

Mitigation



By Dale Hanson

Lesson Objectives

- **Explain why mitigation is important; define terms associated with mitigation.**
- **Describe key coordinator responsibilities in the mitigation determination process.**
- **Identify who does mitigation.**
- **Identify and explain the steps in the mitigation determination process.**
- **Give examples of mitigation measures.**
- **Determine when paleontological resources are at risk and recommend appropriate mitigation measures for a particular Federal action.**
- **Explain the purpose and use for mitigation reports.**

Route

- Mitigation Defined
- Legal Mandates
- Types of Mitigation
- Roles & Responsibilities
- Mitigation Steps
- Confidentiality

Mitigation: Defined

- What is Mitigation?
 - The process of lessening or eliminating damage or destruction from surface disturbing activities – Direct impacts.
 - Lessening or eliminating loss to the public from land exchanges or sales – Indirect impacts.
- WHY is Mitigation Important?

Discussion



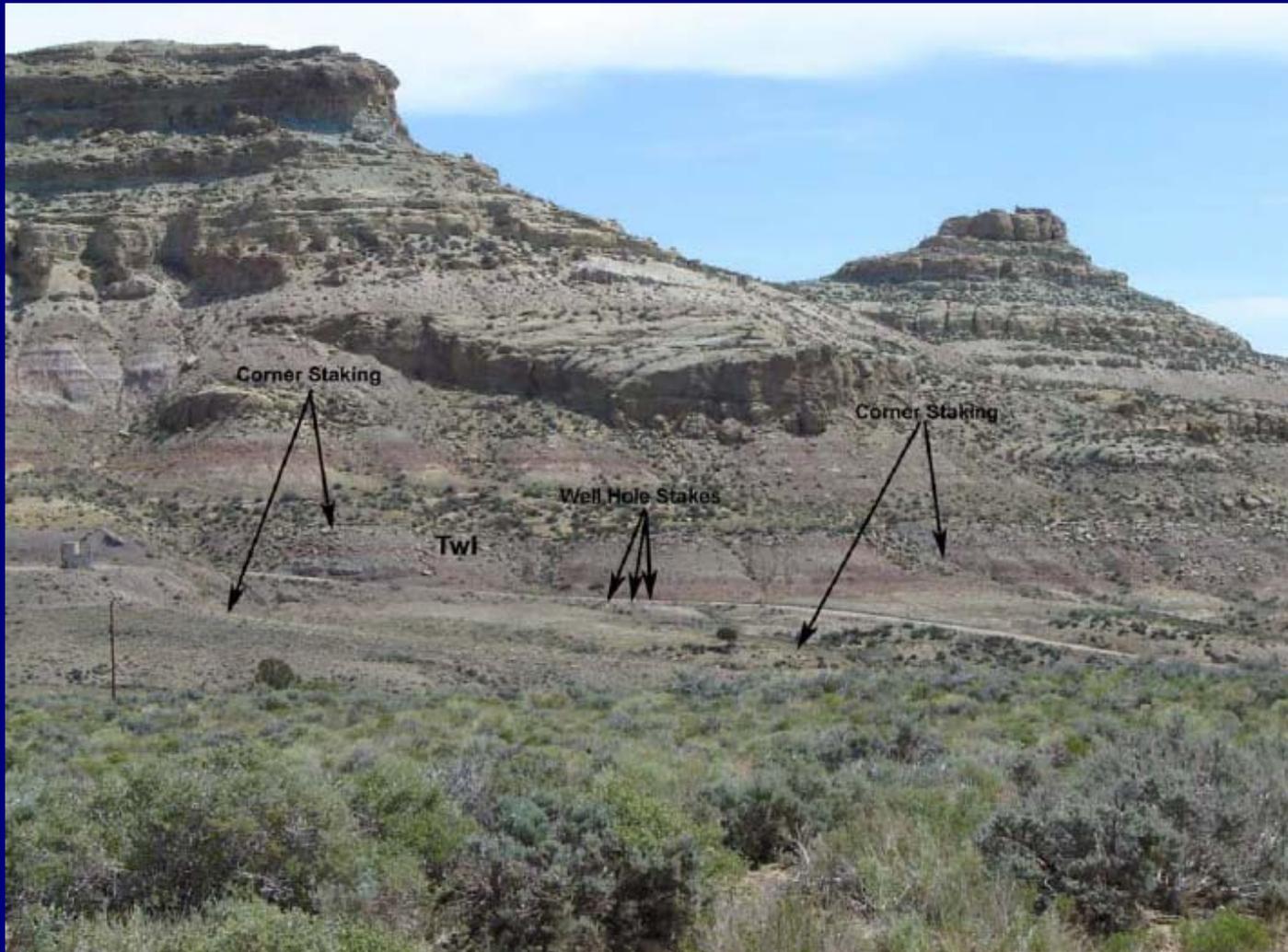
Mitigation: Legal Mandates

- FLPMA – “protect...scientific...values”
- NEPA – “preserve important historic, cultural, and natural aspects of our national heritage” and consider them in assessing environmental consequences.
- Mineral Leasing Act – “protection of the interests of the United States”

Mitigation: Legal Mandates

- Bottom Line – There are no direct laws or regulations mandating mitigation of paleontological resources,
- However, FLPMA, NEPA, and other laws and regulations mandate protection of “scientific values” and “natural aspects” and “interests of the United States” – all of which would apply to paleontological resources

Discussion



Mitigation: Types

- Avoidance
- Sampling
- Recovery before disturbance
- Deferred recovery
- Recovery during disturbance
- Destruction

Roles & Responsibilities:

Project Proponent / Project Initiator:

- Industry, rancher, other agency, BLM folks
- May not know the need for paleo assessments
- Responsible for acquiring consultant and paying mitigation costs
- Responsible for completion of mitigation requirements

Roles & Responsibilities:

Paleo Consultants:

- Extension of BLM – our “Agents”
- Must have current Consulting Permit
- Responsible for:
 - Performing work in professional and ethical manner
 - Knowing BLM requirements and expectations
 - Preparation of all reports

Roles & Responsibilities:

Consulting Personnel:

- PI (Principal Investigator) – permittee and the ‘official’ consultant
- Field Agent – qualified paleontologist, can work independently
- Field Monitor – some field experience, but must work near PI or Field Agent
- Field Assistant – under immediate supervision of PI or Field Agent

Roles & Responsibilities:

Paleo Coordinators:

- Field Office level
- Responsible for:
 - Determining the need for surveys and monitoring
 - Assuring requirements and stipulations are incorporated into project authorizations
- Local point of contact for consultants, proponents, others

Roles & Responsibilities:

Regional Paleos and SO:

- Four Regional Paleos; other states use Cultural Program Lead (State Office Arch.)
- SO issues permits, tracks annual reports
- SO is responsible for multi-FO projects
- Regional Paleos are responsible for multi-state projects

Exercise



Mitigation: Steps

- Identify project and potential impacts
- Locate project area on geology/PFYC map
- Consider any alternatives to proposed action
- Determine local conditions or situations that may affect survey locations or intensities

Mitigation: Steps

- Determine final survey needs
- Inform proponent for need for survey
- Conduct survey
- Receive and assess survey report
- Document survey results in project records

Mitigation: Steps

- Adjust proposed action
- Determine need for monitoring
- Approve action with appropriate stipulations
- Conduct monitoring
- Stay informed of project progress

Mitigation: Steps

- Receive and assess monitoring report
- Document monitoring results in records
- Incorporate new data into BLM records

Exercise



Confidentiality

- Fossils and associated data are Federal property, not the proponent's or consultant's property
- The consultant should keep specific locality data and maps in a separate section of report
 - Provide this section only to BLM and the repository, not to proponent or the public

Lesson Summary

Can you now do these things?

- **Explain why mitigation is important; define terms associated with mitigation.**
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Thanks to:

- Chris Arthur and Mike Bies, BLM
- Erathem-Vanir Geological Consulting – Gus Winterfeld and crew

For the Photos