Limits of Acceptable Change Planning System

An Alternative Implementation of Carrying Capacity

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CSS 496

Why Not Use Recreation Carrying Capacity?

- Carrying Capacity focuses on the wrong question.
- Decreasing the Number of users may NOT lessen impacts.
- We want to manage for desired resource & social conditions.
- The public demands to know how decisions are made!

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What is Limits of Acceptable Change?

LAC is a process to define:

- What kind of Resource conditions, and
- What kind of Social conditions are acceptable? and
- To prescribe Actions to protect or achieve those conditions.

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Why Use LAC?

- LAC process focuses on maintaining Desired Future Conditions:

Resource conditions, *Social* conditions, & *Managerial* conditions

- LAC provides for stability over time.
- LAC is trackable & traceable.

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Basic premise of LAC

- Change is a natural, inevitable consequence of recreation use--both environmental & social.
- Instead of, *"How much use is too much?"*
- LAC asks, *"How much change is acceptable?"*

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How Does LAC Work?

- It usually follows a nine-step process designed by the USFS.
- It often includes public input and involvement at key steps.
- It moves from broad descriptions to specific prescriptions.
- It requires setting standards and monitoring conditions.

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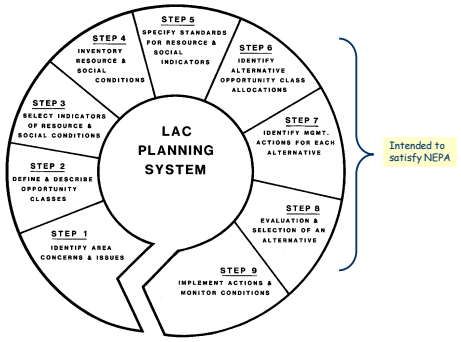
The Nine-Step Process



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The Nine-Step Process

1. Identify area concerns & issues.
2. Define & describe opportunity classes (zones).
3. Select indicators of resource & social conditions.
4. Inventory resource & social conditions.
5. Specify standards for both.
6. Identify alternative opportunity class allocations.
7. Identify management actions for each alternative.
8. Evaluate and select a preferred alternative.
9. Implement actions and monitor conditions.

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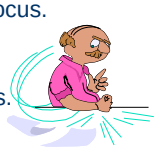
Problems with the first step

Starts by Identifying Issues & Concerns:

- Inherently negative.
- Pits one group against another.
- Creates a narrow focus.
- "Hot" issues may overlook long-term ecological problems.



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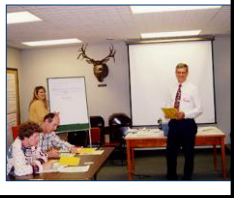
A Positive Way to Fix the First Step

- Build upon people's positive values.
- Silently list things they like or value.
- Individually present their values.
- Silently generate list of threats to their values.
- Round-robin share list of threats (= issues).

This produces awareness of issues AND a positive foundation to begin planning.



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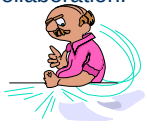
Why Work Towards Consensus Rather than Voting?

- Voting pits winners against losers.
- Voting makes suboptimal decisions (49% may still hate the decision!)
- Voting tends to polarize groups.
- Voting fosters politics rather than collaboration.
- A marginal favorable vote is seldom supported on the ground.



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4 Levels of Support to Reach Consensus

1. I can easily support the action.
2. I can support it but it is not my preference.
3. I can support it if minor changes are made.
4. I cannot support it unless major changes are made.

(I agree to discuss level 3 & 4 concerns before positions are made firm.)

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Step 2 -- Defining Desired Future Conditions

- Create Zones based upon the ROS classes:
- Primitive
  Semi-primitive Non-motorized
  Semi-primitive Motorized
  Roaded Natural
  Rural
  Urban
- Pristine, Primitive, Attraction Sites, Portals

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Step 2 -- Defining Desired Future Conditions

- Define key physical attributes to be maintained (undisturbed natural environment, no permanent development, remote from access . . .)
- Define key social attributes (solitude, isolation, few contacts, self-reliance, challenge . . .)
- Define key managerial attributes (light-handed, minimal management presence, primitive tools used, rely more on information & education than policing . . .)

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Step 3 -- Indicators (The Heart of LAC)

- Indicators are things we can *measure* which tell us if desired resource & social conditions are *changing* from human use.

Example Indicators:

Exotic plants
Impacted campsites
Damaged vegetation
Litter & human waste

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Step 5 -- Standards (The Heart of LAC)

- The point at which an indicator tells us that the change is *acceptable* or *not*.
- Exceeding the standard should *trigger a management action*.
- "If it isn't broken, don't fix it!"
- Management actions can be traced back to specific problems (via indicators).

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Swimming Beach Example

Indicator of dangerous pollution

- Fecal Coliform

Standard

- Drinking water -- 0 organisms /100 ml
- Swimming -- 20 organisms/100ml

Management Action

- Chlorinate 24 hrs. / Close the beach

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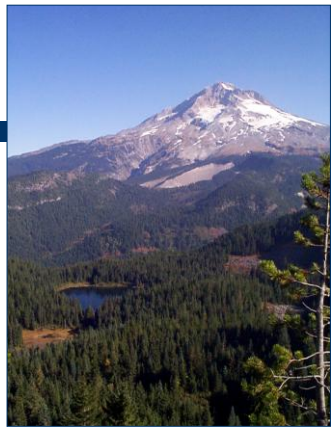
Mt. Hood Wilderness Example



provided by:
Kathleen Walker
Zigzag Ranger District
Mt. Hood National Forest

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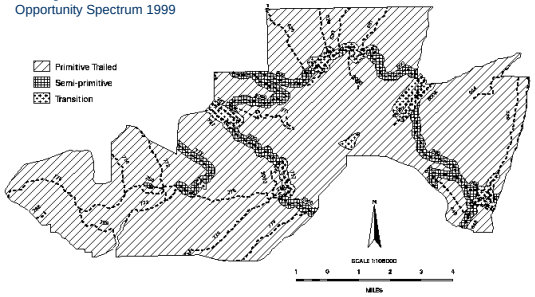
Mt. Hood National Forest

Mt. Hood Wilderness

Existing Wilderness Recreation Opportunity Spectrum 1999

41,698 people / year

46,400 acres



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Mt. Hood Wilderness Example Indicators & Standards

INDICATOR: Encounters with Other Groups

STANDARD:

During 80 percent of the primary recreational use season

- ***Encounters with other groups shall be limited to no more than ten groups per day in semi-primitive areas,***
- ***and no more than six groups per day in primitive areas***

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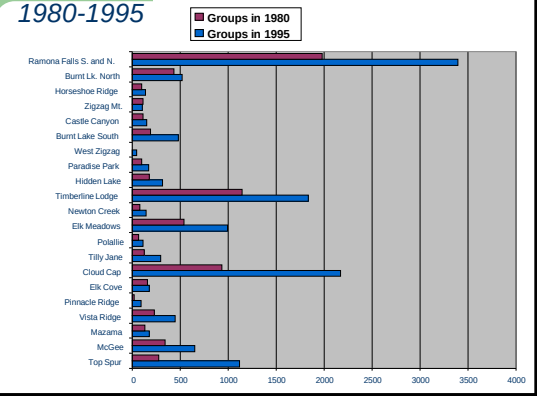
Group Use of Mt. Hood Wilderness 1980-1995



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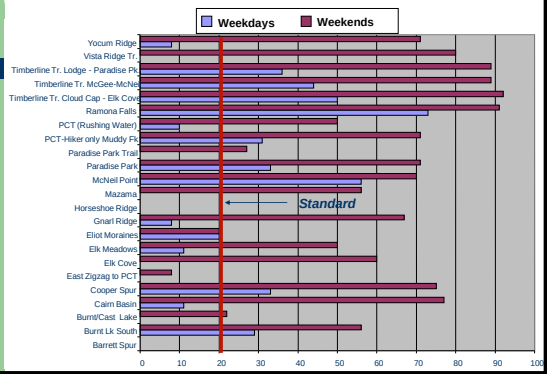
Percent of Time Encounters Exceeded Standards: Mt. Hood Wilderness



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Ramona Falls: 260 people per weekend day.
Encounters standard exceeded 85% of the time

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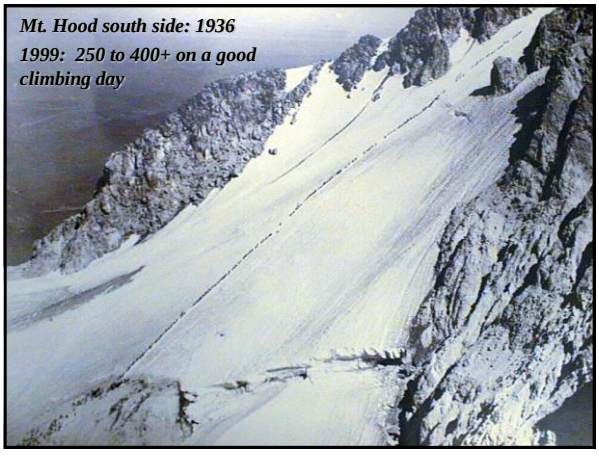
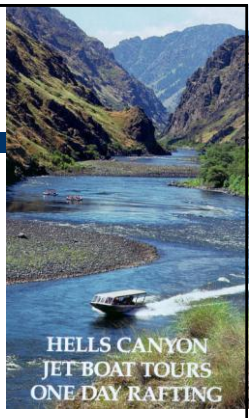


Mt. Hood south side: 1936

1999: 250 to 400+ on a good climbing day

Example from Hells Canyon

LAC Planning Process



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Create goals to accomplish the DFCs

Desired Future Condition in Hells Canyon (examples)

(The public decided that most conflicts started at the launch/take-out ramps.)

Goals:

- Decrease conflict among floaters and power boaters.
- Minimize congestion on the river.

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Specific Objectives to accomplish the goals

- Provide launch/take-out facilities to minimize congestion & conflict.
- Minimize the amount of time people must wait to launch their boats.

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Indicator & Standard

- Indicator:
  Time spent waiting to launch.
- Standard:
  80% of boating parties will have to wait no longer than 15 minutes.

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Monitoring

- Develop a systematic monitoring plan
  (schedule, protocols, locations)
- Take measurements on the ground and compare to standards.
- If standards are exceeded:
  1st, check conditions and sampling
  2nd, check if standard is appropriate
- Then Implement Management Action.

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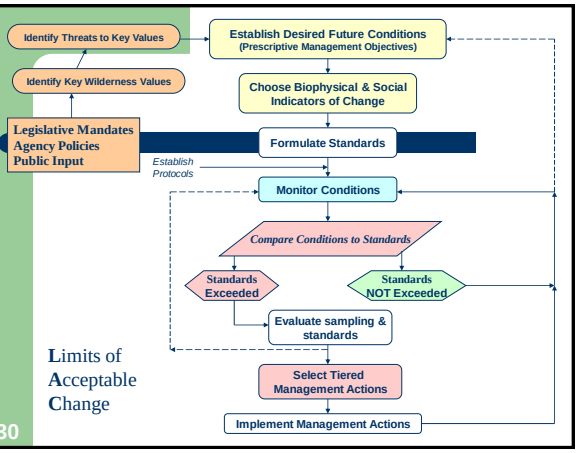

Limits of Acceptable Change

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Tiered Management Actions (triggered by standard)

- Do nothing until the standard is exceeded, then: *(hierarchy, indirect to direct)*
- Post signs on bulletin boards.
- Staff launch & take-out sites with a ranger.
- Build more launch ramps.
- Schedule staggered launch times.

Indirect Actions → Direct Actions

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Disadvantages of LAC

- It takes a lot of time (2 to 4 years).
- Must fit with NEPA, FACA & other planning regulations.
- Forces you to be specific.
- We don't know best indicators to use.
- Setting standards is difficult.
- Requires a lot of systematic monitoring.
- Must be revisited and fine tuned.

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Advantages of LAC

- Public input at all stages
  (Values, threats, DFCs, etc.)
- Desired Future Conditions clearly defined.
- Relevant Indicators & Standards selected.
- Management Actions address specific problems & you can evaluate effectiveness.
- Trackable and Traceable!
- Public becomes partners in management.

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LAC and Recreation Carrying Capacity

- RCC limits numbers of people to prevent deterioration of resource & social conditions.
- LAC maintains *desired future resource & social conditions* through monitoring & management actions targeted at specific problems.
- LAC is trackable & traceable--RCC seldom is.
- LAC is most reasonable way to implement RCC.

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Thank You

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