

# WILDERNESS MANAGEMENT AND CLIMATE CHANGE LAW AND POLICY OVERVIEW

Jeffrey Vail

Program Manager – Wilderness and Wild and Scenic Rivers  
U.S. Forest Service – Pacific Southwest Region

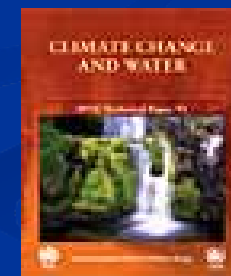
- Defining the Issue
- Management Options
- Risks and Benefits



# CLIMATE CHANGE – WORKING DEFINITION.....

‘.... A change of climate attributable directly or indirectly to **human activity** that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.’

*United Nations Framework Convention on Climate Change, Article 1.*



“The Laws of Congress and the Laws of Physics have grown increasingly divergent, and the Laws of Physics are unlikely to yield.” Bill McKibben



# WHAT IS WILDERNESS?

## WILDERNESS ACT OF 1964

- UNDEVELOPED LAND – PRIMEVAL CHARACTER AND INFLUENCE.
- UNTRAMMELED BY MAN – VISITOR WHO DOES NOT REMAIN.
- AFFECTED PRIMARILY BY FORCES OF NATURE.
- OUTSTANDING OPPORTUNITIES FOR SOLITUDE.
- IMPACT OF MAN SUBSTANTIALLY UNNOTICEABLE.
- WITHOUT PERMANENT IMPROVEMENT OR HUMAN HABITATION.

# WILDERNESS PURPOSES

- RECREATIONAL
- SCENIC
- SCIENTIFIC
- EDUCATIONAL
- CONSERVATION
- HISTORICAL



## PURPOSES FOR WHICH LANDS ESTABLISHED

FOREST SERVICE, PARK SERVICE, BLM, FISH & WILDLIFE



# CALIFORNIA WILDERNESS LEGISLATION

PUBLIC LAW 98-425—SEPT. 28, 1984

Public Law 98-425  
98th Congress

An Act

Entitled the "California Wilderness Act of 1984".

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this title may be cited as the "California Wilderness Act of 1984".*

# NATIONAL WILDERNESS PRESERVATION SYSTEM

- 107 MILLION ACRES IN 44 STATES
- 704 INDIVIDUAL WILDERNESS AREAS
- MANAGED BY FS, NPS, BLM, AND F&WS





# IMPACTS OF CLIMATE CHANGE ON WILDERNESS:

- EXCESSIVE FUEL LOADS AND EXTREME FIRE EVENTS
- INVASIVE PLANTS, INSECT, AND DISEASE
- ANIMAL MIGRATION INTO/OUT OF WILDERNESS AREAS
- IMPACTS TO WATER, AIR, AND SOIL



Alpine Chipmunk

WILDERNESS STEWARDSHIP IN A TIME OF CLIMATE CHANGE:

## **ARE WE GUARDIANS OR GARDENERS?**

WHAT ARE NATURAL CONDITIONS? What is primeval character?

- 1) Pre-human Contact (20,000 years ago?)
- 2) Pre-European Contact (1491?)
- 3) Post-European Contact (1992-1964?)

- AT TIME OF WILDERNESS DESIGNATION?
- AT TIME OF WESTERN CONTACT?
- PRE-HUMAN CONTACT?
- TO RESTORE OR TO LET NATURE TAKE ITS COURSE?

# Fire and Wilderness

**FUEL LOAD REDUCTION:**

**PRESCRIBED BURNING**

**WILDLAND FIRE USE**

- PROTECT ADJACENT COMMUNITIES
- PRESERVE NATURAL CONDITIONS

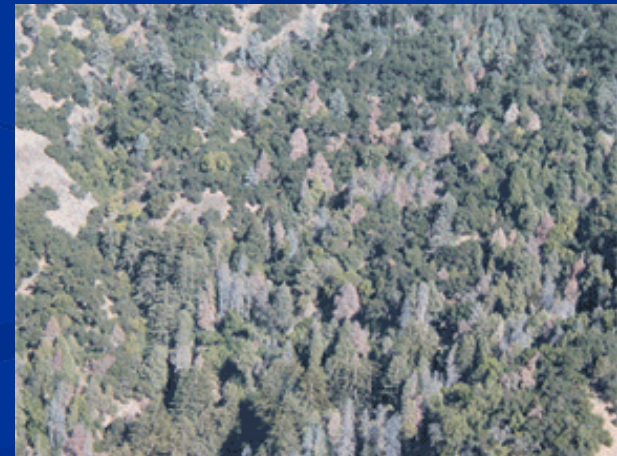
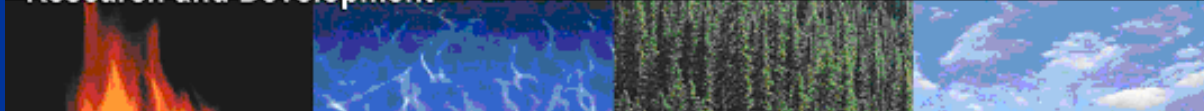


# INSECTS AND DISEASE – WHEN TO INTERVENE?

- SIERRA CLUB PINE BEETLE CASE
  - NON-WILDERNESS ACTION FIRST
  - MINIMIZE IMPACT TO NATURAL PROCESSES
  - DEFINE CONSEQUENCES OF DOING NOTHING

USDA Forest Service  
Research and Development

USDA



## **RISKS AND REWARDS**

### **Management Options to Address Climate Change in Wilderness:**

**A. Let Nature Take Its Course - Do Nothing.**

**B. Selective Management Action.**

- i. Non-Wilderness Alternatives Do Not Exist.**
- ii. Species and Ecosystem Diversity are Endangered.**
- iii. Scientific Evidence Supports Management Action.**

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# **Wilderness as Laboratories to Measure Impacts of Climate Change**

*"Our field records will be perhaps the most valuable of all our results. You can't tell in advance which observations will prove valuable. Do record them all!"*

**Joseph Grinnell, UC Berkeley, Museum of Vertebrate Zoology, 1908.**

- **Wilderness Purposes: Scientific and Educational Use.**
- **Baseline for Comparison and Monitoring.**

# WILDERNESS FUTURE IN A CHANGING CLIMATE

- DEPENDS ON PUBLIC SUPPORT.
- SUBJECT TO CHANGE IF CONSIDERED A THREAT.
- REQUIRES EDUCATION AND CONSTITUENCY.



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## Principles for Wilderness Stewardship in a Changing Climate:

1. Reduce GHG Emissions Globally.
2. Preserve Biodiversity – Species and Ecosystems.
3. Act Outside Wilderness Before Active Management In Wilderness.
4. Adaptive Management: Experiment Incrementally.

