

Recreation Opportunity Spectrum (ROS) and Forest Planning Ashley National Forest

Introduction

This paper provides a brief summary of: 1) history and background of the Recreation Opportunity Spectrum (ROS) process, 2) importance of ROS to Forest Planning and subsequent project planning and implementation, 3) ROS steps completed on the Ashley National Forest as of August 26, 2005, and 4) ROS steps yet to be completed as of said date.

History and Background

ROS guidelines were developed after the “Eisenhower Consortium” Planning Workshops of the late 1970’s and early 1980’s, and are reflective of national and regional public issues for maintaining desired physical, managerial and social settings in forest environments. Since the release of NFMA and the FS Planning guidelines until this date, ROS has been considered a public issue, as well as a management concern.

The WO and Regions have developed Forest Planning guidance for updating existing National Forest ROS maps and guidelines for use in Forest Planning and alternative development, i.e., *ROS Mapping Protocol (December 2003)*, *ROS Applications during Plan Revisions and other planning efforts – R4 Guidance (draft 10/25/02)*, and *Forest Plan Topics Requiring Regional Consistency (10/28/02)*. These documents not only describe methods of updating ROS map inventories, but also describe the needs and benefits to Forest Planning and to the customer base.

Issue Statement – ROS and Forest Planning

Accurate ROS inventory maps and associated “Desired Future Conditions” (DFC’s) will allow the Ashley National Forest to have more control over how and when the six ROS settings and their respective characterizations will change and how this change will affect natural resources and public uses. (*Change in ROS settings has been labeled as “ROS Creep”.*) The Forest will also be able to use the inventory maps and DFC’s to address how ROS will be affected by Forest Plan alternatives and subsequent FS programs/actions.

ROS is a planning tool that can benefit alternatives for managing vegetation, wildlife habitat and hydrologic regimes, as well as public recreation and non-recreation uses. ROS integrates existing and alternative public uses with existing and alternative natural resource management programs/actions. To

view ROS otherwise, is to see it as a hindrance to “getting things done”, and thereby lose perspective of integrated resource management with the human dimension.

Use of ROS in the Analysis of the Management Situation – ROS can be useful to determine...‘if there is a need for change, i.e., current management of recreation is not meeting current and anticipated user needs and is not compatible with other resource objectives. If there is a need for change, ROS can be used as one of the tools in defining existing/desired conditions, analyzing effects of the various alternatives, and in subsequent implementation and monitoring’. (ROS R4 Guidance 10/25/02 draft)

What happens if ROS is not adequately addressed during Forest Planning and Alternative development? What are the Benefits of ROS to Forest Planning?

Scenarios (Important! ROS benefits and requirements should be integrated with other resource management programs/actions.)

1. Disregard of ROS or minimizing applicability of ROS –

ROS Classes could change indiscriminately in either direction, but most likely towards a more developed setting, i.e., Roaded Natural, Rural and even Urban. The uses associated with this “ROS Creep” could adversely affect management of associated vegetative cover, wildlife habitat, water quality, air quality, soil stability, etc.

Without recognition of “ROS Creep”, national forest alternatives could result in reduced recognition by land managers of overall effects to resources by a particular program/action. ROS setting characteristics recognize the values associated with natural resource management within the corresponding ROS class.

- *Changes on the Forest to the ROS classifications of SPNM, SPM, and RN between first Planning Process and the ongoing Planning Process should be determined. This change will show what has happened with “ROS Creep”. If ROS is not part of alternative development, all resource conditions will change not just public use patterns.*
- *Existing SPNM areas on the some districts could be considered for Primitive Classifications if ROS becomes part of alternative development.*

2. Coordination between Travel Planning and ROS –

Determination and designation of alternative travel maps and associated authorized travel methods, i.e., non-motorized vs. motorized, would be flawed without coordination with ROS class characterizations, i.e., managers could end up with travel uses that do not match the ROS setting or vice-versa.

3. Conflicts between vegetative manipulation, i.e., timber sales, type conversion and ROS –

With full implementation of ROS in Forest Planning, tradeoff analysis would be easy to do, as well as implementation of practices that safeguard ROS boundaries in high use density areas. Decisions to change ROS classes to accommodate a resource program and action would be fully disclosed rather than minimized or forgotten. Resource programs, such as timber sale should consider ROS as part of mitigation, similar to riparian or wildlife habitat mitigation.

4. Conflicts between adjacent private holdings and ROS classes and direction on NF administered lands –

Coordination of ROS with adjacent private land development would lead to an acceptable transition zone between national forest resource values and private land actions and activities; otherwise, the national forest would become fully subject to the activities on adjacent private land.

5. Capacity Studies –

ROS establishes capacities based on accepted methodology (*refer to National ROS Users Guide, item 25 – Capacity, pages 31 through 35*). These capacities could serve as data for alternative development for all resource areas; and therefore would illustrate capacities that best fit the management situation for each alternative.

6. Benefits vs. Costs of ROS –

To repeat, ROS is a public issue as well as a management concern. It is part of overall comprehensive management. If left out of the Forest Planning process, costs of future impacts to all natural resource programs/actions would exceed the cost of ROS implementation. These costs would be those associated with increased human impacts to soil, water, vegetative cover, water quality, air quality, wildlife habitat, visuals, and recreation developments.

ROS Steps Completed

1. Draft ROS Maps at 1:100,000 scale – shaded relief were prepared.
2. “Remoteness”, “Size”, and “Evidence of Humans” criteria on pages 16-24 of the “ROS Users Guide” and pages 10-16 of the “ROS Inventory Mapping Protocol” were used to delineate tentative ROS Classes.

A summary of the mapping criteria for Remoteness, Size and Evidence of Humans Criteria is as follows:

a. Remoteness Criteria

Maps include the following:

- ✓ two levels of roads, “primitive roads”, i.e., maintenance level 1 roads and maintenance level 2 roads that meet the ROS definition of a primitive road; and

“better than primitive roads, i.e., maintenance level 2 roads that meet the ROS definition of better than primitive road, and all maintenance levels 3, 4 & 5 roads).

These maintenance levels are also tied back to road classes, i.e., Arterial, Collector, & Local).

- ✓ motorized and non-motorized trails.
- ✓ ROS class delineations based on distance criteria associated with Primitive (P), Semi-primitive non-motorized (SPNM), Semi-primitive motorized (SPM), Roaded Natural (RN), Rural (R), and Urban (U) Classes as discussed on page 18 of the ROS Users Guide.

b. Size Criteria

Maps include further delineations of the above six ROS Classes (produced with Remoteness criteria) based the “Size” criteria on page 20 of the ROS Guide.

c. Evidence of Human Criteria

Maps also display the following activities and “activity sites”:

- ✓ Administrative Sites, i.e., work compounds, maintenance yards, housing areas, etc.
- ✓ Recreation Complexes, i.e., campgrounds, ski areas, visitor centers, etc.
- ✓ Special Uses and Leases, i.e., marinas, lodges, utility ROWs, electronic sites, mining & oil and gas developments, etc.

- *Boundaries of ROS classifications were revised to eliminate inconsistencies between Evidence of Humans and corresponding ROS classifications.*

3. The maps produced for Steps #'s 1 & 2 were sent to the ranger districts for their use preparing the following:

a. Existing unauthorized roads, trails, uses and conditions.

Unauthorized roads, trails, uses and conditions were entered on the maps by district personnel as hand written notes or other notations.

- *Boundaries of the ROS classification on the maps were corrected to reflect the unauthorized road, trails, uses and conditions, or the boundaries remained without change, depending on line officer direction.*

b. District comments on ROS boundaries established by applying the ROS delineation criteria for "remoteness", "size", and "evidence of humans" as described in Step #1.

District personnel prepared their comments on the draft ROS maps in accordance with the following points:

- *Avoid making changes outside of the ROS mapping criteria for ROS classifications.*
As directed in the ROS Inventory Mapping Protocol, districts personnel avoided making changes to ROS boundaries shown in the above maps for Wilderness, Roadless Areas, RNAs, Scenery Management, etc. ROS Classifications for these items are guided by the ROS Inventory Mapping Protocol.
- *ROS National Criteria for inventory mapping must be done in a sequential order for Physical Criteria, followed by Social and Managerial Criteria. This is done to maintain integrity of the ROS system, and to eliminate the tendency to move from descriptive (inventory or update) of ROS class delineations to prescriptive (alternative development).*
- *The effects of private lands within or adjacent to the Forest boundary on the kinds of recreation opportunities on the NF will be determined. These effects do not necessarily indicate a need to change the ROS class delineation. Private in holdings will eventually be eliminated from the ROS class delineations but will be displayed on the draft ROS inventory maps.*

- *Review the relationship of roads and motorized trails and respective influence on RN, SPM, and SPNM areas. Address the question....do the mapped areas for these mapped ROS classes match the remoteness criteria for distance from primitive vs. better than primitive roads?*
- *Review the relationship of “reservoirs with motorized use” and adjacent RN and SPM areas. Remember that reservoirs with motorized use equate to “primitive” or “better than primitive” roads in regards to delineation of adjacent ROS classes. Address the question....do the mapped areas for RN and SPM areas around the reservoir match the remoteness criteria for distance from motorized use on the reservoir?*
- *Inventoried Roadless Areas are not displayed on the draft ROS maps because they are not part of the National criteria and mapping protocol.*
- *Research Natural Areas are displayed as subclasses of the associated primary ROS class.*
- *The RN, R and U classes are distinguished from one another using the criteria for Evidence of Humans. If Evidence of Humans is more dominant than indicated for the designated ROS class, the class boundary will be adjusted so that designations accurately reflect the situation.*
- *Trails with motorized use are considered as primitive roads in ROS.*
- *Buffering non-motorized trails is not address by the national criteria. Such changes must be part of the AMS and DFC steps of Forest Plan revision.*
- *RN and SPM settings within Wilderness only occur in isolated situations, under very limited circumstances:*
 - *where an adjacent road or development has a profound effect on the wilderness recreation experience,*
 - *where language within the enabling legislation permits motorized transportation and,*
 - *where the motorized use is frequent enough to influence the typical wilderness recreation experience*

Therefore, address the question.....are there any RN or SPM classes within the High Uintas Wilderness caused by the above mentioned circumstances?

- *Non-Forest roads, both within and adjacent to, the Forest boundary within 3 miles of the Forest boundary were used to delineate ROS classes based on the “remoteness” criteria. This ensures consideration of off-Forest influences when mapping on-Forest settings.*
 - *Areas initially mapped as “motorized” because of the presence of roads, but are closed according to the travel management plans, may be identified as SPNM due to the closure. The opposite may also be the case. An area initially inventoried as SPNM due to a lack of roads may change to SPM where the management of the area is for ATVs.*
 - *In regards to Wild and Scenic Rivers Eligibility, those with a tentative classification of Wild, Scenic, and Recreational correlate with P settings, SPNM, and RN, respectively.*
 - *Changes that are prescriptive can not be addressed as part of the updated ROS inventory mapping process. Such changes should be part of the Analysis of the Management Situation (AMS) and Desired Future Conditions (DFC) steps of the Forest Plan revision.*
 - *Changes to ROS class delineations (based on district information on road maintenance levels and trail type and use) may be postponed if the information is not corroborated or verified by the Forest GIS database and INFRA. Database issues on road maintenance levels and trail type should be resolved through coordination between the District Rangers and Supervisor’s Office staff.*
- 4. Meetings were held with District personnel to discuss comments on Step #'s 1, 2 & 3 as previously described.**
- 5. Appropriate changes were made based on district comments as validated by the ROS Users Guide and National Inventory Mapping Protocol.**

6. Meetings were held with District personnel to develop “Social” and “Managerial” Settings for ROS classifications.

These settings were developed based on the following criteria:

- *Determining the “Social” and “Managerial” Settings for the ROS classification. The mapping criteria for Social and Managerial Settings will be followed, as discussed and listed in the “ROS Users Guide”, pages 25-29.*
- *The Social and Managerial criteria will be used to further refine the boundaries of the six ROS classifications.*
- *Assure that the social and managerial information is clearly labeled for future identification.*
- *In areas of concentrated use, the Social and/or Managerial Settings may not result in the same ROS class as the physical setting criteria for the area. When this occurs a “setting inconsistency” is taking place. “Setting Inconsistencies” will be discussed and finalized during the meetings with districts, based on the direction contained in the “ROS Users Guide”, page 29*
- *To resolve setting inconsistencies for the current situation, map the ROS class which best reflects current management direction. If this consideration still leaves a dilemma in identifying the existing class, the following approach will be used.*
 - ✓ *Tend towards the physical setting.*
 - ✓ *If the physical setting yields unrealistic results, average the differences between the physical, social and managerial components.*
 - ✓ *If averaging is necessary, consider that it is usually easier to shift in a Primitive to Urban direction along the spectrum than to move from Urban towards Primitive, unless this unduly eliminates options for the future.*

7. The Draft ROS Maps were revised based on Step #'s 5 and 6 above.

8. Subclasses to ROS classifications were developed and displayed.

The subclasses were developed according to direction in the ROS Guide, and pages 5 & 6 of the National Inventory Mapping Protocol. This direction is as follows:

- *Development of subclasses and/or adjustments of ROS class boundaries (RN, SPM and/or SPNM) will be based on the following physical setting criteria:*
 - ✓ *topographic features (cliff breaks, steep slopes)*
 - ✓ *geology*
 - ✓ *vegetative screening*
 - ✓ *sound and sight*
- *Areas along RN and/or SPM boundaries that are adjusted (due to topography, etc) are often made subclasses of RN and/or SPM. The subclasses are either SPM or SPNM for the RN areas or SPNM for the SPM areas (depending on the adjacent ROS class).*

These subclasses are created to track boundary adjustments; thereby allowing District personnel the opportunity to review and comment on the changes. These subclasses are also made to reflect potential influences of boarding ROS classes.

After review, District personnel may decide to change the RN subclass areas to SPM or SPNM ROS classes if they determine that the characterizations of RN do not exist in the subclass areas. This also applies to SPM and SPNM subclass areas.

- *Areas with distinct and abrupt changes in topographic features and geology along RN and SPM boundaries may be adjusted to the adjacent ROS class without creating subclasses.*
- *In general, isolated SPNM areas that are between 1,000 and 2,500 acres in size are made subclasses of SPM, and SPNM areas less than 1,000 acres in size are changed to SPM. (There are instances where SPNM areas under 1,000 acres are made subclasses of surrounding SPM areas, if such areas are isolated along ridge tops or in other rugged terrain.) SPNM areas at or above 2,500 acres are retained.*

9. The Draft ROS maps subsequent to Step #8 were sent to District personnel for review and comment.

Changes, comments, etc., were entered on the maps as hand written notes or other notations.

10. Meetings were held with District personnel to discuss comments on Step # 8.

11. Recreation Developments were identified and mapped.

a. Existing Activity Opportunities were identified and developed based on the following guidelines:

- o *Existing activities are identified and developed by ROS classes and a determination is made if they are inconsistent, inappropriate, or inadequately provided for within the current situation.*

b. Recreation Developments were identified based on the following guidelines:

- o *Existing developments by ROS classes are mapped and determination is made if they are inconsistent, inappropriate, or inadequately provided for within the current situation.*

12. Draft Final ROS maps were prepared based on district input from Step #11.

ROS Steps Yet To Be Completed

Inventories are done and have been reviewed and approved by the District Rangers. *Remaining ROS steps to complete as part of Forest Planning are as follows: (refer to National ROS Users Guide, items 23- Activity Opportunities, 24 – Recreation Developments, pages 31 through 33)*

1. Potential Activity Opportunities should be identified and developed based on the following guidelines:
 - *As part of Forest Planning, identify and develop potential activities by ROS classes and a determination is made if they are inconsistent, inappropriate, or inadequately provided for within the current situation.*
 - *Alternative management prescriptions should be designed to assure that the direction for recreation goals and objectives respond to a range of recreation opportunity needs, including projected activity demands. With this done, Forest Plan alternatives and subsequent program/action alternatives will be able to describe and illustrate tradeoffs with other forest uses.*
2. Potential Recreation Developments should be identified based on the following guidelines:
 - *As part of Forest Planning, identify potential developments by ROS classes and determine if they are inconsistent, inappropriate, or inadequately provided for within the current situation.*
 - *Alternative management prescriptions should be designed to assure that directions for recreation goals and objectives respond to a range of recreation opportunity needs, including projected developments. As stated previously, Forest Plan alternatives and subsequent program/action alternatives will then be able to describe and illustrate tradeoffs with other forest uses*
3. Capacity –
Determine the maximum number of people who can obtain given kinds of recreation experiences at an established standard on the national forest within the constraints of resource capability. Establish this maximum number by ROS Class (*refer to National ROS Users Guide, item 25 – Capacity, pages 33 through 35*).

This is needed to also determine tradeoffs between alternatives.

Recommended changes that result from completing the above remaining ROS steps should be considered as “prescriptive”. Such changes should be part of the Analysis of the Management Situation (AMS) and Desired Future Conditions (DFC) steps of Forest Plan revision.