

## Limits of Acceptable Change Planning System

An Alternative Implementation of Carrying Capacity

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RRT 287

## 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
- It provides for stability over time.
- It is trackable and traceable.

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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).



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

Management Action

- Chlorinate 24 hrs. / Close the beach



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## 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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## 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.



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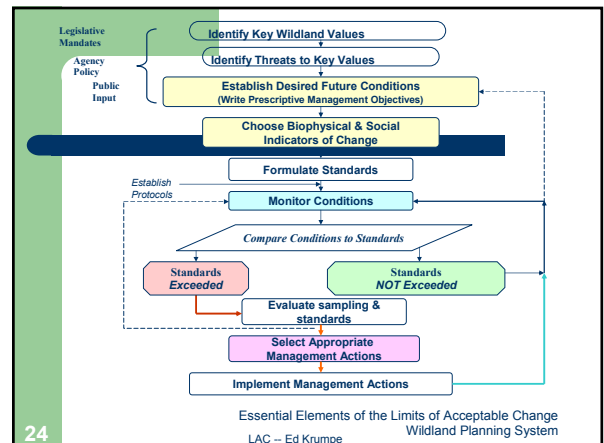
## Disadvantages of LAC

- It takes a lot of time.
- 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 & 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. For further information contact:

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