

Recreation Opportunity Spectrum "ROS"

*A behavioral approach to planning
& management*



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CSS 287

Discussion Topics



- What are the outputs of natural resource management?
- How do we measure what we produce?
- What are the outputs of resource recreation management?

- Behavioral approach to management
- Recreation Opportunity Spectrum

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Historical "Products or Output" of Natural Resource Management

- Timber
- Wood Products
- Fish
- Game
- Grazing





Willamette National Forest, Oregon

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Current Trends in Natural Resource Management

- **A balance of...**
- Habitat management
- Forest products management
- Ecosystem management
 - Aquatic
 - Riparian
 - Endangered Species
 - Forest health/fire/safety
- Visitor management
 - Access
 - Allocation/Rationing
 - Impact management/mitigation




Eagle Cap Wilderness, Oregon

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Historical "Products & Outputs" of Resource Recreation Management

- How did we measure recreation management?
 - Numerical counts of:
 - Campers
 - Backpackers
 - Anglers
 - Hikers
 - Skiers
 - Satisfaction surveys
 - Success → more is better




Umatilla National Forest, Oregon


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But what does counting tell us?


Is a visit here the same as a visit here? a visit here? or a visit here?




= ?



= ?



or a visit here?



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Assessing Recreation Equivalency

- Numerical equivalency?
 - Is a visitor **camping** the same as a visitor **picnicking** or **swimming** or **rafting** or **hunting** or **bicycling**?
- Let's standardized the count!
- Recreation Visitor Days (RVD)**
- 1 RVD = 1 person spending 12 hours on-site.
 - 1 RVD = 2 people each spending 6 hours on-site.
 - 2 RVD = 1 person spending 24 hours on-site.

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A New Perspective for Outdoor Recreation Management

- The output of recreation resource management is MORE than just providing recreation activities.
- It is important **where** we provide them...
- The mix of facilities, densities, & proximity is important...
 - Physical Setting
- The mix of rules & regulations, restrictions, assistance, seasons, alternatives, & behavior of others is important...
 - Social Setting

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Functional Relationships

- Experiences** derived in recreation are related to the setting in which they occur.
- Settings** are a function of environmental factors, such as...
 - Physical* (campsites, trails, facilities, etc.)
 - Social* (use density, encounters, behavior)
 - Managerial* (rules, regulations, restrictions)
- The range of settings managers provide affect the experiences that people can have





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Lesson 12

A Behavioral Approach


- People seek opportunities to engage in preferred activities
- In preferred settings
 - Preferred *Physical* setting,
 - Preferred *Social* setting, &
 - Preferred *Managerial* setting
- To realize desired experiences


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Does the setting really matter?


Is a visit here the same as a visit here? or a visit here?




= ?



= ?



or a visit here?



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Range of Preferred Physical Environmental Settings



Marion Lake, Willamette N.F.

- **Landscape Features**
 - Lakes, rivers, mountains, deserts, forests
- **Facilities**
 - Tent camping, RV camping, pit toilets, showers, visitor centers, trailhead register
- **Access & Remoteness**
 - Paved roads, dirt roads, foot bridges, trail improvements, trail signage, no trails

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Range of Preferred Social Environmental Settings



- **Social Interaction**
 - Low to High levels
 - "In" vs. "out" group
- **Proximity & Privacy**
 - Close vs. distant
 - Encounters (*many/few*)
 - Use density (*high/low*)
- **Behavior Perceptions**
 - Objectionable behavior
 - Degrees of compliance with regulations

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Range of Preferred Managerial Environmental Settings



- **Indirect Management**
 - Minimal management
 - Education (LNT)
 - Trailhead permits
 - Higher risk
- **Direct Management**
 - Maximal Management
 - Use-limits
 - Fees (*NW Forest Pass*)
 - Enforcement or presence
 - Lower risk



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Managing a "Spectrum" of recreation opportunities

- "Experience-based setting management"
 - Activities → Settings → Motivation → Benefits
- Selecting recreation opportunities...
 - Range & mix of setting attributes
 - Social
 - Physical
 - Managerial
 - No single place can offer all the possibilities



Recreation Opportunity Spectrum (ROS)

- ROS is based on the premise that people expect certain levels of development related to the character of the setting and the type of recreation they prefer.
- Recall, we (*future managers*) want to...
 - Provide recreation **opportunities** (for)
 - Preferred **activities** (in)
 - Preferred **settings** (physical, social, & managerial)
- **Activity → Setting → Desired Experience**

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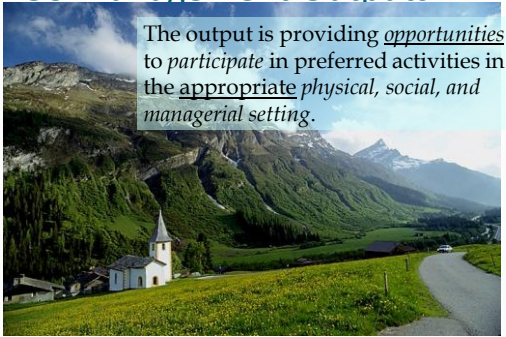
ROS Classes (Spectrum)

- Primitive
- Semi-primitive, non-motorized
- Semi-primitive, motorized
- Roaded natural
- Rural
- Urban/Developed



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ROS Management Outputs



The output is providing *opportunities* to participate in preferred activities in the *appropriate* physical, social, and managerial setting.

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ROS Management Outputs



The opportunity has changed... from Routed Natural to Urban/developed

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ROS Criteria - Size

- **Primitive** - - - > 5,000 acres
- **Semi-Primitive Non-motorized** 2,500 min.
- **Semi-Primitive Motorized** 2,500 min.
- **Routed Natural** -- No Minimum
- **Rural** - - -- No Minimum
- **Urban/Developed** - - No Minimum

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ROS Criteria - Remoteness

- **Primitive**: more than 3 miles from roads
- **Semi-Primitive (n.m.)**: more than ½ mile and less than 3 miles from roads or motorized.
- **Semi-Primitive (m)**: ½ mile from primitive roads or trails OR ½ mile from improved roads
- **Routed Natural**: w/in ½ mile of improved roads
- **Rural and Urban/Developed**: No minimum.

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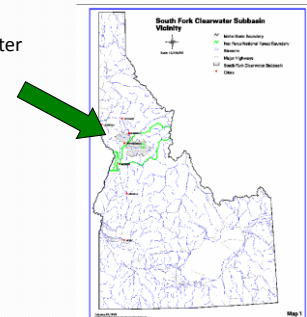
ROS Criteria – Social (use-density)

- | ROS | Trail | Camp |
|--------------------------------|-------------------------|---------|
| • Primitive | <6/day | <3 vis. |
| • Semi-Primitive (n.m.) | 6-15/day | <6 vis. |
| • Semi-Primitive (m) | Low to Moderate | |
| • Routed Natural | (l-m trail & m-h roads) | |
| • Rural | Mod/high in dev. areas | |
| • Urban/Developed | Expect large numbers | |

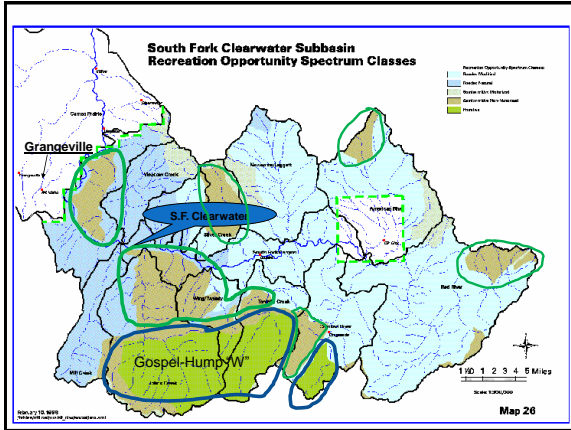
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A look at an ROS Map

- South Fork Clearwater N.F.




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ROS Uses

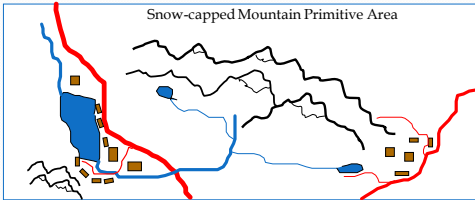
1. Inventory & Classification System
2. Guides management decision making
3. Communication tool
 - Letting the public know what's available



Lesson 13

ROS – Inventory & Classification

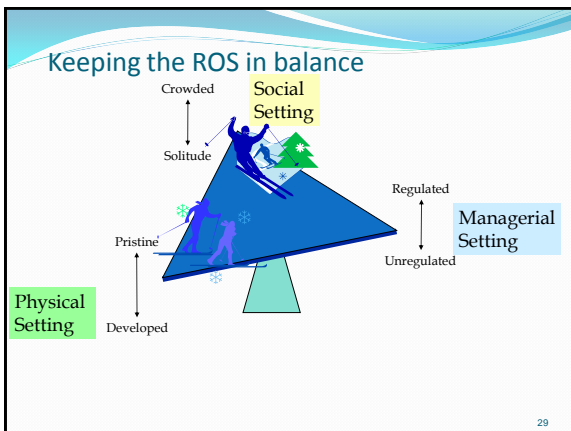
- As a land Inventory and Classification System. (ZONING primitive, semi-primitive or roaded natural areas)



Primitive | SpN-M | SpM | Roaded Natural | Rural | Urban developed

ROS as a Planning Tool

- Provides a mechanism to inventory existing opportunities;
- Analyze the effects of other resource activities;
- Estimate the consequences of management decisions on planned opportunities;
- Link visitor desires with recreation opportunities;
- Identify complementary roles of all multiple-use recreation suppliers (public & private);
- Develop standards and guidelines for planned settings and monitoring activities.



Implications of ROS Management

- Anomalies in the Physical, Social, or Managerial setting can significantly change what you are providing along the spectrum.
- Managers should clearly communicate what is being provided
- The public can then choose where it is appropriate to participate in recreation activities they desire.

- Primitive
- Semi-Primitive Non-motorized
- Semi-primitive Motorized
- Roaded Natural
- Rural
- Urban/developed

Functional Relationships in ROS

- **Experiences** derived from recreation are related to the setting in which they occur, and...
- **Settings** are a function of environmental factors we manage (*physical, social, & managerial*).
- Managers provide a range of settings that affect the **opportunities** for people to pursue desired **experiences**.



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ROS is based upon a behavioral approach to Recreation

- We manage natural settings to provide recreation opportunities.
- People seek opportunities to engage in preferred activities --
- In preferred settings --
 - Physical setting,
 - Social setting,
 - Managerial setting
- To realize desired experiences

Managers who change these...

Will also change these!

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ROS

Urban/developed



Primitive



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One More Thing...

- Natural Resource Management
- Resource Recreation Management
- Behavioral Approach...and
- In case you forgot -- ROS
- We provide Opportunities to participate in Desired Activities → in Preferred Setting → to obtain Desired Experiences



Salmon River, Idaho

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