

# Controlling Invasive Plants in Wilderness

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Fish Camp  
Cal - IPC



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# Topics

## Active Management/Ecological Intervention in Wilderness

1. The confines of the Wilderness Act
2. Legal Question
3. What ARE we doing ?

# Wilderness Act – Statement of Policy

In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System to be composed of federally owned areas designated by the Congress as "wilderness areas," and these shall be administered for the use and enjoyment of the American people in such manner **as will leave them unimpaired for future use and enjoyment as wilderness**, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness; and no Federal lands shall be designated as "wilderness areas" except as provided for in this Act or by a subsequent Act.

# Wilderness Act

## DEFINITION OF WILDERNESS

(c) A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are **untrammeled** by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of **undeveloped** Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its **natural conditions** and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has **outstanding opportunities for solitude or a primitive and unconfined type of recreation**; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

# Wilderness Character

- Untrammeled
- Undeveloped
- Natural Conditions
- Opportunities for Solitude or a primitive and unconfined type of recreation

# Wilderness Act of 1964, Sec. 2(c) Definition of Wilderness

"An area of wilderness is further defined...retaining its primeval character and influence...which is protected and managed so as to preserve its *natural conditions*"

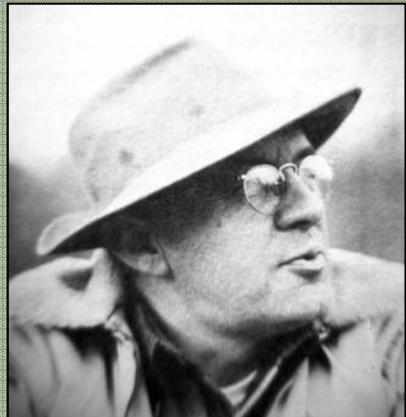
- = species, patterns, and processes that evolved in the area
- = "natural"



## Wilderness Act of 1964, Sec. 2(c) Definition of Wilderness

"A wilderness...is hereby recognized as an area where the earth and its community of life are *untrammeled* by man"

- = freedom from intentional modern human control and manipulation
- = "untrammeled" = "wildness"



*Howard Zahniser:* "Once management undertakes to improve the wilderness...by manipulating natural processes in the wilderness itself, the fragile wilderness quality of the area being managed is in jeopardy."

Untrammeled has especially important symbolic and ethical value today

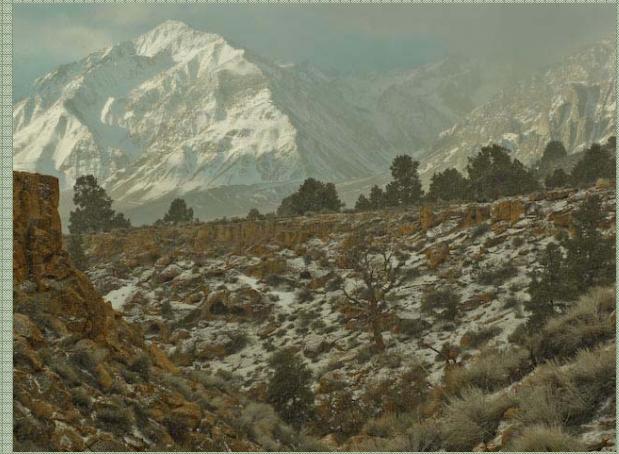
# THE WILDERNESS STEWARDSHIP/ACTIVE MANAGEMENT/ECOLOGICAL INTERVENTION DILEMMA

- Taking restoration action compromises the *untrammeled* value of wilderness
- Not taking restoration action may compromise the *natural* value of wilderness



# Wilderness Management Principles

- A composite resource with inseparable parts
- Allow natural processes, manage human influences
- Minimum necessary
- Indirect techniques vs direct techniques
- Preservation of Wilderness Character



# ECOLOGICAL SYSTEMS IN WILDERNESS CHANGE... ...AND ALWAYS WILL

## Questions:

- Does this change matter? What is “natural”?
- Should we take restoration actions?
- What do we gain and what do we lose?
- Do the ends justify the means?



Spraying  
herbicide

## Legal Limitations

- No absolute prohibitions on active management
- Procedural hurdles place thumb on the scale for restraint and passive management
- Act allows for responses in situations where we are more certain that actions will be effective and benefits of active management are worth the costs.

Long and Biber : The Wilderness Act and Climate Change Adaptation

## How inflexible is the Wilderness Act ?

- What about active management steps to restore wilderness characteristics that have been damaged by human intervention?
- Significant exemptions –
  - for control of fire, insects and diseases
  - Temporary roads and motorized and mechanized equipment
- Must follow the ‘minimum requirements for administration of the area’

# What ARE we doing?

- 10 Year Wilderness Stewardship Challenge
- Tamarisk Removal on Los Padres
- Decision Support Tool for Ecological Intervention

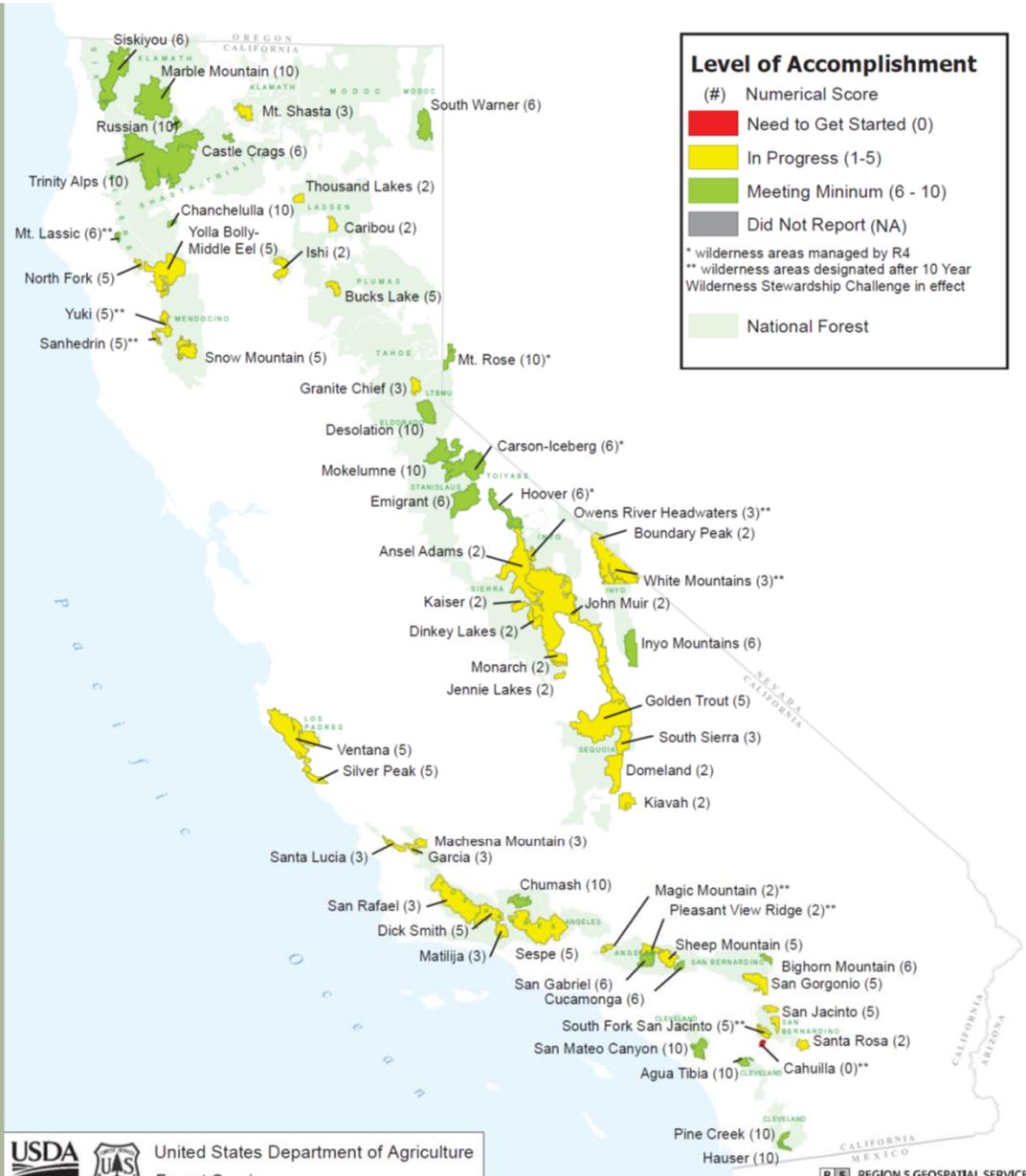
# 10 Year Wilderness Stewardship Challenge

- Invasive Species (plants, vertebrates, invertebrates, pathogens)
- Scorecard approach
  - Survey (2pts)
- Integrative invasive species management plan (6 pts)
- Planned Priority management actions implemented (8 pts)
- Invasive species treatment efficacy data collected (10pts)

# 10-Year Wilderness Stewardship Challenge: Element 2

FY 2014

## Wilderness is successfully treated for non-native, invasive plants



# Tamarisk Removal in Wilderness on the Los Padres National Forest

- Proposal of hand pulling and targeted chemical treatment
- The Minimum Requirement Analysis supports active management
- Analysis focused threats to native species and to the recovery of TES species
- Long term irreversible effect to Natural quality of wilderness character compared to short term adverse impact to the Untrammeled quality
- Social license

# Decision Support Tool

Supplement to Minimum Requirements Analysis/Decision Guide  
(MRA/MRDG): Evaluating Proposals for Ecological Intervention in  
Wilderness

- A. *Is there an ecological issue or degradation that is prompting the proposed ecological intervention?*
- B. *Does the proposed intervention need to occur here and now?*
- C. *What are the legal and administrative considerations that apply to the proposed intervention?*
- D. *Have essential issues related to stakeholders, values, and implementation been considered in developing a range of alternatives?*

Developed by Beth Hahn and Peter Landres, Aldo Leopold Wilderness Research Institute

# Take-Aways

- There is no single right answer
- Social and value laden
  - Action or non action is heavily influenced by personal values of staff
  - Values (ethical, cultural, agency tradition) have strongly driven most past decisions
- In some cases there's sufficient science to identify the problem and recommend action; in many cases there isn't
- Consistent set of questions forces intellectual honesty

In wildness is the preservation of the world.....

H.D. Thoreau



In culture is the preservation of wildness

Wendell Berry

# References

- The Wilderness Act – Public Law 88-577 (1964)
- Christopher Solomon, Rethinking the Wild – The Wilderness Act is Facing a Midlife Crisis. New York Times July 5, 2014
- Long and Biber, The Wilderness Act and Climate Change Adaptation. Lewis and Clark Law Journal 2014
- Hahn and Landres Evaluating Proposals for Ecological Intervention in Wilderness. June 2016
- Non-Native Invasive Plants Toolbox at:  
• [www.wilderness.net/toolboxes/](http://www.wilderness.net/toolboxes/)