry that provides jobs, and produces goods and services.

BENEFITS

ECONOMIC VALUATION	The old question arises here--how do you place a dollar value on a sunset? A number of methods have been developed for approximating a dollar valuation of the benefits of recreation. Most have been based on the concept of "willingness to pay". The question is to ascertain what users would pay were the opportunity supplied in a price-elastic market:--since there is no such market, the valuation should include not only what is actually paid but the "consumer's surplus" or worth of the opportunity above the cost.
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QUALITY

OPPORTUNITIES	The basic assumption underlying the ROS is that quality in outdoor recreation is best assured through provision of a diverse set of opportunities. Providing a wide range of settings varying in level of development, access, and other factors, insures that the broadest segment of public will find quality recreational experiences, both now and in the future. Although the notion of quality is relative--a value judgment--the concept of quality can be stated for management decision purposes in this way: quality depends on what experiences the individual is looking for, how much of it is realized, and the degree of satisfaction.
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DESIRES FOR SETTINGS	A crucial problem for resource managers, then, is to respond to recreationists' desires for various kinds of appropriate settings managed to produce as many of those experience opportunities as are within the National Forest role. A further challenge is to determine what different practitioners need for satisfying experiences , and if it can be delivered within existing constraints. If a recreation opportunity area is consistently providing satisfactory experiences, the area can be said to be producing quality recreation opportunities, and the users to be receiving full benefit from their experiences. If, on the other hand, there is evidence that inconsistencies exist between what an area offers, what users are led to expect and what managers are trying to provide, the area is producing less than full quality recreational opportunities.
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INCONSISTENCY

THE NATURE OF IT	<p>A setting inconsistency occurs when the physical, social, and/or managerial settings do not each separately contribute to the same type of ROS opportunity.</p> <p>An example of an inconsistency was the paving and straightening of access roads along the southern edge of the Boundary Waters Canoe Area. Levels of use rose rapidly, and following the change in the access factor, pressures developed for increases in facilities and other measures to control use-developments generally inconsistent with a primitive-type opportunity. This inconsistency with the Wilderness Act was recognized by land managers and recreationists.</p>
MINIMIZE EFFECTS	<p>An objective of the opportunity spectrum concept is to minimize the effects of inconsistencies unless purposely managed for. This can be done by analyzing how they occur.</p>
ROADS	<p>An inconsistency might result from an earlier management action (e.g., roadbuilding for timber harvest), for which the effects on recreational use were never identified or anticipated. Had these effects been recognized, the road might not have been built, the type of construction or the road's location might have been changed, or perhaps the road would have been closed after the timber was removed.</p>
UN- AVOIDABLE	<p>Or, the impacts on recreation of an earlier action might have been identified and considered but judged to be unavoidable. Such a situation might develop where the anticipated benefits seem to outweigh the costs (i.e., the benefit of a timber harvest exceeding the costs incurred by changing the nature of the recreational opportunity).</p>
PLANNED SHIFT	<p>The inconsistency could be the result of a purposeful course of action. For example, there may be plans to convert a generally primitive opportunity to a semi-primitive motorized opportunity where motorized access is desirable. This conversion could be based on an assessment that the relative availability of primitive opportunities in the Region is high, whereas the supply of semi-primitive motorized opportunities is low. It may be that an apparent inconsistency is required to achieve certain objectives; it may be desirable, for example, to provide a primitive setting with some form of motorized access to allow easy entry for the handicapped or to provide cabins in primitive areas for protection against the elements.</p>

CONSEQUENCE What are the implications of the inconsistency? Consistency as we describe it above is an ideal concept. In reality, one or more factors may be inconsistent with the others. It is not the inconsistency per se that should be of concern; rather, the consequences of the inconsistencies that may cause a problem, particularly, when they are not anticipated or recognized.

CHANGES
IN USE Serious problems can develop from inadvertent changes. As the nature of a setting is altered, inconsistencies may occur, resulting in subsequent changes in use. The "new" campground attracts a different type of user, camping in a different style and seeking different kinds of experiences. As the new type of user becomes increasingly established, original users move to other locations more to their liking; that is, where the combination of all opportunity factors (including-access, use density, and facilities) still resembles the kind of opportunity formerly enjoyed. This process of "invasion and succession" can drastically change the nature of the available opportunities, the clientele served, and their recreational experiences. Particularly where the process is unnoticed, opportunities can be lost and clientele disfranchised. Implications for managers might involve questions, such as: Will the inconsistency accelerate change in other factors that will, in turn, lead to further undesired changes in the kind of opportunity provided? For example, will the highly developed access lead to higher levels of resource impact because of increased use at the site and will this necessitate development of more facilities or further regulation of use? And, if these outcomes appear likely, are they within national goals and direction?

A SYSTEM It is important to remember that we are looking at recreation as a system, with an interdependence among the various elements of that system. Thus, a change or modification in one element may affect (either slowly or very quickly) the other parts of the system. Remoteness from humans and their impacts, for example, is a major consideration in primitive settings. But the level of remoteness can be affected by changes in several management factors--access, social interaction, and nonrecreational resources. Changes in any one factor may lead to an inconsistency resulting in a negative impact on other factors.

NO ACTION	When inconsistencies occur, managers have three responses available. First, a "no action" response can be adopted. For example, planned changes in the access to an area by one government agency may affect adjacent recreation lands managed by another agency.
CLOSURES	A second response would call for closures of certain types of roads, elimination of facilities, or institution of the onsite modifications.
ALTERING FACTORS	Finally, managers can respond to an inconsistency by altering the remaining factors to bring them into line with the original inconsistent one. This could occur where changing conditions develop an opportunity not presently provided. Response to a situation where well-developed access is inconsistent with a primitive-type opportunity <u>might</u> involve altering the remaining factors to make the area loaded natural. Such a change would have to be justified in the area management plan. Obviously, it is better to think through such relationships before taking the other resource action rather than letting it dictate the recreation response.

THE NATURE OF CONFLICT

DEGRADES	As previously stated, the intended output from providing outdoor recreation opportunities is satisfactory experiences. Conflict generally degrades an experience. Conflict may be either real or perceived.
ELEMENTS	<p>If it is perceived or imagined, it can often be as disturbing to the user as if it really is happening. Several elements increase the likelihood of conflict occurring. They include:</p> <ol style="list-style-type: none"> 1. The intensity of a recreational pursuit--is it a part of a person's central life interest or only a once in a while pastime? 2. The attachment to a specific setting -a favorite place visited many times or a first time visit? 3. The environmental focus--is the setting an important part of the experience or is it just an incidental backdrop? 4. Tolerance to the lifestyles of others.

The following chart outlines some possible causes of conflict, grouped under physical, social, and management attributes. Generally, the more specialized a recreation user is, the more likely he or she will conflict with others,

<u>Physical</u>	<u>Social</u>	<u>Management</u>
Unexpected or severe modification of natural setting,	Inappropriate number of people (groups) - relative congestion.	Inappropriate condition of facilities (sites, trails, roads)
Inappropriate facilities, Perceived degradation of expected (preferred) setting over time,	Inappropriate behavior of groups. Inappropriate behavior or activities.	Inappropriate regulation of activities, space, or congestion.
	Competition for space (relates to the 3 above)	Perceived poor stewardship of the land,
	Inadequate or wrong information.	Non-predictable future for an area.
		Nonconfidence in management actions.
		Nonresponsiveness to needs.

SPECIALIZATION

A number of generalizations can be made about the role of specialization in recreation behavior:

NEWCOMERS WANT RESULTS	Newcomers to an activity are intent on getting results in their recreational pastime, any results, The beginning photographer wants his snapshots of the children to turn out, The novice hiker wants to get from point A to point B, in relative comfort, without blisters on his feet,
VALIDATE COMPETENCE	When the participant becomes competent, the recreationist seeks to validate that competence with the number of successes achieved, or else he operates in settings providing greater challenge, Hikers and backpackers strive to be fully prepared; birdwatchers accumulate long lists of birds sighted; skiers want to perfect style in a consistent manner; canoeists enjoy adventures without pain or pitfall; and photographers attempt to duplicate the results of professionals.
SPECIAL- IZATION	It is after the accomplished stage of development is reached that the recreationist seems most vulnerable to adjunct types of specialization, The flyfisherman may develop a fixation on fly-tying and entomology. In fact, preoccupation with sporting equipment may become an end in itself,

ACTIVITY
FOR ITS
OWN SAKE

Finally, at the extreme end of the specialization continuum are those recreationists who place the most emphasis on doing the activity for its own sake, those who are heard most frequently to refer to the "quality" of the experience and those who make the most specific demands for particular resource settings. Included in the category are the "artist photographers" who view the camera as a means to creative expression. Here too are found the hunter who minimizes the importance of the kill, the hiker who seeks the challenge of unguided journeys, and the "no-trace" camper who enjoys the preparation, execution, and communion with nature.

SPECIFIC
PREFERENCES

Persons with specific preferences and requirements are completely disenfranchised if opportunities for their desires are not met, whereas "generally" motivated users have more numerous alternatives. This notion is politically viable as well, for the specialized users are often the most organized and vocal, since they consider themselves as having the most at stake in terms of personal commitment and involvement in their activity.

ALLOCATING AND PLANNING RECREATIONAL RESOURCES

TYPES OF
OPPORTUN-
ITIES

The ROS is a helpful concept for determining the types of recreation opportunities that should be provided. After a basic decision has been made about the opportunity desirable in an area, the ROS provides guidance about appropriate planning approaches--standards by which each factor should be managed.

THREE
CONCEPTS

Three concepts related to the ROS are useful in making such a decision: (1) the relative availability of different opportunities, (2) their reproducibility, and (3) their spatial distribution.

RELATIVE
AVAILABIL-
ITY

The concept addresses the issue of supply as well as the appropriate role of the recreation manager. Adequacy of supply is a function of, among other things, the spatial distribution of opportunities, and it may be appropriate to estimate relative availability within a Regional framework that extends beyond agency boundaries. When one type of opportunity is in abundant supply, it may be necessary for an agency with that supply to actively encourage other suppliers to provide other kinds or opportunities.. For example,

in an area such as southeast Alaska, primitive and unroaded opportunities are abundant and the USDA Forest Service manages most of the land. The agency might find it necessary to actively encourage other agencies to provide modern and semimodern opportunities in the interests of offering diversity.

REPRODUCI-
BILITY AND
REVERSI-
BILITY

Reproducibility and reversibility are also fundamental considerations. They address the question of the extent to which an opportunity can be technologically reproduced, as well as the ability of management to reverse the outcome of decisions. Opportunities at the modern (developed) end of the spectrum are generally more reproducible (capable of creation through use of technology, infusion of capital, etc.) than those at the primitive end. There is a test of reasonableness here, because it is at least possible to reproduce any opportunity, given sufficient time and money. The spectrum is characterized by asymmetry in the reversibility of management actions because changes from primitive to modern are more difficult, than changes in the other direction. The obvious implication here is that decisions transforming an area from a primitive condition to something more developed needs to be carefully weighed because of the relative inability to reverse that decision.

SPATIAL
DISTRIBU-
TION

In planning and managing large areas for recreational purposes, managers must consider the spatial distribution of opportunities. Sharply dissimilar opportunities generally should be kept apart so that conflicts are minimized

EXAMPLE

For example, opportunities featuring high standard road systems and highly developed campgrounds should not be constructed adjacent to primitive opportunities. Keeping dissimilar opportunities apart also reduces the likelihood that impacts from one opportunity will "spill over" onto an adjacent opportunity (e.g., noise from an area catering to outdoor recreational vehicle users reaching an adjacent area managed for primitive opportunities). Some recent planning efforts have attempted to incorporate this concept. The recently dedicated Alpine Lake Wilderness in Washington's Cascade Range will be bordered by a management area featuring primarily semiprimitive recreational opportunities. This differs from a "buffer" concept in that the semi-primitive area is managed to provide a specific recreation opportunity and is a professional, management response because-it considers the coordination/conflict potentials of activities on adjacent land.

CONSTRAINED Unfortunately, planners and managers often do not have the necessary flexibility to organize opportunities according to this ideal spatial arrangement. They are constrained by previous management decisions, other resource uses, established recreation use, or a variety of other factors that complicate the job. But even within these limitations, mapping recreational opportunities--existing and proposed--can help identify potential conflicts.

Demand.

THE NATURE
OF DEMAND There are three identifiable dimensions of demand. These are: demands for activity opportunities, such as to picnic, hike or ski tour; demands for setting opportunities such as to hike in an environment with specified characteristics (e.g., few people, many facilities and services, scenic vistas, etc,) and demands for specific types of experience opportunities, such as solitude, group interaction, mental relaxation, exhilaration, physical rest, or physical challenge.

RESPONSE
TO SUPPLY Demands for recreation opportunities are inexorably tied to what is available. Demand can often be increased by merely increasing supply directly (e.g., new downhill ski areas). In other areas, demand (as related to supply) can be increased by the management practices in other resource areas. For example, new roads constructed for a timber sale produce incidental RVD's. Other demands can be related to factors that are totally uncontrolled and generally are a result of population increases,

PRICE The demand for product recreation opportunities is often in direct relation to the prices which the consumer must pay for the recreation experience (campground fees) and/or the cost of getting to the area. (Used as part of the travel cost method for establishing values.)

ATTRACTIVE-
NESS Effects on Demand--The degree that visual quality is maintained in a particular opportunity setting should be consistent with the activities involved, The degree of acceptable landscape alternation can vary widely from settings designed for alpine skiing and those maintained for back packing. Visual inconsistencies can substantially alter demand in a given area.

SUBSTITUT-
ABILITY Many outdoor recreation activities are capable of being substituted for other activities or locations and many are not. Knowing the difference is critical in the development of alternatives that satisfy the recreational preference of user groups. For example, the roaded natural setting rarely

satisfies demand for primitive or semi-primitive settings. On the other hand, hikers are generally happy to try new trails or routes as long as the experience is to their liking. To insure that substitutability is considered in the development of alternatives, insure that recreation settings and activities are not lumped into broad categories. Focus on those settings and experiences that are being eliminated in specific alternatives and discuss their substitutability.

DIVERSITY OF OPPORTUNITY Demonstrated demand for a particular activity can and usually does create demand for additional activity opportunities. The demand for a new campground can often create demand for other activities such as hiking, fishing, or trail biking. The demand for any one activity should always be considered in light of associated activities and provisions identified for providing settings appropriate to a diversity of activities.

TRENDS Use trends are an important part of any demand analysis. Correlation of a past population group with past recreation use and projections of how this relationship may change in the future often provides the major basis for demand projection.

Resource Inventory

CURRENT SITUATION The land and water area of National Forest lands are inventoried and mapped by Recreation Opportunity Spectrum class to identify which areas are currently providing what kinds of opportunities. This is done by analyzing the physical, social, and managerial components of each area. The physical setting is defined by the absence or presence of human sights and sounds, size, and the amount of environmental modification caused by human activity. The social setting reflects the amount and type of contact between individuals or groups. It indicates opportunities for solitude, for interactions with a few selected individuals, or for large group interactions. The managerial setting reflects the amount and kind of restrictions placed on people's actions by the appropriate administering agency or private landowner.

The inventory has application to land administered by Federal, State, and local agencies as well as on private lands.

Actual inventory procedures are outlined in the ROS User's Guide and FSM 2300.

CHARACTER-
ISTICS

The characteristics of components (physical, social, and managerial) of the setting affect the kind of experience the recreationist most probably realizes from using a particular area. Also, the inventory can identify the quality and quantity of recreation opportunities; inconsistencies, the current mix of opportunities, and relative abundance and supply.

OUTPUTS

RVD's

Recreation outputs are displayed in the form of recreation visitor days (RVD's)--12 visitor hours, which may be aggregated continuously, intermittently, or simultaneously by one or more persons. Output code listings are displayed in the Management Information Handbook. Following are those listed for recreation:

Code	Title	Code	Title
W01	Primitive Recreation Use (Std.)	W02	Primitive Recreation Use (Less than Std.)
W03	Semi-Primitive Non-Motor. (Std.)	W04	Semi-Primitive Non-Motor. (Less than Std.)
W05	Semi-Primitive Motorized (Std.)	W06	Semi-Primitive Motorized (Less than Std.)
W07	Roaded Natural Use (Std.)	W08	Roaded Natural (Less than Std.)
W09	Rural Recreation Use (Std.)	W10	Rural Recreation Use (Less than Std.)
W11	Urban Recreation Use (Std.)	W12	Urban Recreation Use (Less than Std.)

ACTIVITIES

In the Recreation Information Management System (RIM) these RVD's of use are further broken down by recreation activities. Keep in mind that recreation outputs are really outdoor experiences enjoyed and are linked to user preferences and setting quality.

LINKING LAWS, REGS., AND POLICY TO ALTERNATIVE REQUIREMENTS

SOCIAL
GOALS

Recreation does not have legal requirements that set minimum and maximum limits of management. Recreation is linked rather to satisfying national social goals through recreational settings which provide quality recreation opportunities.

To the degree consistent with needs and demands for all major resources (one of which is recreation), a variety of Forest and rangeland related outdoor recreation opportunities shall be provided for in each alternative. Thus the key to setting alternative management requirements is to know the recreation market area and the social needs which are to be addressed through recreational opportunities for users.

INTERRELATIONSHIP BETWEEN RESOURCES

RESOURCE INTERFACE The purpose of this section is to describe the interface between Recreation and other resources. The interface refers to identifying the areas of compatibility and conflict in developing integrated management prescriptions. It also refers to identifying the procedural steps in using the different resource inventories so that opportunities are not foreclosed before analysis and any conflicts are identified.

INTEGRATION The various resources including those closely related to recreation, should be kept entirely separate in the planning steps of issues, concerns, opportunities, inventory, decision criteria and analysis of the management situation. Only in the development of a range of alternatives do they begin to come together in the form of integrated management prescriptions.

INTERRELATIONSHIPS

VISUAL Defining the interface between recreation and visual resource is important because there are many overlaps in inventory, analysis, and management application--most of which are complementary. Secondly, many of the **laws** pertaining to one resource have direct implications to the other.

INHERENT QUALITY Visual Resource Management is based upon the inherent scenic quality of the land, the degree of existing alteration of that resource, and the amount of use of that scenic resource generated by travel routes and use areas.

ROS Recreation Resource Management, using the Recreation Opportunity Spectrum, is based upon the experience opportunities provided by the physical, social, and managerial settings of the land and the recreation activities which occur in those settings.

COMPLEMEN-
TARY

The two systems, ROS and VMS, are different--complementary and entirely compatible if used properly. The ROS system measures the existing and potential opportunities from Primitive to Urban based on the physical, social, and managerial settings. The Primitive and Semi-Primitive setting descriptions are particularly definitive. The Roaded Natural through Urban setting descriptions are quite broad, allowing most any evidence by humans within the setting description. Missing is a good measure of the inherent or cultural scenic quality (attractiveness) of the settings, differing levels of concern for that attractiveness in many ROS classes, and a method for measuring the degree of alteration of the setting for inventory and management. The Visual Management System--or adaptations of it--provides the latter through variety class and existing visual condition inventories, use of visual quality objectives and carefully prepared characteristic landscape statements for Rural and Urban settings.

But except for variety class and existing visual condition inventories, the Visual Management System does not analyze the dispersed opportunities of the Primitive and Semi Primitive settings. Visual Quality Objectives can be used as proxies to manage these settings but only after ROS analysis has been completed.

BENEFITS

Visual Resource Management is reflected in ROS settings and contributes to recreation benefits which are accounted for by the measure of RVD's. It also covers public needs for scenic quality which incur costs to maintain or create but which are not reflected or measured as RVD benefits. The latter instance includes the National Forest scenic backdrops of cities, communities, or other occupancy sites on private lands, scenic backdrops along travel routes outside of National Forest boundaries, visual benefits accrued to nonrecreation travelers on National Forest travel routes, and visual benefits accrued to nonrecreation residents of National Forest lands.

VRM and CRM

Visual Resource Management is based upon the inherent scenic quality of the resource, the degree of alteration of that resource, and the amount of use of that scenic quality that is generated by travel routes and use areas. It is quite independent of the needs to maintain natural appearing landscapes due to cultural, religious needs of Native Americans or other groups of the public. Visual Resource Management can be a useful tool to maintain or create such physical setting. In order for this to happen, the extent and acceptable degree of human alteration of the landscape must be prescribed by CRM in the planning process.

TRAILS	Examples of such situations may be seen most from trails used almost exclusively for religious or other cultural purposes and prominent features in the landscape, such as mountain peaks, springs, or groves of trees almost exclusively used for such purposes.
CULTURAL LANDSCAPES	Visual Resource Management can also contribute to maintaining or creating cultural landscapes identified as being significant to cultural heritage by CRM. The results will ordinarily be compatible with VRM, but in some cases CRM needs will override VRM and violate the minimum desired visual condition identified by the VMS. The direct costs to maintain or recreate such cultural landscapes and the opportunity costs to other resources should be assigned to CRM.
IS and RECREATION	The Interpretive Services program is an essential ingredient in the user achieving a successful set of psychological experiences. Interpretation or lack of it is important in such experiences as a sense of learning and self-discovery, exploring to satisfy curiosity needs, sense of achievement, feeling of solitude, sense of security, teaching and leading others, applying and developing creative abilities, learning more about nature, gaining a greater appreciation of the Nation's cultural heritage, and improving an understanding of resource management and conservation practices. Interpretive elements which are critical are the amount and type of information provided, and the location and design of facilities, including materials, architectural style, and complexity or sophistication of displays (i.e. simple sign vs. three dimensional moving exhibit).
WILDLIFE	Wildlife management is done to maintain or improve habitats for a wide range of both game and nongame species. Desired changes in amount of forage areas, thermal and hiding cover, and areas for reproduction are usually done through Timber Management Activities. Where such activities occur they are key to accomplishing wildlife, recreation, and timber objectives. Compatibility for wildlife in the matrix might be shown as part of timber.

p	SPNM	SPM	RM	RN	Rural	Urban
No timber harvest or habitat manipulation as the norm.	May range from no timber or habitat manipulation to harvest habitat manipulation units that meet retention to travelway and cross-country users.	Reg. units and habitat manipulation meet partial retention from travelways or cross-country.	Reg. units and habitat manipulations are strongly dominant from within area.	Reg. units and habitat manipulations designed to maintain a natural appearing Forest.		

USER ACCESS ROS classes vary in the amount of recreation users allowed in both motorized and nonmotorized types. Wildlife (species populations) benefit in general from decreased human disturbance resulting from low road densities and/or restrictions on motorized use.

SECURITY From this standpoint, wildlife populations have greater habitat security and are, therefore, better off in Primitive, SemiPrimitive, and Nonmotorized, Semi-Primitive Motorized classes. In these classes, however, manipulation of vegetation for habitat improvement is limited. Roaded natural allows more habitat manipulation, but also allows potential increases in numbers and density of people. The roaded modified class used in some western Regions allows the maximum amount of manipulation and significant reduction in numbers of people. Timber harvest activity may be intense at times, causing unwanted motorized disturbance.

However, there are options for creating wildlife emphasis areas with habitat manipulations and high density of roads which may be periodically closed to the public. These areas should be given a wildlife emphasis title. Recreation experiences created are closer to a Roaded Modified except roads are closed. It may be established as an ROS subclass.

OVERLAP AREAS There are habitats or certain attributes of habitats which have compatible benefits for both wildlife and recreation. Areas maintained with a significant proportion of old growth characteristics often also produce Semi-Primitive or Primitive recreation experiences. The desired vertical diversity of vegetation often desired for certain wildlife

species is also a desired character in many road and trail foreground landscapes. Increased edge of created openings (vertical and horizontal diversity) is also a highly desirable visual objective. Where these result in mutual overlapping, allocation areas in Forest planning, benefits, and costs should be distributed accordingly.

RECREATION

Much of the success in managing vegetation to achieve desired visual character and meet visual quality objectives in Roded Natural and Rural areas is tied to control of viewing positions primarily on roads, highways, and use areas. When the recreation user is traveling on trails or cross-country in Primitive or Semi-Primitive areas, near view becomes very evident. Recreation experience opportunities not as available in Roded Natural and Rural should become a primary goal. Some of these may include:

1. Obtaining privacy, solitude, and tranquility in an outdoor setting.
2. Experiencing natural ecosystems in environments which are largely unmodified by human activity.
3. Gaining a new mental perspective in a tranquil outdoor setting.
4. Self-testing and risk-taking for self-development and sense of accomplishment.
5. Learning more about nature, especially natural processes, human dependence on them, and how to live in greater harmony with nature. To the extent practical, these opportunities should be goals in all ROS settings on the National Forest System.

SUBTLE

Any vegetative management must be quite subtle and for the purposes of creating and maintaining an attractive recreation setting that will offer these types of experience opportunities. Details such as the attributes of an old growth Forest (rotting logs with conks, large trees with distinctive bark, etc.,) become even more important in Primitive and Semi-Primitive than in Roded Natural and Rural. Providing human scale or created openings generally means they must be quite small with natural appearing forest floor, edge, shape, and disbursement.

More detailed guidelines can be found in the Timber Agricultural Handbook 559: National Forest Landscape Management, Vol. 2 Chapter 5.

ROS RATIONALE

From "A Technique for Recreation Planning and Management"
in Tomorrow's Forests" by Brown and Stankey

TOMORROW'S FORESTS

In characterizing the nature of tomorrow's forests, several features appear likely. Increasing population coupled with growing aspirations have already produced greater demands on forests for the various goods and services they produce, and these demands will certainly continue to grow. There is also a steady growth in the level of demand placed on forest lands for non-forest uses. Spreading urbanization, agriculture, and other uses have displaced forestry as the principal land use in many areas. Tomorrow's forests almost certainly will be characterized by an increased level of management presence. Forests of free access and unregulated resource setting will be increasingly difficult to locate. Finally, with the growth in forest and non-forest dependent demands, the level of conflict among forest users will assuredly grow. The preservation versus development issue found in the forests of many countries today will be increasingly common.

MORE COMPLEX

Planning and managing recreation in forests where such demands and conflicts exist is an inherently difficult task. It is made even more complex by the rapid and often unpredictable nature of change.

This includes changes in technology, recreation tastes and preferences, and social, political, and economic conditions. The typically low accuracy and reliability of recreation use projection is indicative of the difficulty of anticipating these changes, and make the task of planning into the future extremely difficult.

A FRAMEWORK

Despite the complexity of the issue, it seems clear that recreation will remain one of the principal services provided by forests. And in coping with the uncertainty of future conditions, it seems important that recreation managers have at their disposal a framework that recognizes recreation as one element of an integrated forest system. This is especially necessary given that non-recreation related decisions in forest settings are often the major influence on the nature of the recreation opportunities supplied. Changes in the nature of the vegetation mosaic brought about by timber harvesting, and changes in the amount, distribution, and nature of access created for timber management and fire control purposes are examples of such influences.

A FRAMEWORK FOR INTEGRATION

Recent legislation has given impetus to efforts to supplant traditional functional planning with comprehensive land management planning programs that recognize the integrative and interdependent nature of the forest resource systems.

In meeting this need in recreation, planning and management have developed the Recreation Opportunity Spectrum (ROS) framework for guiding recreation planning and management. Although not a new idea, the ROS has only recently been sufficiently operational to permit its systematic application in planning, allocation and management.

DIVERSE RECREATION

The basic assumption underlying the Recreation Opportunity Spectrum is that options to realize the number of recreational experiences sought by users are best assured by providing a diverse set of recreation opportunities. A recreation opportunity is a chance for a person to engage in a specific recreational activity within a specific environmental setting to realize a predictable recreation experience. Thus, the ROS conceives of the recreation management and planning task as a behaviorally-based production process, with three distinctive aspects of demand that must be considered.

MORE THAN JUST ACTIVITIES

First, visitors seek opportunities to participate in certain activities.

Traditional analysis has focused on activities and levels of participation in them, but there is increasing recognition that such an approach is inadequate as a basis for establishing meaningful management objectives or assessing the output of the recreation management system.

SETTINGS

Second, visitors seek certain settings in which they can recreate.

Settings are composed of three primary elements: The physical setting, the social setting, and the management setting. These three elements exist in various combination and are subject to managerial control so that diverse opportunity settings can be provided.

DESIRED EXPERIENCES

These settings, however, are not ends in themselves. Providing settings is a means of meeting the third aspect of demand, desired experiences. Settings are used for providing opportunities to realize specific experiences that are satisfying to the participant. In offering diverse settings where participants can pursue various activities, the broadest range of experiences can be realized. The task of the recreation planner and manager, then, is to formulate various combinations

of activity and setting opportunities to facilitate the widest possible achievements of desired experiences-- or to preserve options for various types of recreation opportunities.

EIGHT GUIDELINES

These ideas about a spectrum of recreation opportunities were used to design the Recreation Opportunity Planning system. In developing this system, several additional guidelines were followed so that the system would: (1) build on the existing system, (2) have intuitive appeal to managers and give them useful results, (3) be both simple and inexpensive to implement, (4) fit with the land planning and management process, (5) give consistent results, (6) provide objective criteria for evaluating the recreation opportunity potential of different types of resources and landscapes, (7) assure that the total range of recreation opportunities is considered, and (8) be based on tested behavioral science theories that are relevant to recreation choices. Using these guidelines, a number of existing planning systems were reviewed and useful elements of each were combined with the fundamental precepts of the ROS concept to produce the ROS system.

USE AND VALUE

The ROS framework is useful for several purposes. It helps specify more clearly the recreation opportunities demanded, guides resource inventory for arriving at recreation planning recommendations, combines recreation opportunity analysis into integrated forest resource planning, assesses the impact of a recreation allocation on other resource outputs or the impacts of other resource uses on recreation opportunities, guides recreation demand analysis by better defining recreation outputs, and ensures consistency between allocation, action, and project plans. The ROS provides a framework that will aid in the systematic provision of diverse opportunity settings that build to different styles as well as kinds of activities, thus promoting the equitable, effective, and efficient delivery of outdoor recreation services. Through the diversity which the ROS promotes, the kinds of change for tomorrow's forests with which planners must contend can be accommodated and, as suggested earlier, the consequences of alternative solutions to meet these changes can be more readily identified.

VISITOR EXPECTATIONS

Finally, ROS concepts can themselves be used as a framework for communicating and interacting with recreationists. By providing information to visitors about ROS with regard to acceptable activities, the nature of the setting, and the likely kinds of experiences, the likelihood of linking recreationist's expectations and desires with places that meet their demands is greatly increased. Similarly, by asking recreationists

of activity and setting opportunities to facilitate the widest possible achievements of desired experiences-- or to preserve options for various types of recreation opportunities.

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to specify what it is they want, managers can help people find these desired opportunities, thus avoiding problems related to conflict and displacement.

TITLE 2300 - RECREATION, WILDERNESS,
AND RELATED RESOURCE MANAGEMENT

2310.3 - Policy. In addition to general planning policy presented in 36 CFR 219.1, FSM 1903, FSM 1920.3, FSM 1922.03, and FSM 2303:

1. Use the Recreation Opportunity Spectrum (ROS) to establish planning criteria, generate objectives for recreation, evaluate public issues, integrate management concerns, project recreation needs and demands, and coordinate management objectives.
2. Use the ROS system to develop standards and guidelines for proposed recreation resource use and development.
3. Use the ROS system guidelines to describe recreation opportunities and coordinate with other recreation suppliers.
4. Recognize individual National Forests need not provide recreation opportunities in each ROS class.
5. Do not provide urban opportunities with appropriated or other public funds. Channel urban class provided by private sector funds to private land if available.

2311 - RESOURCE OPPORTUNITIES IN RECREATION PLANNING.

Stratify and define outdoor recreation setting opportunities to:

1. Establish outdoor recreation strategies and supporting standards and guidelines.
2. Ensure the proper scale and design criteria of development as explained in FSM 2330 and FSM 2340.
3. Support tradeoff analysis of possible recreation opportunities and quality (36 CFR Part 219.21 and Part 219.26 and FSM 1922.12-15).
4. Monitor the quality of recreation outputs and effects in Forest plan implementation (36 CFR Part 219.11(d) a3 defined in each Forest plan).

2.311.1 - Recreation Opportunity Spectrum (ROS). Use the Recreation Opportunity Spectrum (ROS) system and the ROS **Users** Guide (U.S. Department of Agriculture, Forest Service. ROS Users Guide. Washington, DC: U.S. Department of Agriculture, Forest Service: 1982. 37 p.) to delineate, define, and integrate outdoor recreation opportunities in **land and resource management** planning (FSM 1922.15, item 2). Recreation integration/coordination provides for integrated **management** prescriptions **and associated** standards to deal with the recreation resource. ROS defines six recreation opportunity classes that provide different settings for

recreational use: primitive, semi-primitive nonmotorized, semi-primitive motorized, roaded natural, rural, and urban. Use ROS classes to describe all recreation opportunity areas--from natural, undisturbed, and undeveloped to heavily used, modified, and developed. Apply the criteria involving the physical, social, and managerial environments found in the ROS Users Guide to delineate the different ROS classes of land. Urban class areas are not normally an appropriate management objective for National Forest lands.

2311.11 - Recreation Opportunity Spectrum Visual and Access Guides. Exhibit 1 presents visual quality guides for each ROS class. Exhibit 2 presents access strategies for each ROS class.

2311.12 - Recreation Opportunity Spectrum Subclasses. Each Recreation Opportunity Spectrum class may be divided into subclasses to better reflect local or Regional conditions. Regions using subclasses shall define subclasses clearly and coordinate with adjoining Regions. Subclasses must fall within the six major classes for regional and national data summarization.

TITLE 2300 - RECREATION, WILDERNESS,
AND RELATED RESOURCE **MANAGEMENT**

RECREATION OPPORTUNITY SPECTRUM/ VISUAL MANAGEMENT SYSTEM

ROS	Visual Quality Objectives				
	Preservation	Retention	Partial Retention	I Modification!	Maximum Modification
PRIMITIVE	Norm	Inconsistent	//////	//////	//////
-----',-----,-----					
SEMI-PRIMITIVE NON-MOTORIZED		Norm	Inconsistent	1//////	Unacceptable//////
SEMI-PRIMITIVE MOTORIZED	Fully	Compatible	Norm*	Inconsistent!	1//////
ROADED NATURAL			Norm	Norm	Inconsistent
RURAL				Norm	Norm
URBATl**	Acceptable		I I I I		Norm

* rrom sensitive roads and trails. (USDA Handbook 462)

** Normally inappropriate on National Forest land.

TITLE iJUU - H CK A lUN, WlLU HN ,
AND RELATED RESOURCE MANAGEMENT

ACCESS STRATEGY AND THE RECREATION OPPORTUNITY SPECTRUM

	I Cross-country & trails	II Easy trails	I TSL D roads	III D roads	IV Controlled TSL B & C Rds	I Full Access TSL A, B, & C	V Full Access TSL A, B, & C
PRIMITIVE	Norm	Inconsistent	1	1	1	1	1
SEMI-PRIMITIVE MOTORIZED		Norm	Inconsistent	1	Unacceptable	1	1
SEMI-PRIMITIVE MOTORIZED			Norm	1	Inconsistent	1	1
ROADED NATURAL				Norm	Inconsistent	1	1
RURAL					Norm	Norm	Norm
URBAN						Norm	Norm

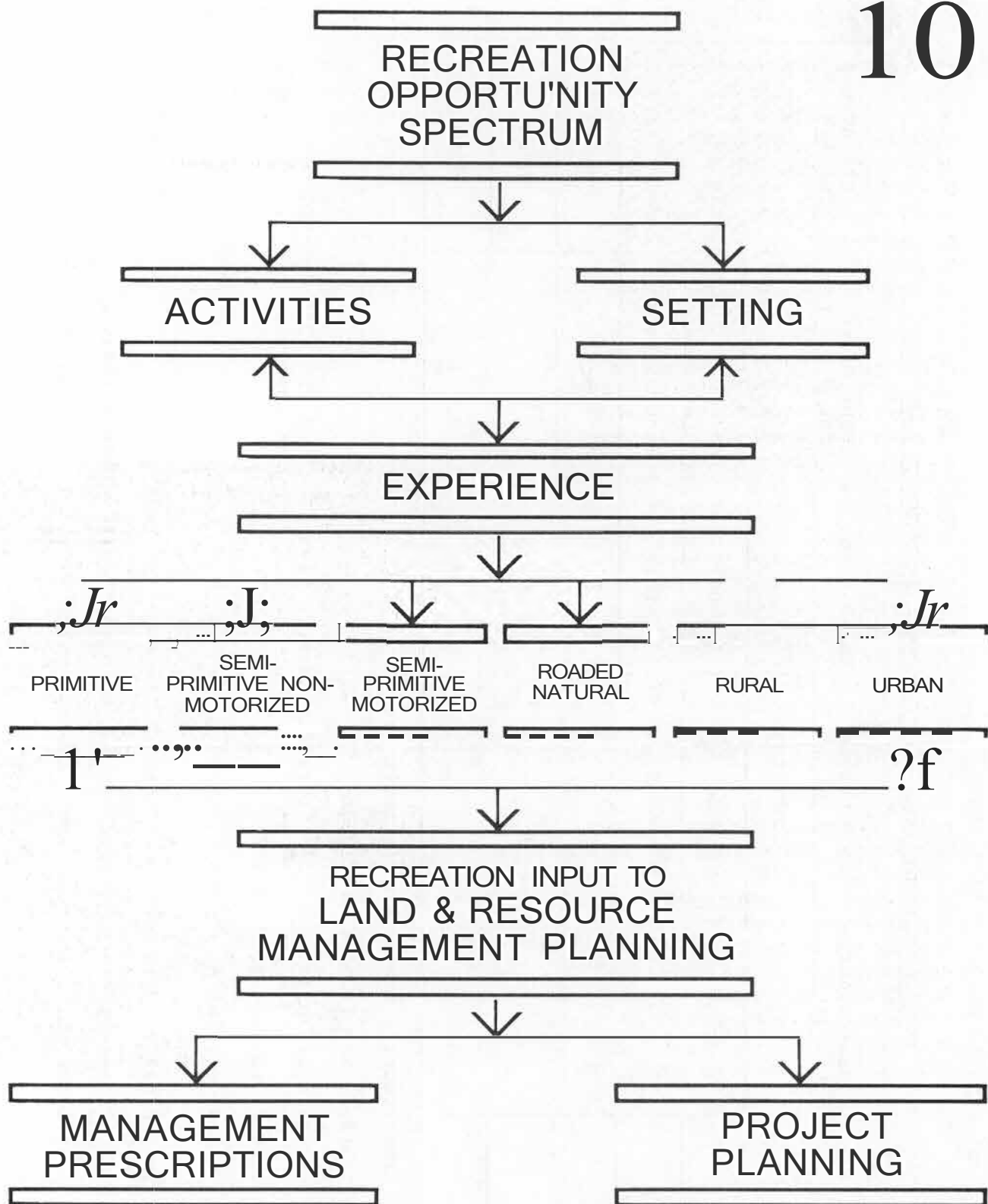
- | | | |
|----|--|-----------------------------------|
| I | Cross-country travel to difficult trails. | |
| II | Trails, easy to most difficult. | |
| LT | Low-standard primitive roads (Traffic Service Level D) | (See FSM 2355 for ORV management) |
| IV | Controlled-access TSL Band c roads. | |
| V | Full-access TSL A, B, and C roads. | |

Norm: The normal conditions to be found in the physical setting.

Accept-	Conditions which are acceptable, but more restrictive than normal.
---------	--

Inconsistent	Conditions which are not generally compatible with the norm, but may be necessary under certain circumstances to meet the management objective,
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Unacceptable conditions under any circumstances.



11-RECREATION

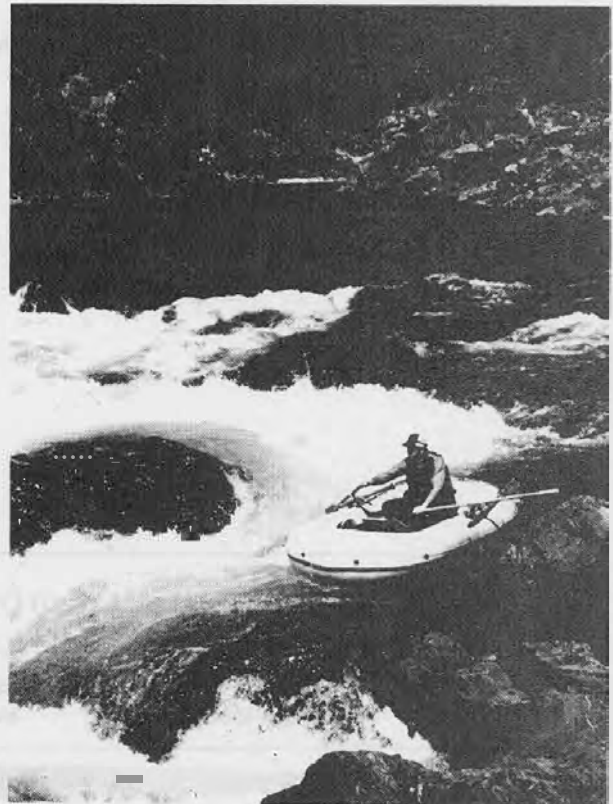
Many definitions of recreation exist, each emphasizing some slightly different aspect of this complex phenomenon called "recreation." In the *Recreational Use of Wild Lands*, Frank Brockman defines recreation as "the pleasurable and constructive use of spare time." Howard Danford, in *Creative Leadership in Recreation*, defines recreation as "any socially desirable leisure activity in which an individual participates voluntarily and from which he derives immediate and continuing satisfaction." Webster defines recreation as "refreshment in mind and body."

The sense of creativeness, refreshment and pleasure which the recreationist has while recreating or having a good time can be viewed as the recreationist "realizing satisfactory experiences." The recreationist attains these satisfactory experiences by participating in preferred recreation activities in preferred surroundings or settings. Therefore although the recreation resource manager manages settings, he or she does so to provide opportunities for recreation experiences and the benefits those experiences produce for individuals and society. Those experiences are influenced by many factors, the settings, the activities, other resources present, activities by managers, and by the values, expectations and other characteristics of the recreationists. These factors interrelate to define outdoor recreationists' needs and the way these needs are met by management action.

"Managing for recreation requires different kinds of data and management concepts than does most other activities. While recreation must have a physical base of land or water, the product-recreation experience-is a personal or social phenomenon. Although the management is resource based, the actual recreational activities are a result of people, their perceptions, wants, and behavior." (From: Final Report of the Committee of Scientists for Implementation of Section 6 of the National Forest Management Act of 1976, February 22, 1979, as published in the Federal Register, Part V, May 4, 1979, p. 26628.)

12-RECREATION OPPORTUNITY

The word opportunity is defined as a "combination of circumstances favorable for a purpose." The purpose or goal of the recreationist, as discussed above, is to realize satisfying experiences. This is done by participating in preferred activities in preferred environmental settings. Thus, recreation opportunity is "the availability of a real choice for a user to participate in a preferred activity within a preferred setting, in order to realize those satisfying experiences which are desired."



13-RECREATION OPPORTUNITY SPECTRUM

While the goal of the recreationist is to obtain satisfying experiences, the goal of the recreation resource manager becomes one of providing the opportunities for obtaining these experiences. By managing the natural resource setting, and the activities which occur within it, the manager is providing the opportunities for recreation experiences to take place. Therefore, for both the manager and the recreationist, recreation opportunities can be expressed in terms of three principal components: the activities, the setting, and the experience.

For management and conceptual convenience possible mixes or combinations of activities, settings, and probable experience opportunities have been arranged along a spectrum, or continuum. This continuum is called the Recreation Opportunity Spectrum (ROS) and is divided into six classes (Figure 1). The six classes, or portions along the continuum, and the accompanying class names have been selected and conventionalized because of their descriptiveness and utility in Land and Resource Management Planning and other management applications.

Each class is defined in terms of its combination of activity, setting, and experience opportunities (Table 1). Subclasses may be established to reflect local or regional conditions as long as aggregations can be made back to the six major classes for regional or national summaries. An example of a subclass may be a further breakdown of Roaded Natural into subclasses based on paved, oiled, or dirt surfaced roads, which in turn reflects amount of use, or a further breakdown of Primitive based upon aircraft or boat use.

The Recreation Opportunity Spectrum provides a framework for stratifying and defining classes of outdoor recreation opportunity environments. As conceived, the spectrum has application to all lands regardless of ownership or jurisdiction. Its use in the National Forest System will facilitate the consideration, determination and implementation of the recreation management role.

Figure 1

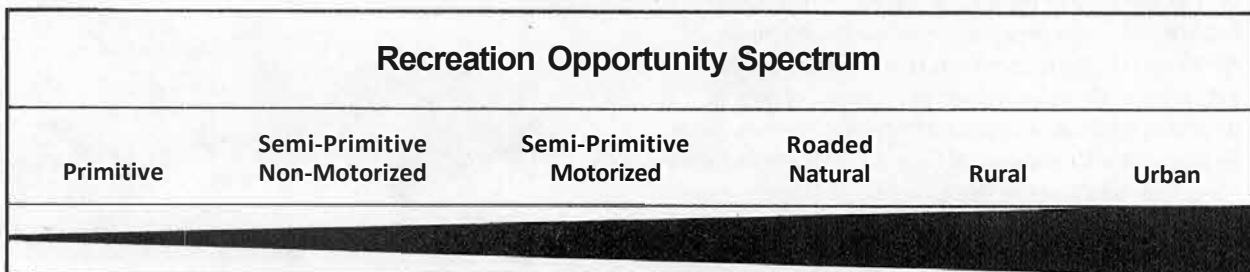


Table 1

ROS Activity Characterization*					
Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized	Roaded Natural	Rural	Urban
<u>Land Based:</u> Viewing Scenery Hiking and Walking Horseback Riding Tent Camping Hunting Nature Study Mountain Climbing <u>Water Based:</u> Canoeing Other Watercraft (non-motorized use) Swimming Fishing <u>Snow and Ice Based:</u> Snowplay X-Country Skiing/Snowshoeing	<u>Land Based:</u> Viewing Scenery Automobile (off-road use) Motorcycle and Scooter Use Specialized Landcraft Use Aircraft Use Hiking and Walking Horseback Riding Camping Hunting Nature Study Mountain Climbing <u>Water Based:</u> Boating (powered) Canoeing Sailing Other Boating Swimming Diving (skin or scuba) Fishing <u>Snow and Ice Based:</u> Ice and Snowcraft Use Skiing, Downhill Snowplay X-Country Skiing/Snowshoeing	<u>Land Based:</u> Viewing Scenery Viewing Activities Viewing Works of Human-Kind Automobile (includes off-road use) Motorcycle and Scooter Use Specialized Landcraft Use Train and Bus Touring Aircraft Use Aerial Trams and Lifts Use Hiking and Walking Bicycling Horseback Riding Camping Picnicking Resort and Commercial Services Use Resort Lodging Recreation Cabin Use Hunting Nature Studies Mountain Climbing Gathering Forest Products Interpretive Services <u>Water Based:</u> Tour Boat and Ferry Use Boat (Powered) Canoeing Sailing Other Watercraft Use Swimming and Waterplay Diving (skin and scuba) Waterskiing and Water-Sports Fishing <u>Snow and Ice Based:</u> Ice and Snowcraft Use Ice Skating Sledding and Tobogganing Downhill Skiing Snowplay X-Country Skiing/Snowshoeing	<u>Land Based:</u> Viewing Scenery Viewing Activities Viewing Works of Human-Kind Automobile (includes off-road use) Motorcycle and Scooter Use Train and Bus Touring Aircraft Use Aerial Trams and Lifts Use Hiking and Walking Bicycling Horseback Riding Camping Picnicking Resort and Commercial Services Use Resort Lodging Recreation Cabin Use Hunting Nature Studies Gathering Forest Products Interpretive Services Team Sports Participation Individual Sports Participation Games and Play Participation <u>Water Based:</u> Tour Boat and Ferry Use Boat (Powered) Canoeing Sailing Other Watercraft Use Swimming and Waterplay Diving (skin and scuba) Waterskiing and Watersports Fishing <u>Snow and Ice Based:</u> Ice and Snowcraft Use Ice Skating Sledding and Tobogganing Downhill Skiing Snowplay X-Country Skiing/Snowshoeing		

*These activities (from R1 M FSH 2309.11) are illustrative only. Specific additions or exception of activities within a ROS class may occur depending upon local forest situations.

Table 1 (continued)

ROS Setting Characterization*					
Primitive	Semi-Primitive Non-Motorized	Sem I-Primitive Motorized	Roaded Natural	Rural	Urban
Area is characterized by essentially unmodified natural environment of relatively low interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.	Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted.	Area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted.	Area is characterized by predominantly natural-appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.	Area is characterized by substantially modified natural environment. Recreation and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided far away from developed sites. Facilities for intensified motorized use and parking are available.	Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modification and utilization practices are to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sounds of humans, on-site, are predominant. Large numbers of users can be expected, both on-site and in nearby areas. Facilities for highly intensified motor use and parking are available with forms of mass transit often available to carry people throughout the site.

*This table is for descriptive purposes only.
Use the five specific ROS class delineation criteria given in Table 2 to identify the actual areas to which these descriptions apply.





Table 1 (Continued)

ROS Experience Characterization*					
Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized	Roaded Natural	Rural	Urban
Extremely high probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers a high degree of challenge and risk.	High, but not extremely high, probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk.	Moderate probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk. Opportunity to have a high degree of interaction with the natural environment. Opportunity to use motorized equipment while in the area.	About equal probability to experience affiliation with other user groups and for isolation from sights and sound of humans. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities associated with more primitive type of recreation are not very important. Practice and testing of outdoor skills might be important. Opportunities for both motorized and non-motorized forms of recreation are possible.	Probably for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. These factors are generally more important than the setting of the physical environment. Opportunities for wilderness challenges, risk-taking, and testing of outdoor skills are generally unimportant, except for specific activities like downhill skiing, for which challenge and risk-taking are important elements.	Probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. Experiencing natural environments, having challenges and risks afforded by the natural environment, and the use of outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive use of open spaces are common.

*these experiences are highly probable outcomes of participating in recreation activities in specific recreation settings.

14-RECREATION INPUT TO LAND AND RESOURCE MANAGEMENT PLANNING

Planning for recreation opportunities using the Recreation Opportunity Spectrum is conducted as part of Land and Resource Management Planning. The recreation input includes factors such as supply and demand, issues and identification of alternative responses to those issues which the planner must **assess** in order to develop management area prescriptions designed to assure the appropriate recreation experience through setting and activity management on the Forest.

Use of the Recreation Opportunity Spectrum classes in the formulation of Land and Resource management prescriptions provides the primary recreation framework for:

1. Establishing outdoor recreation management emphasis, standards and guidelines for specific management areas.
2. Trade-off analyses of available recreation opportunities as environmental characteristics might be changed by other proposed resource management actions.
3. Monitoring outputs in terms of established Recreation Opportunity classes.
4. Providing guidelines for project plans.



Recognition that National Forest System lands potentially have a large and diverse variety of recreation opportunities does not imply that equal or balanced allocations of classes be provided, nor does it mean that individual National Forests provide some of each class. Specific kinds and quantities of recreation opportunity classes are more appropriately established considering Forest capabilities with other resource integration needs as guided by national policy direction.

15-MANAGEMENT PRESCRIPTIONS

In the Land and Resource Planning process the management emphasis selected for a specific management area is achieved through the implementation of management prescriptions. Prescriptions are closely integrated sets of specific management practices scheduled over the entire planning period or portions of the planning period. Most acres within a planning area have the inherent capability, to some degree, to provide recreation opportunities and experiences. Therefore management prescriptions for each management area should include consideration for recreation use.

The introductory portion of a management prescription states in a concise way the goals and objectives of the prescription; what resource outputs are being emphasized; and the expected future "condition of the Forest" that will result from application of the prescribed management actions. Alternative sets of management prescriptions are developed to reflect and evaluate emphasis of different resource output management directions.

Each prescription should contain minimum guidelines and standards to be met as well as directions concerning the type of activities, settings, and experience opportunities to be managed for during the planning time periods.

16-PROJECT PLANNING

Project plans take their direction from Forest land and resource plans which include prescriptions for specific management areas. The Recreation Opportunity Spectrum class determination as an integrated part of the management area prescription in conjunction with the standards and guidelines provides for the overall project planning direction.

D1 = D2 - D3

Dimension 1

Recreation Opportunity Classes

Physical Setting
Social Setting
Managerial Setting

Dimension 3

Recreation Experiences (Psychological Outcomes)

Escape Physical Pressure
Escape Personal/Social Pressure
Reflection on Personal Values
General Learning
Equipment Use/Testing
Being With People
Risk Taking
Achievement
Etc.

Urban

Rural

Etc.

Roaded Natural

Semi-Primitive Motorized

Semi-Primitive Non-Motorized

Primitive

Auto Camping

Cross-Country Ski Touring

Compete in Games

Organization Camping

Picnicking

Power Boating

Auto Touring

ORV Touring

Nature Study

Hunting

Swimming

Camping

Fishing

Canoeing

Horseback Riding

Hiking

Viewing Scenery

Dimension 2

Recreation Activities