



# Visual Resource Management

A photograph of a rugged mountain range with layered rock formations, likely Red Rock Canyon in Nevada. The sky is a deep blue with some light clouds. The foreground shows dark, rocky terrain.

**“A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community.”**

***Aldo Leopold***

***Red Rock Canyon, NV***

Las Vegas, NV

October 4 - 8, 2010

# Unit 1 Objective

---

Provide an :

- Introduction to the course,
- Convey the importance of protecting scenic values,
- Explain in general terms, the process the BLM uses to manage for scenery via the Visual Resource Management System (VRM).

# Overall Course Objective

---

After attending this course, you will be able to:

- Describe the basic principles and concepts of the VRM system
- Communicate the role of visual resource management in BLM land use planning and activity planning
- Demonstrate the skills and knowledge necessary to:
  - inventory visual resources
  - analyze the landscape
  - develop mitigation for minimizing contrast to the landscape from activities.

---

## UNIT 1

# Course Outline

## VRM Training: Las Vegas, NV October 4 - 8, 2010

<b><u>Monday April 19</u></b>		
<b>TIME</b>	<b>UNIT DESCRIPTION</b>	<b>INSTRUCTORS</b>
<b>8:00- 9:30 am</b>	<b>Unit 1: Introduction</b>	McCarty
9:30- 9:45 am	< Break >	
9:45 -12:00 pm	<b>Unit 2: Looking at Landscapes</b>	Angus
12:00- 1:00 pm	< Lunch >	
1:00- 2:45 pm	<b>Unit 3: Visual Resource Inventory</b>	Schwarzler/ Cownover
2:45- 3:10 pm	< Travel to Field Site >	
3:10- 3:45 pm	<u>Landscape Character Exercise</u>	Angus
3:45- 4:30 pm	<u>Scenic Quality Exercise</u>	Cownover/Schwarzler
<b>4:30- 5:00 pm</b>	< Travel back >	
<b><u>Tuesday April 20</u></b>		
<b>8:00- 9:45 am</b>	<b>Unit 4: Resource Management Planning</b>	Sweeten/ McCarty
9:45- 10:00 am	< Break >	
10:00- 10:30 am	<b>Unit 5: Project Planning and Implementation</b>	Cownover
10:30- 11:45 am	<b>Unit 6: Human and Environmental Factors</b>	Angus
11:45- 12:45 pm	< Lunch >	
12:45- 2:30 pm	<b>Unit 7: Visual Design Fundamentals</b>	Sweeten/ Cownover
<b>2:30- 5:00 pm</b>	<u>Solar Site Field Trip</u>	Chandler/ Terry Page

# Course Outline



<b><u>Wednesday April 21</u></b>		
<b>8:00- 9:30 am</b>	<b>Unit 8: Contrast Rating</b>	Schwarzler/ Sweeten
9:30- 12:00 pm	< Break as part of Travel to Field >	Cownover/ McCarty
	<b>Unit 8 cont.- Color Panel Exercise and Contrast Rating</b>	Sweeten/ Schwarzler
12:00- 1:00 pm	< Lunch on way back from Field >	
1:00- 2:00 pm	<b>Unit 9: NEPA VRM</b>	Angus/ McCarty
2:00- 2:45 pm	<b>Unit 10: Visualization</b>	Sweeten/ Cownover
2:45- 3:00 pm	< Break >	
<b>3:00- 5:30 pm</b>	<b>Unit 11: Experience</b>	Sweeten/ McCarty/ Schwarzler /Angus/
<b><u>Thursday April 22</u></b>		
<b>8:00- 5:30 pm</b>	<b>Final Class Projects</b> – Exercise description and basic Principles (lunch integrated into the day's team exercise)	Sweeten
<b><u>Friday April 23</u></b>		
<b>8:00 – 8:15 am</b>	<b>Evaluations</b>	
8:15 – 11:00 am	<b>Unit 12: Class Project Presentations</b>	Teams
11:00 – 11:30 am	<b>Unit 13: Course Wrap Up</b>	McCarty

BLM manages lands with inherent scenic value...



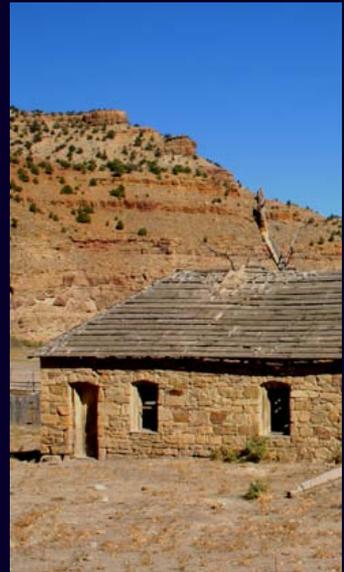
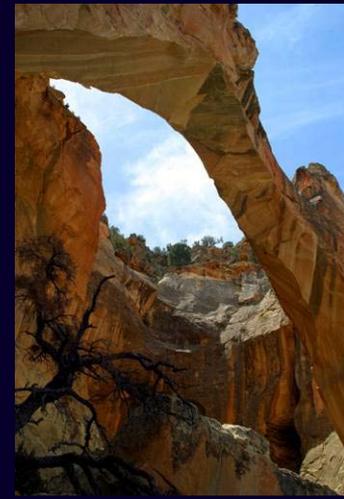
**UNIT 1**

All BLM lands have inherent scenic value...



**UNIT 1**

The scenic significance of many landscapes is cultural or historic.



**UNIT 1**

Lands provide a place to escape and enjoy the beauty of nature.



**UNIT 1**

# President's White House Conference on America's Great Outdoors

Addressing the challenges, opportunities, and innovations surrounding land conservation and the importance of reconnecting Americans and their families to the outdoors.



# Uses of the Public Land

56 million people live within 30 minutes of BLM administered lands

- Renewable Energy
- Communication systems
- Aggregate
- Forestry
- Vegetation Treatments
- Livestock production
- Fire Management
- Recreation
- Oil and Gas
- Coal
- Metals/Minerals
- Uranium



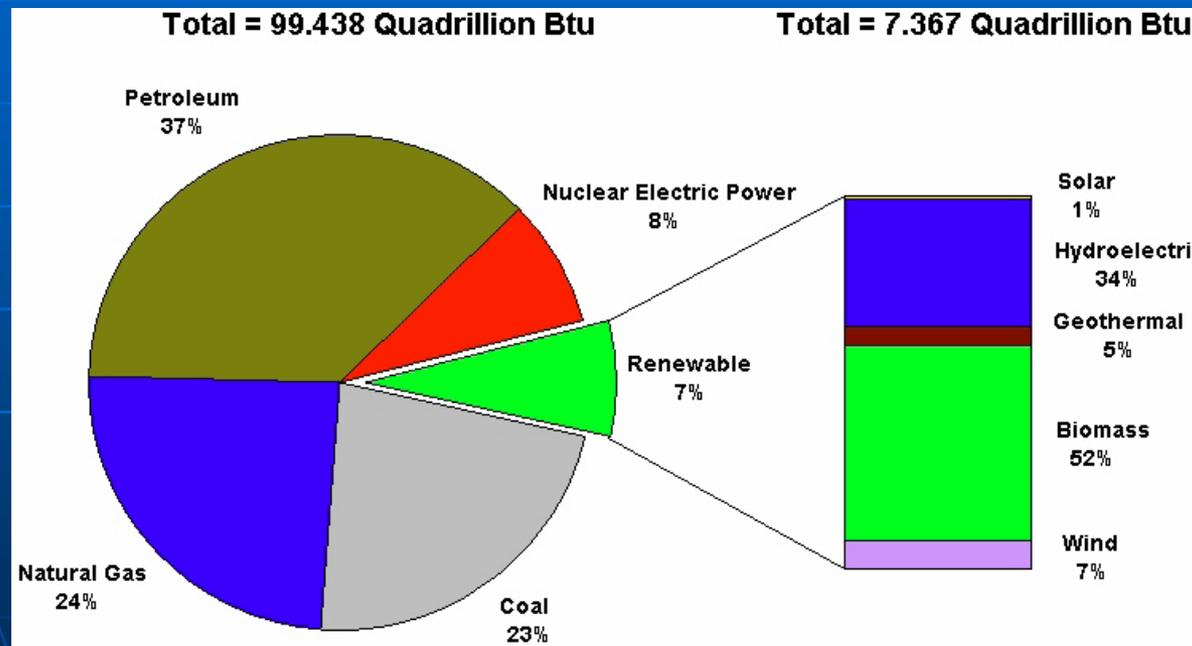
# President's National Renewable Energy Goals

## New Energy for America Plan:

- **10 percent by 2012**
- **25 percent by 2025.**
- **The U.S. is currently at about 6-7 percent.**

# President's National Renewable Energy Goals

## Renewable Energy Consumption in the Nation's Energy Supply, 2008



Source: U.S. EIA [http://www.eia.gov/cneaf/solar.renewables/page/rea\\_data/rea.pdf](http://www.eia.gov/cneaf/solar.renewables/page/rea_data/rea.pdf)

# America's Energy Resources on the Public Land

Level of potential of Renewable Energy activity across the BLM landscape (256 million acres)

Wind Energy  
(20 million acres)



Solar Energy  
(23 million acres)



Geothermal  
(143 million acres)



Energy Corridors  
(5,000 miles of  
~3,500 Ft. corridors)



**UNIT 1**

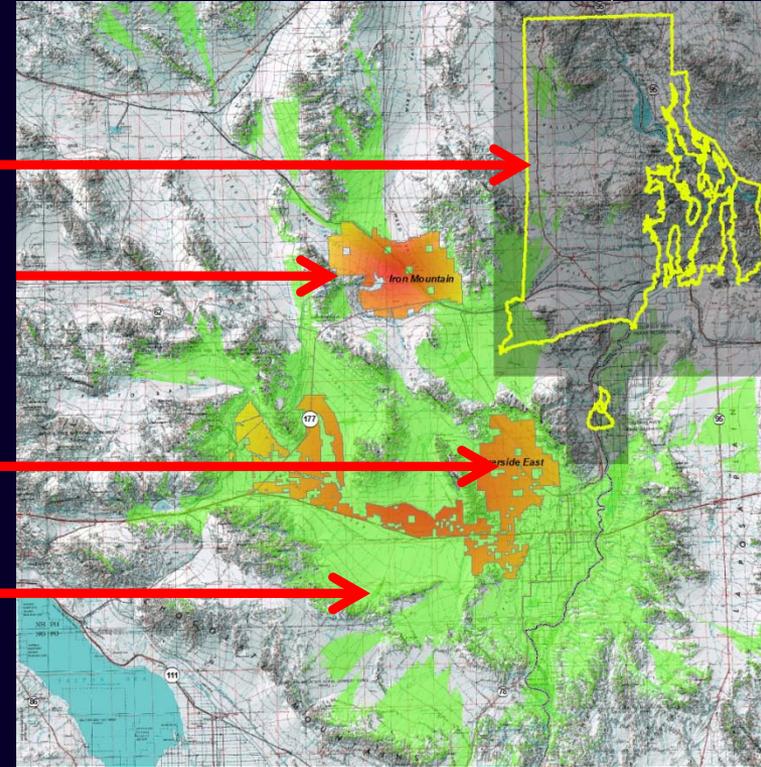
# Renewable Energy Footprint

Rhode Island = 1,214 sq. mi. (776,960 ac)

Iron Mountain, CA SEZ = 166 sq. mi. (106,522 ac)

**Riverside East, CA SEZ = 317 sq. mi. (203,092 ac)**

Riverside East power tower viewshed =  
3,297 sq. mi. (2,110,176 acres)



# Secretarial Order 3285

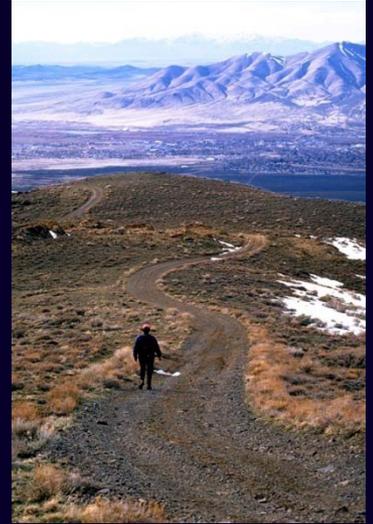
## Renewable Energy Development by the DOI



Agencies and bureaus within the Department will **work collaboratively** . . . to encourage timely and **responsible** development of renewable energy and associated transmission while **protecting and enhancing** the Nation's water, wildlife and **other natural resources.**"

d. develop **best management practices** for renewable energy and transmission projects on the public lands to **ensure the most environmentally responsible** development and delivery of renewable energy.

BLM lands are the backyard of many western communities.



UNIT 1

# Public Concern for the Visual Environment

*Key Issue:* Visual issues consistently identified as a significant public concern for most of BLM management activities: Renewable energy, fire management, forestry practices, vegetation treatments, oil and gas, recreation facilities, etc.



- 87% of experiences through sense of sight
- First impressions mold and hold public opinion
- Increasing public sensitivity
- The Growing Expanse of the American “Backyard” - NIMBYs & BANANAs
- Visible Stewardship



# Visible Stewardship



**Links not well researched**

*Sheppard, 2001*

Different viewpoints on what is beautiful.



UNIT 1

# Different approaches to design and many solutions



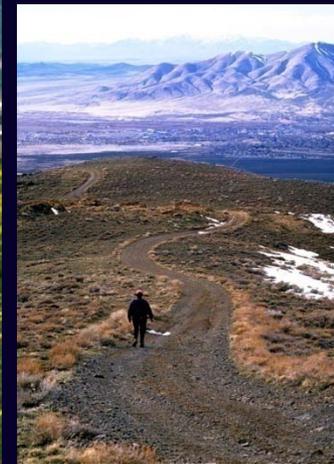
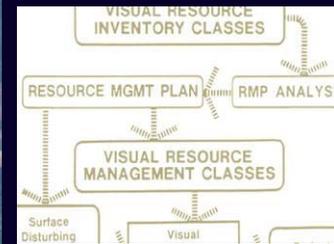
UNIT 1

BLM VRM system is about minimizing visual contrast



**UNIT 1**

# Overview of VRM



UNIT 1

# Unit 1

---

What is VRM?

Why do we manage scenery?

How do we manage for scenery?

# Legal Authority for Managing Scenery

---

## National Environmental Policy Act (NEPA) 1969

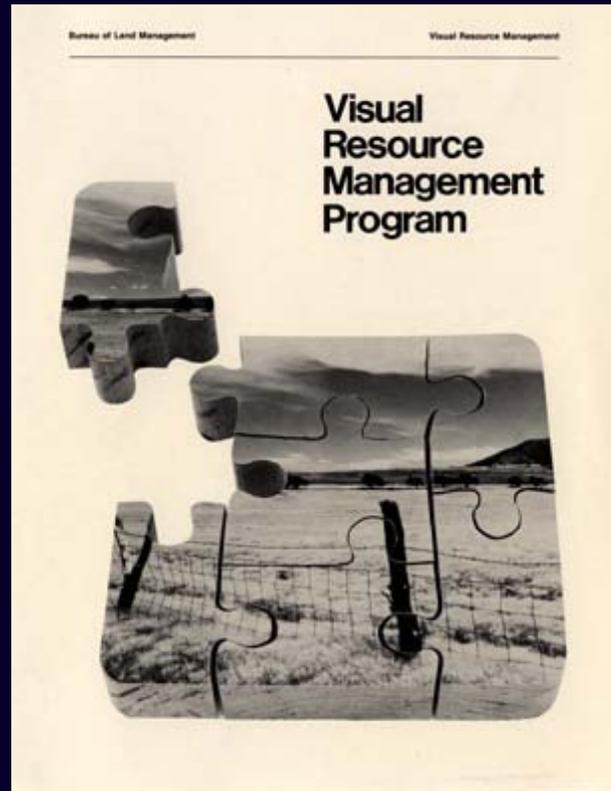
- Assure aesthetically pleasing surroundings
- Require agencies use a system based on environmental design arts for planning and mitigation

## The Federal Land Policy and Management Act (FLPMA) 1976

- Protect scenic values
- Maintain an inventory of scenic values
- Minimize damage to scenic values

# BLM Policy for Scenery

## BLM Policy: Manual Section 8400: Visual Resource Management (1984)



*Each BLM program has responsibility role with VRM*

# Visual Resource Management

Is a collaborative process



# The Fundamental Principles

- Language of Looking at Landscapes (Form, Line, Color, Texture..)



- Principle philosophy~ Reducing Contrast in the Landscape



# Principle Components of VRM System

## 1 Inventory Scenic Values – Handbook H-8410-1

- Scenic Quality, Sensitivity Level, Distance Zones
- (Required for every acre of BLM land)

## 2 Visual Resource Management Classes and Objectives

- Assign visual management objectives land use planning level
- Part of land use decisions
- Required for every acre of BLM land

## 3 Implementation - Design/Evaluate activities to meet objectives

- Project Level - Contrast Rating Form – Handbook H-8431-1



If not carefully designed, activities have the potential to:



- modify character of landscape
- reflect on BLM image
- affect visitor experience and community quality of life
- cause project delays through protest, appeals
- increase long term costs due to restoration needs

Benefits if carefully designed...



**UNIT 1**

# Benefits



**UNIT 1**

# Benefits



# Minimizing Visual Contrast



without VRM



with VRM

# Minimizing Visual Contrast



# Visual Resource Management

**“A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community.”**

***Aldo Leopold***

***Red Rock Canyon, NV***

