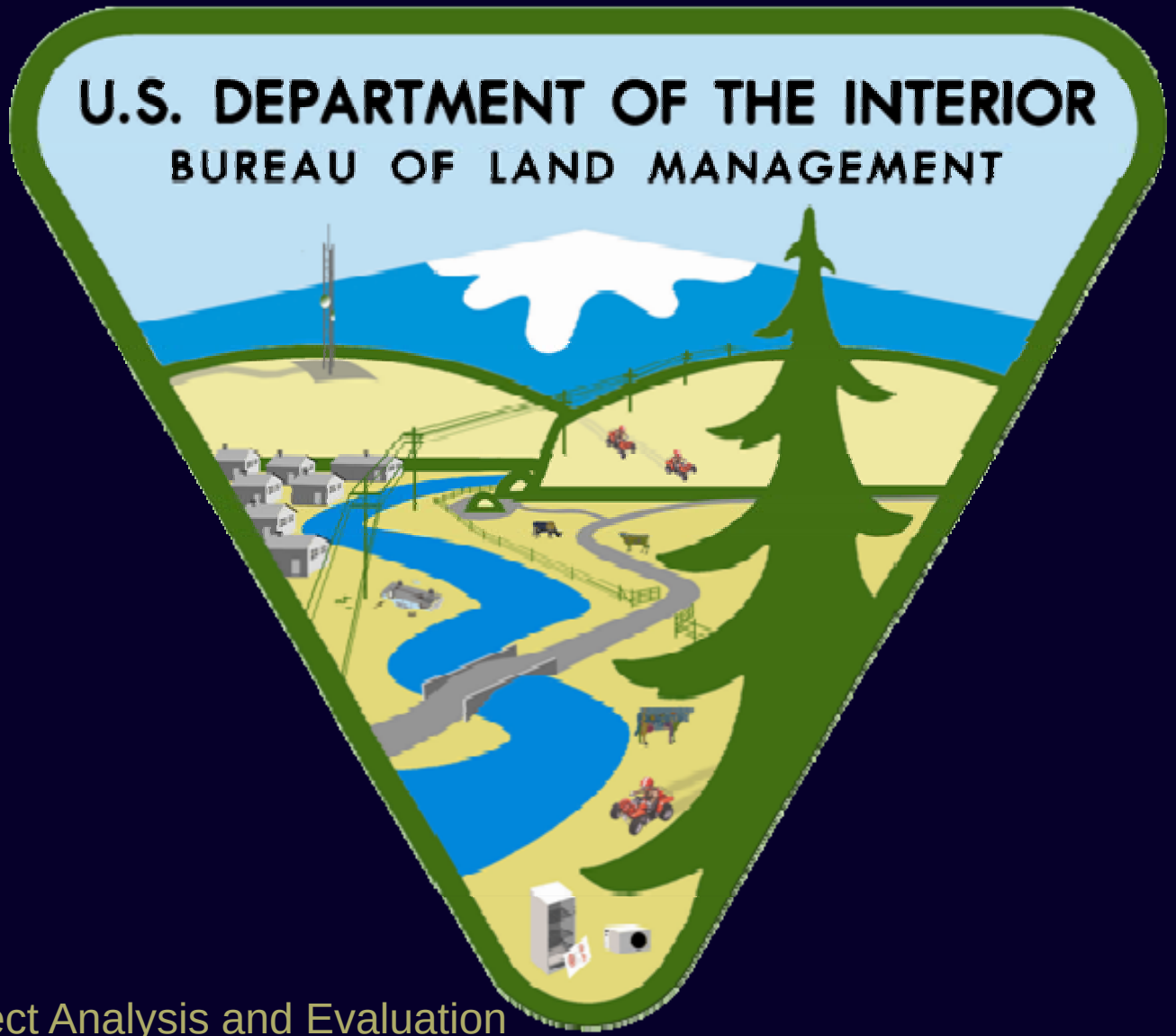
Project Analysis and Evaluation



Objective

Provide accurate and complete information to the decision maker.

Initial Project Considerations

- What is your role?
- When to be scared!
- Project complexity?
- Use third party consultants?
- Cost recovery?
- Skill set and workload?
- Part of a larger project?

Objective

Analyze a project proposal using the visual contrast rating system to determine the elements of a project that are inconsistent with VRM objectives and recommend measures to improve the visual quality of that project

Contrast Rating

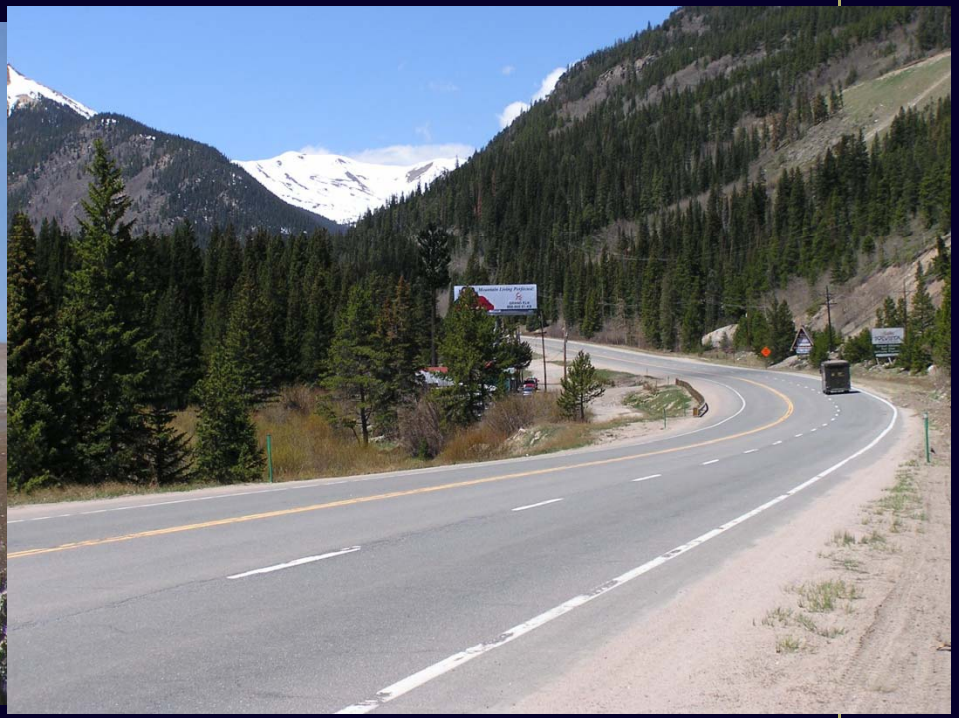
A systematic process we use to identify, describe and analyze potential visual impacts of proposed projects and activities

Visual Contrast Rating

- Systematic process mandated by Bureau policy
- Helps identify where and how the greatest visual contrasts occur in a project and how these can be mitigated
- Assists Bureau personnel not formally trained in the design arts to apply basic principles of design to resolve visual impacts *and review analysis done by others.*

Basic Philosophy

The degree to which a development adversely affects the visual quality of a landscape is directly related to the amount of visual **contrast** between it and the existing landscape character



Visual Contrast Rating System

The amount of contrast is measured by separating the landscape into major features:

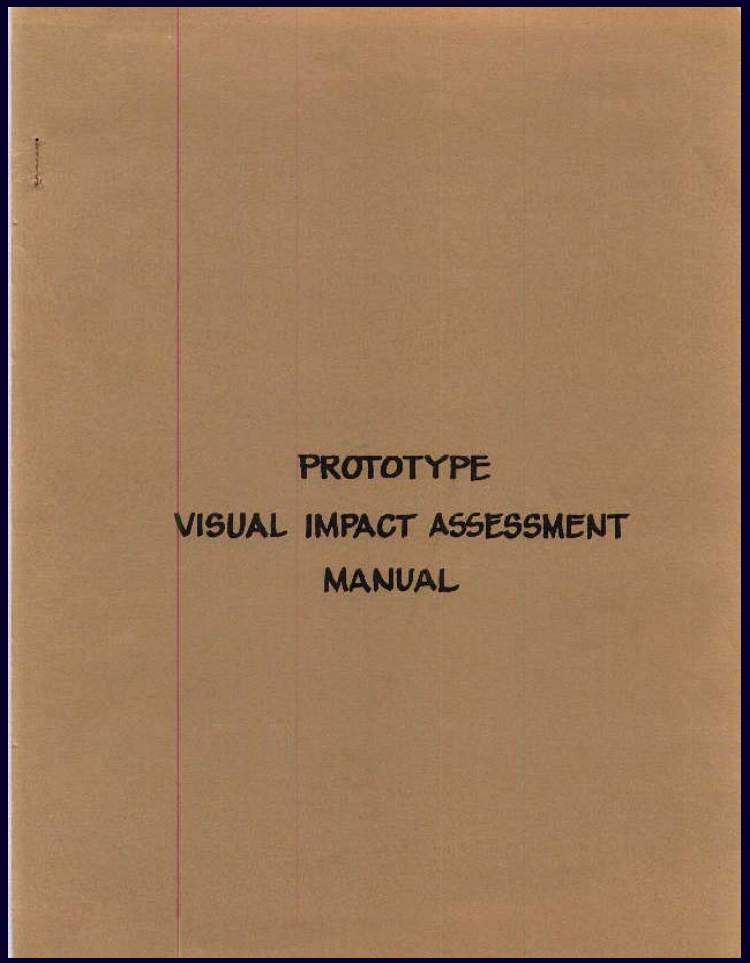
(land/water, vegetation, structures)

then predicting the magnitude of contrast in each of the landscape character elements:

FORM – LINE – COLOR - TEXTURE

Contrast Rating System

- Prototype VMS system developed in 1979



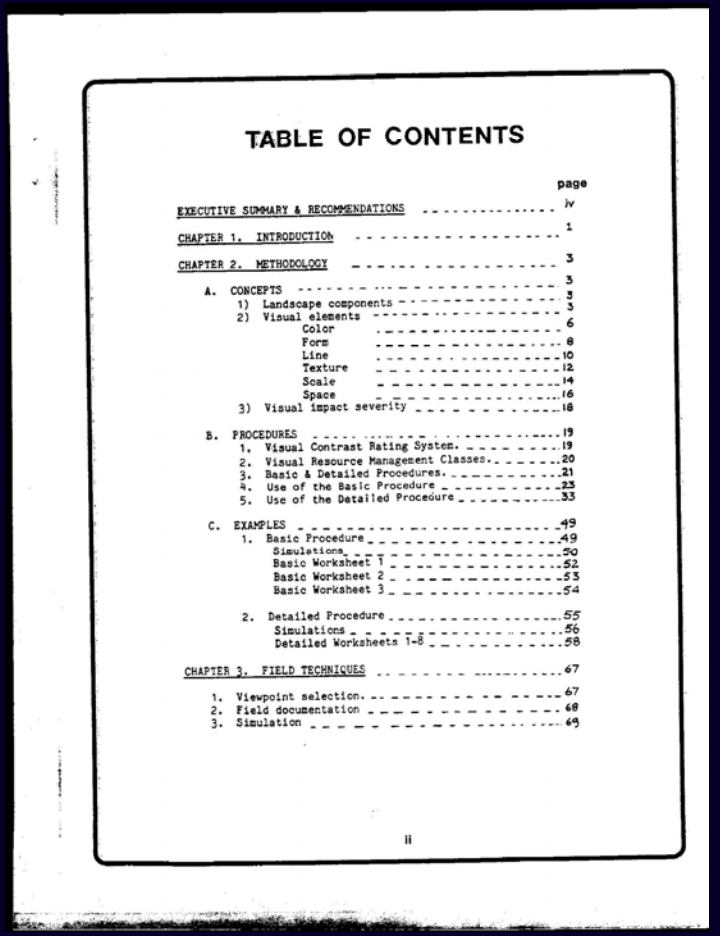


TABLE OF CONTENTS

Analytical Format

Major Features				
Landscape Character Elements		Land/Water	Vegetation	Structures
	Form			
	Line			
	Color			
	Texture			

Analytical Format

- Quickly reveals elements & features that cause the greatest visual impact
- A guide to methods to reduce the visual impact of a proposed project or activity
- Provides basis for design that reflects and responds to the setting

Visual Contrast Rating

- Not a pass – fail exercise. We want an "A"++
- Every attempt is made to reduce visual impacts even if the proposed project meets VRM Management Objectives for the area

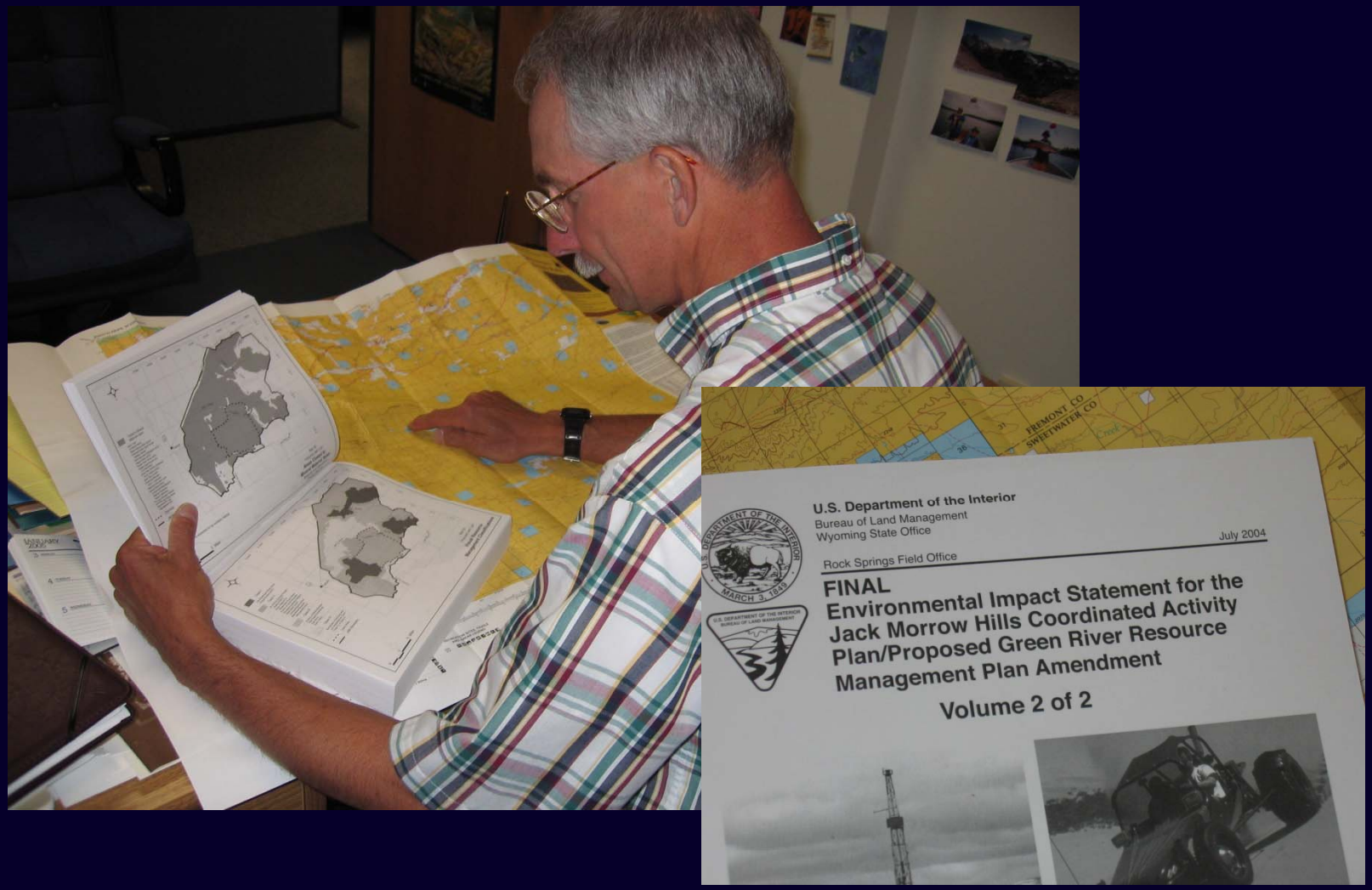
Steps - Contrast Rating Process

1. Obtain a complete project description
2. Identify VRM Objectives from RMP
3. Assess project visibility - Select Key Observation point(s)
4. Prepare visual representation/simulation
5. Complete Contrast Rating

Step 1 – Obtain Detailed Project Description

- Emphasize early contact with project proponent
- Coach proponent on project design
- Proposal must be comprehensive
  - Materials?
  - Scale?
  - Colors/Reflectivity?
  - Lights?
  - Temp structures/seasonal use?

Step 2 - Identify VRM Class From RMP



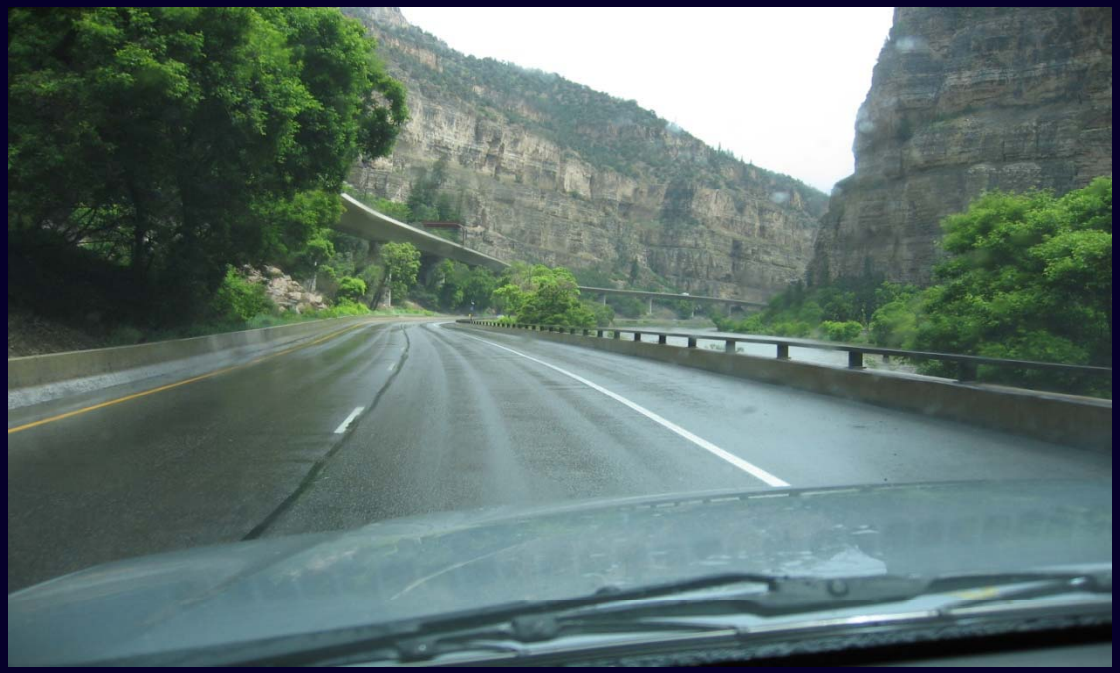
No VRM Class Map???

- Follow BLM policy – Handbook
- Inform manager!
- Inventory project area.
- Find RMP emphasis for that area.
- Develop range of alternatives.
- Prepare contrast ratings.

Step 3 – Assess Project Visibility

- Viewshed Analysis
- Section/Line of sight analysis
- Site and area reconnaissance

Key Observation Point – A critical viewpoint or place from which we analyze the visual impact of a Proposed Project



Typical Project KOPs

- Scenic Overlooks, Rivers & Roads
- Important Vantage Points
- Places from which a proposed project is seen by large numbers of viewers (representative) or critical viewers
- Views From Communities or Subdivisions
- Point where view of proposed project is most revealing (careful to avoid bias in analysis)

KOP Considerations

- RMP direction, IDT input
- Distance
- Angle of observation
- # of Viewers
- Length of time project is in view
- Relative project size
- Season of use
- Light conditions & other factors as appropriate

Rock Quarry – low angle

Rock Quarry – high angle

Rock Quarry - foreground

Rock Quarry - Background

Seasonal considerations

Step 4 – Prepare Visual Simulations

- Helps to understand the project
- Helps to understand the visual impact
- Great way to illustrate impacts in EA
- Seeing an image of the project is much more powerful than trying to imagine it
- Helps eliminate bias
- Allows all team members to see the project the same

Penstock / pump station site

Quick paintshop line drawing

Built project

Color option / mitigation

Reduce edge contrast

Old well pad.

Reduce edge contrast

Old well pad with edges blended.

Step 5 – Complete Contrast Rating

- See Bureau Manual Handbook H-8431-1 (Note the Illustrations and appendices)
  - Tips/techniques:
    - Use IDT and mentor in field
    - If possible, take a recon trip first to familiarize yourself with directions, setting and light conditions at different times of day
    - GPS and photograph the locations you conduct the analysis from
    - Cover elements on worksheet – can use different format or record observations on tape recorder

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date

District

Resource Area

Activity (program)

SECTION A. PROJECT INFORMATION

1. Project Name

2. Key Observation Point

3. VRM Class

4. Location
Township _____
Range _____
Section _____

5. Location Sketch

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEXTURE			

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM			
LINE			
COLOR			
TEXTURE			

SECTION D. CONTRAST RATING ☐ SHORT TERM ☐ LONG TERM

1. DEGREE OF CONTRAST

ELEMENTS	FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Form												
Line												
Color												
Texture												

2. Does project design meet visual resource management objectives? ☐ Yes ☐ No
(Explain on reverse side)

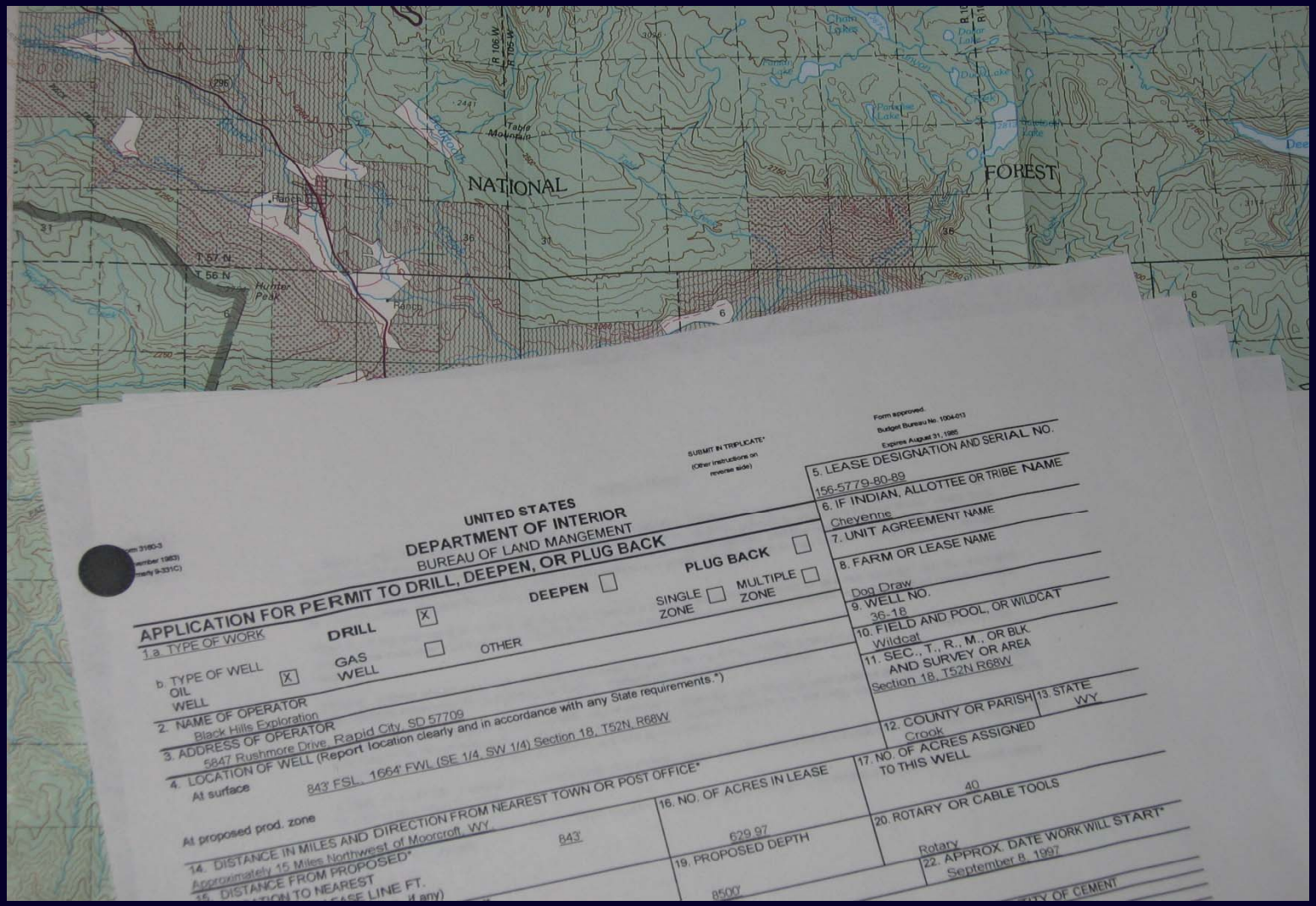
3. Additional mitigating measures recommended?
☐ Yes ☐ No (Explain on reverse side)

Evaluators' Names Dates

Let’s Walk Through an Example

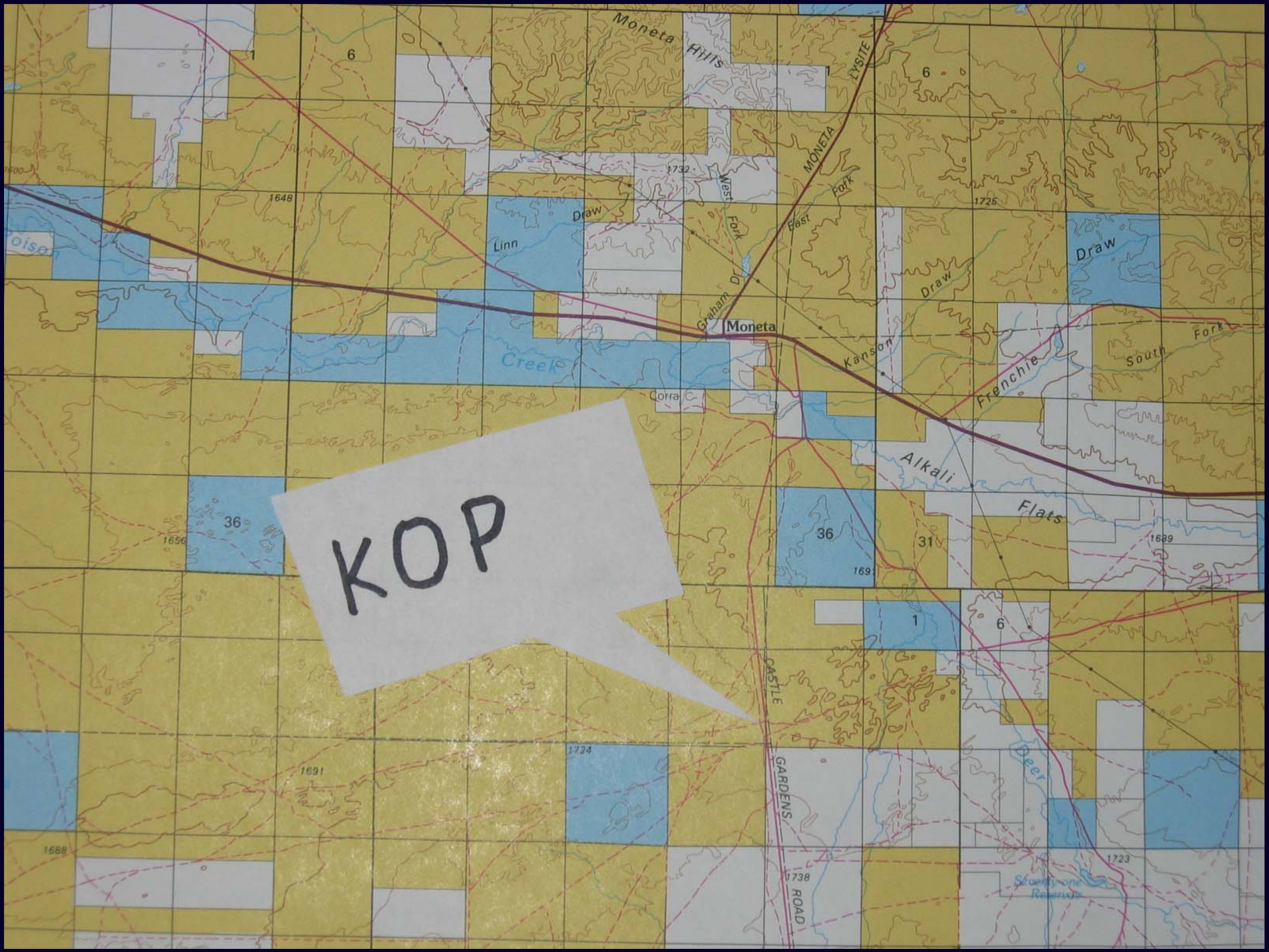
- What is the first step in the process?

Obtain Complete Project Description



Review established VRM objectives

Select KOP(s)


KOP
Moneta
Moneta Hills
Alkali Flats
Creek
Draw
Linn
West Fork
East Fork
Kanson
Frenchie
South Fork
CASTLE
GARDENS
ROAD
Deer
36
31
1
6

Prepare Visual Simulation

- Photo of proposed project site

Simulation of Proposed Project

Complete Contrast Rating

- Section A of Form 8400-4

Form 8400-4 (September 1985) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT **VISUAL CONTRAST RATING WORKSHEET**		Date: Feb 24, 2004 District: N/A Resource Area: Lander Activity: Oil & Gas
SECTION A. PROJECT INFORMATION		
1. Project Name: Well No 136 2. Key Observation Point 29/91 Sec 21: SESE 3. VRM Class VRM Class IV	4. Location Township 29N Range 91W Section 21	5. Location Sketch

Section B of Contrast Rating Form

Characteristic Landscape Description

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION			
	1. LAND/WATER	**2. VEGETATION**	**3. STRUCTURES**
FORM	**Gently rolling terrain, low hills**	**Low, continuous sagebrush cover, smooth, regular pattern**	**None noted in view toward the project from the KOP**
LINE	**Mostly horizontal undulating lines. A horizontal landscape**	**Weak horizontal lines created by changes in vegetative patterns**	**None noted in view toward the project from the KOP**
COLOR	**Light brown to buff where visible**	**Gray-green of sagebrush is dominant, mostly continuous**	**None noted in view toward the project from the KOP**
TEX-TURE	**Smooth, continuous**	**Medium to slightly coarse in immediate foreground to smooth/fine in middleground**	**None noted in view toward the project from the KOP**

Section C of Contrast Rating Form

Proposed Activity Description

SECTION C. PROPOSED ACTIVITY DESCRIPTION			
	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat, leveled pad(s), curvilinear road(s), narrow, linear form	Veg removed from pad, road(s), reclaimed veg low, sparce	Cylindrical tanks, rectangular separator unit. A dominant visual element
LINE	Where seen, pad appears as a distinct horizontal line, same with roads	Sharper line(s) where veg removed	Structures have vertical alignment and are visible
COLOR	Light brown to buff-colored pad(s) & road surfaces.	Tan to light buff most of year, light green in spring.	Carlsbad Canyon contrasts with darker gray of sagebrush
TEX-TURE	Smooth texture on pad(s) & road(s)	Smooth where re-established (grasses) Sage may re-establish in 20 years	Smooth texture of facilities a dominant feature of project

Section D of Contrast Rating form

SECTION D. CONTRAST RATING		SHORT TERM X LONG TERM												
ELEMENTS	1.Degree of Contrast	FEATURES												
		Land/Water Body				Vegetation				Structures				2. Does Project Design meet visual resource management objectives? Yes __X_ No ____ (explain on reverse)
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended. Yes __X_ No ____ (explain on reverse)
	Form			X				X			X			Evaluator's Names Date:
	Line		X				X			X				
	Color			X				X		X				Cimarron Chacon 7/16/04
	Texture			X				X		X				Allysia Angus

Consider mitigation measures as you id contrast:

- What are strong elements in the project setting?
- What are strong elements in the project?
- What can you borrow from the setting?
- What can you change in the setting?
- What can you change in the project:
  - make it fit in setting (color, form, texture, scale…)
  - move it

Section D – Reverse Side of form

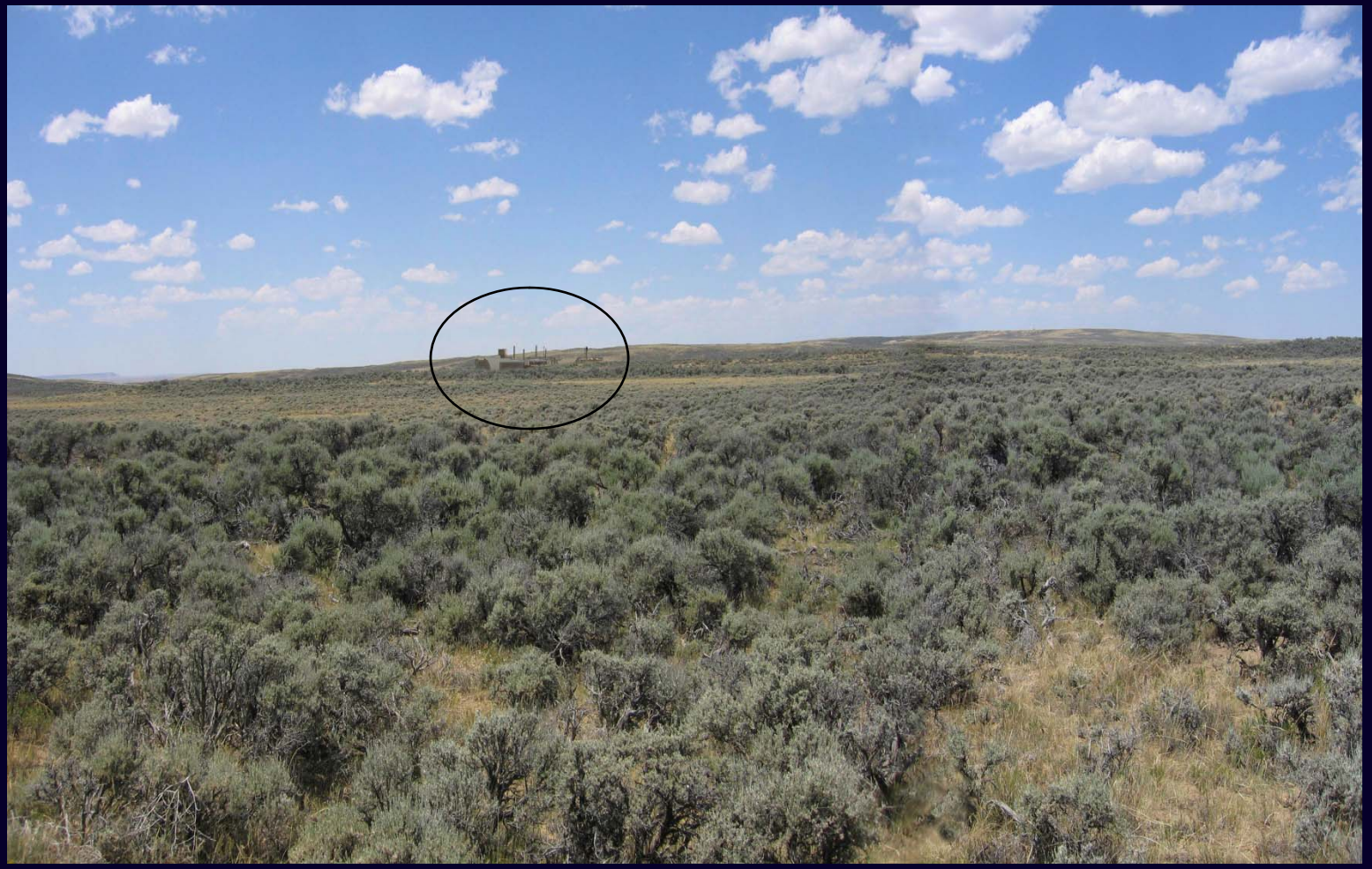
SECTION D. (Continued)
Comments from Item 2. The line created by the clearing for the road and drill pad creates a contrast that will attract attention. The installation of storage tanks and the separator unit will introduce vertical-aligned forms that contrast with the characteristic landscape. The structures will have a smooth texture as opposed to the coarse texture of surrounding sagebrush. The facilities introduce vertical lines which will contrast with the predominately horizontal landscape. The color of the tanks as proposed will contrast with the darker color of the dominant sagebrush.

Contrast Rating form – Mitigating Measures

Additional Mitigating Measures (See item 3)

1. As per agreement with company representatives, relocate drill pad 250 feet northwest behind/between low stabilized sand dunes.
2. Relocate access road behind/between stabilized dunes
3. Use low profile tanks a maximum of 12 feet high rather than the standard 18 foot tanks
4. Paint facilities a color compatible with sagebrush, the dominant veg species in the area

Simulation of Project with Mitigation



Review of VRM Class Objectives

Class I

- Preserve the existing character of the landscape. Manage for natural ecological changes
- Change Allowed: Very Low
- Activities must not attract attention

Review of VRM Class Objectives

Class II

- Retain the existing character of the landscape
- Change allowed: Low
- Activities may be visible but should not attract attention of the casual observer

Review of VRM Class Objectives

- Class III

- Partially retain the existing character of the landscape
- Change allowed: Moderate
- Activities may attract attention but should not dominate the view of the casual observer

Review of VRM Class Objectives

Class IV

- Provide for management activities which require major modification of the existing character of the landscape
- Change allowed: High
- Activities may attract attention, may dominate the view, but are still mitigated

What next?

- Report prepared for project record.
- Discuss with project team and manager.
- Information available for NEPA, may influence range of alternatives.
- Information available for public and others.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