Managing Oil and Natural Gas Development on Federal Onshore Lands

U. S. Department of the Interior
Bureau of Land Management
Division of Fluid Minerals, www.blm.gov

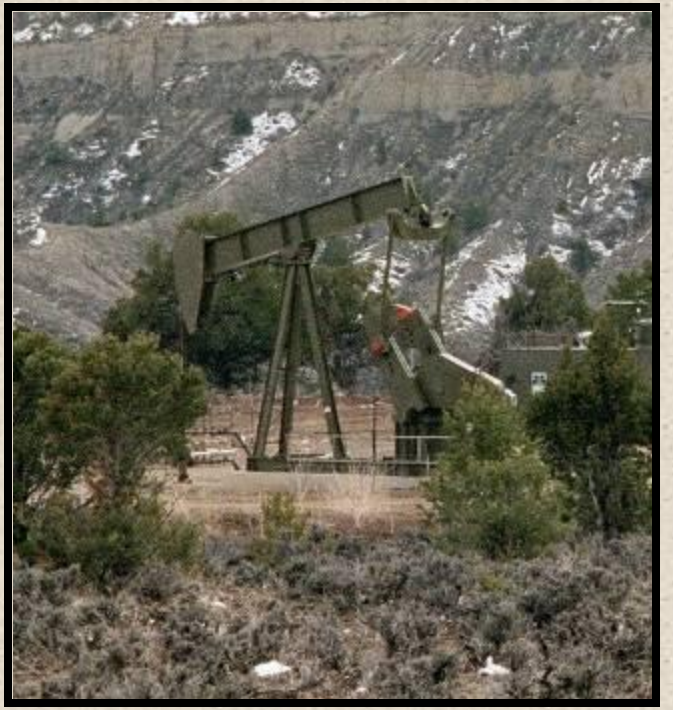
US Bureau of Land Management (BLM) Generates Revenues from:

- 245 million acres of surface lands and
- 700 million acres of sub-surface mineral estate

(48,000 leases/35 million acres)

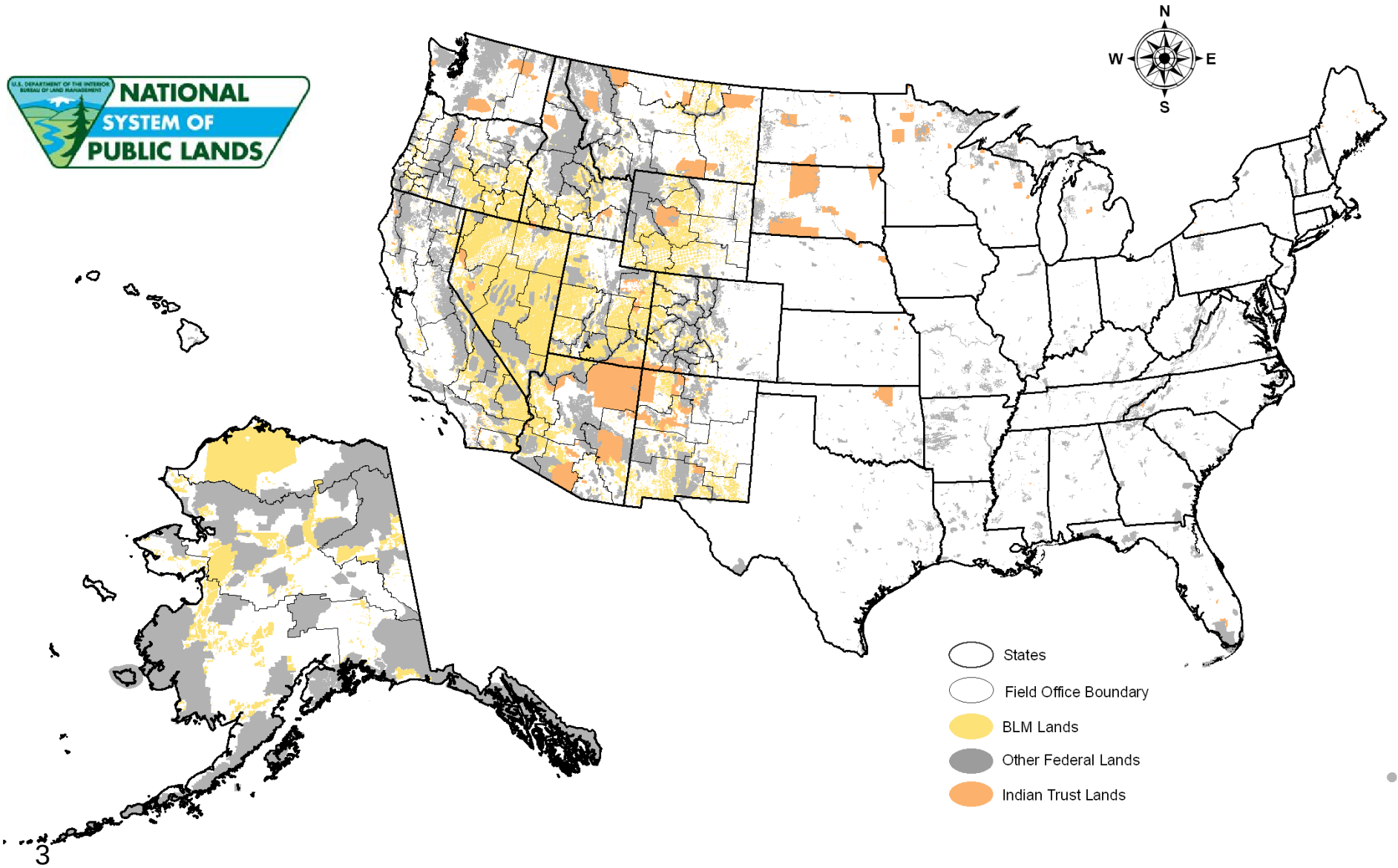
Providing, $2.7 (US) billion annual royalties; $245 million bonuses; $47 million rentals; from $125 million in program funding:

- 6% of Domestically Produced Oil
- 13% of Domestically Produced Natural Gas



Public Lands, Onshore Federal and Indian Minerals

Responsibilities of the Bureau of Land Management

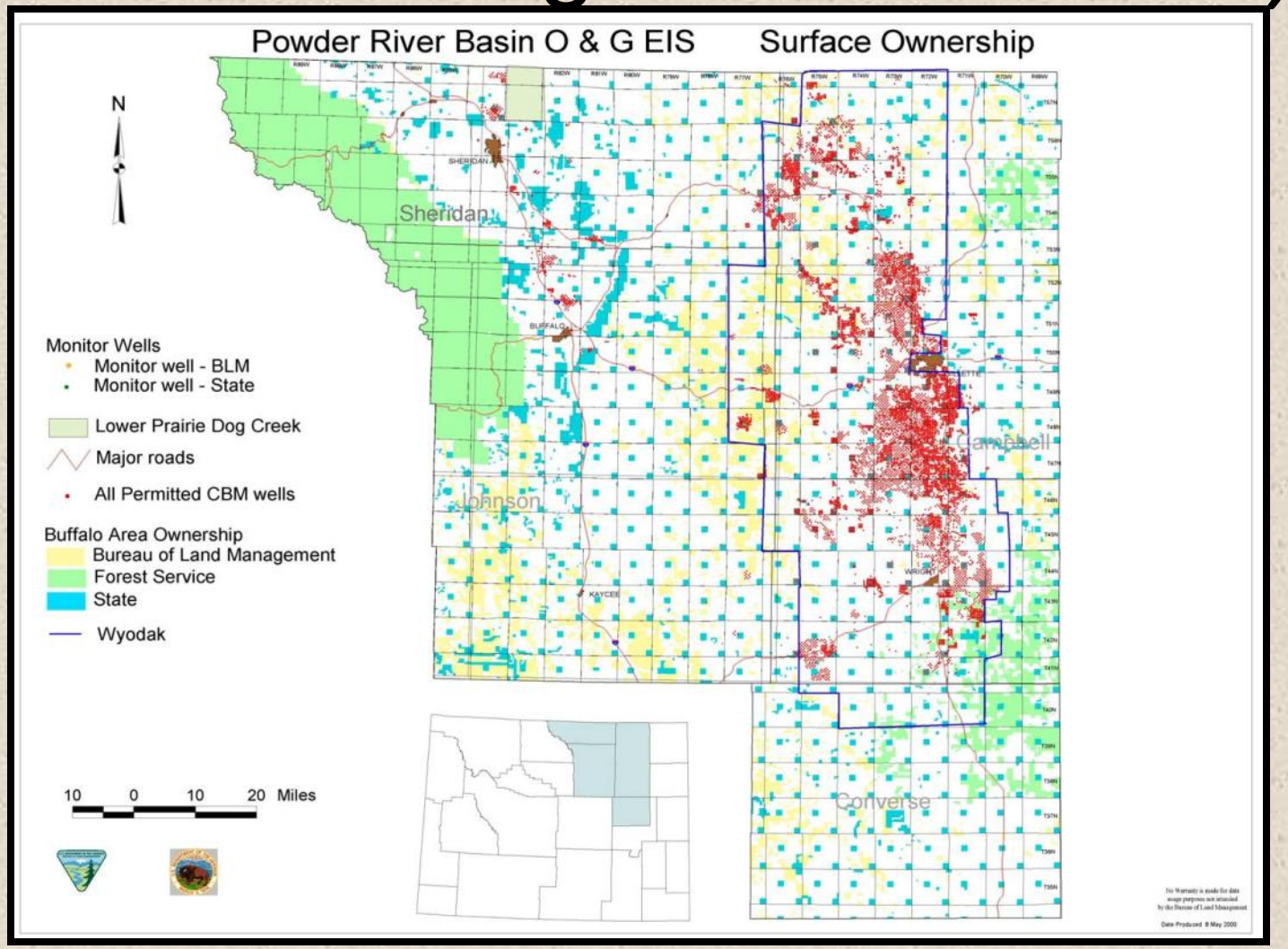


Source: Energy Information Administration based on data from various published studies.
Updated: March 21, 2011

Development is governed under these Laws, and other Regulations and Policies.

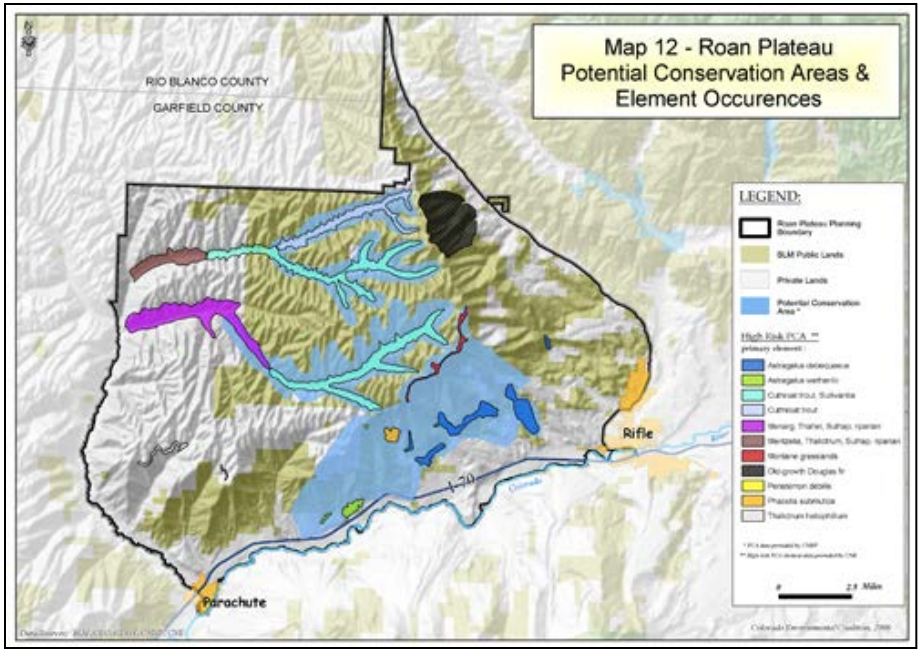
- Mineral Leasing Act of 1920
- National Environmental Policy Act of 1969
- Federal Land Policy and Management Act of 1976 – 2000 laws combined
- Federal Oil and Gas Royalty Management Act of 1982 – followed by a suite of Onshore Orders
- Federal Oil and Gas Leasing Reform Act of 1987
- National Energy Policy Act of 2005

Land Use Planning – Public ! (sets the stage to tier NEPA)



Master Leasing Plans

- "The MLP process takes a more focused look at resource management plan (RMP) decisions pertaining to oil and gas leasing and post-leasing development of the area."

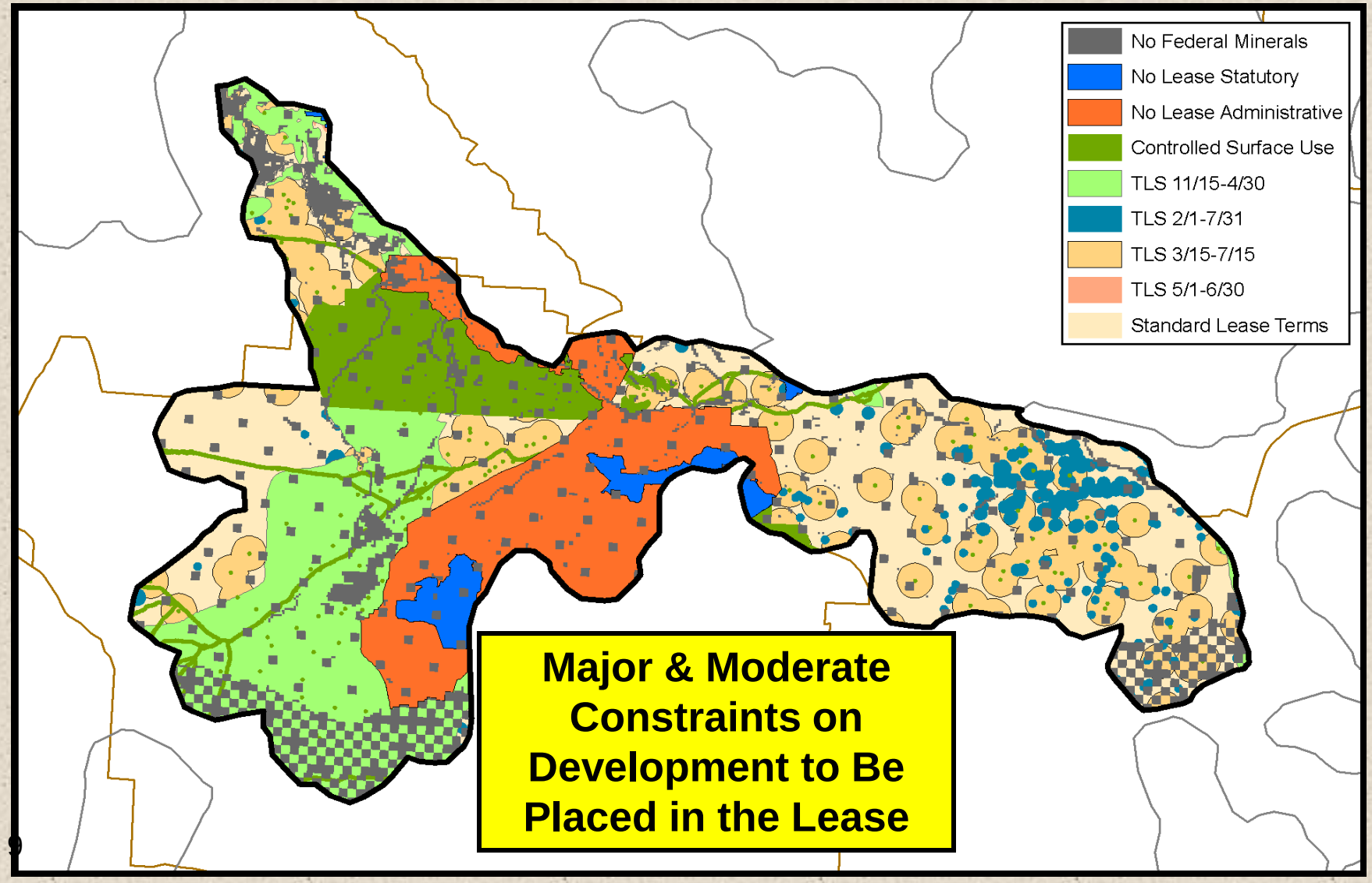


Master Leasing Plans
"...where there is a potential for:"

- Substantial unleased lands.
- Majority Federal mineral interest .
- Industry interest in leasing.
- Potential for oil and gas confirmed by a discovery.

- **Likely resource conflicts if oil and gas development were to occur.**
- "The BLM may also prepare an MLP under other circumstances at the discretion of the Field Manager, District Manager, or State Director."

Resulting Lease Stipulations



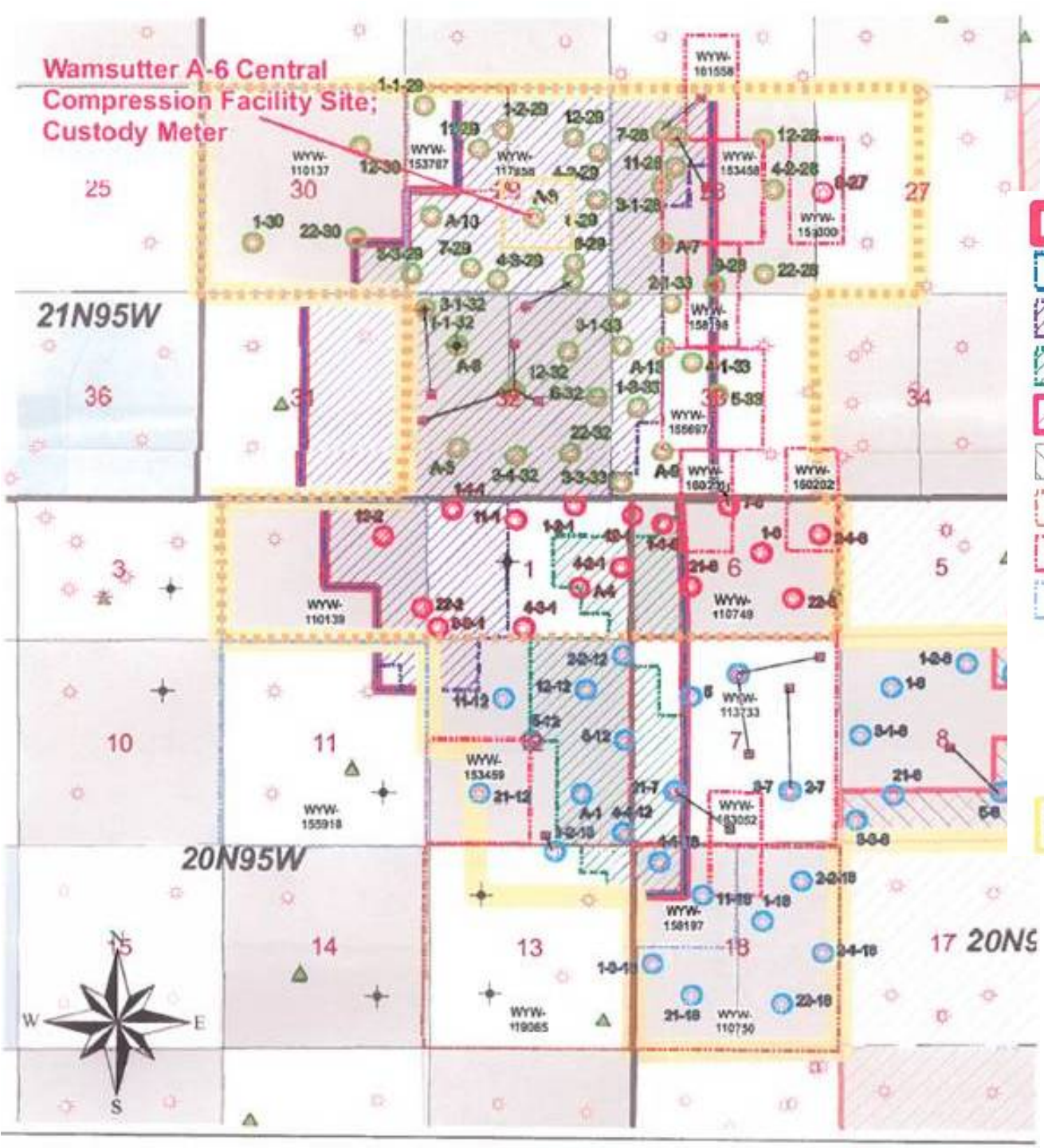
Leasing – Public Auction

Lease Sales

- BLM conducts an interdisciplinary environmental review of nominated parcels and provides opportunities for public comment and protest – difficult and arduous, plus balance with other multiple resources management.

- BLM State Offices conduct quarterly Lease Sales.

- Parcels are offered through competitive, oral auctions with bidding starting at $2/acre.



Complex Ownership Mixed Land Pattern

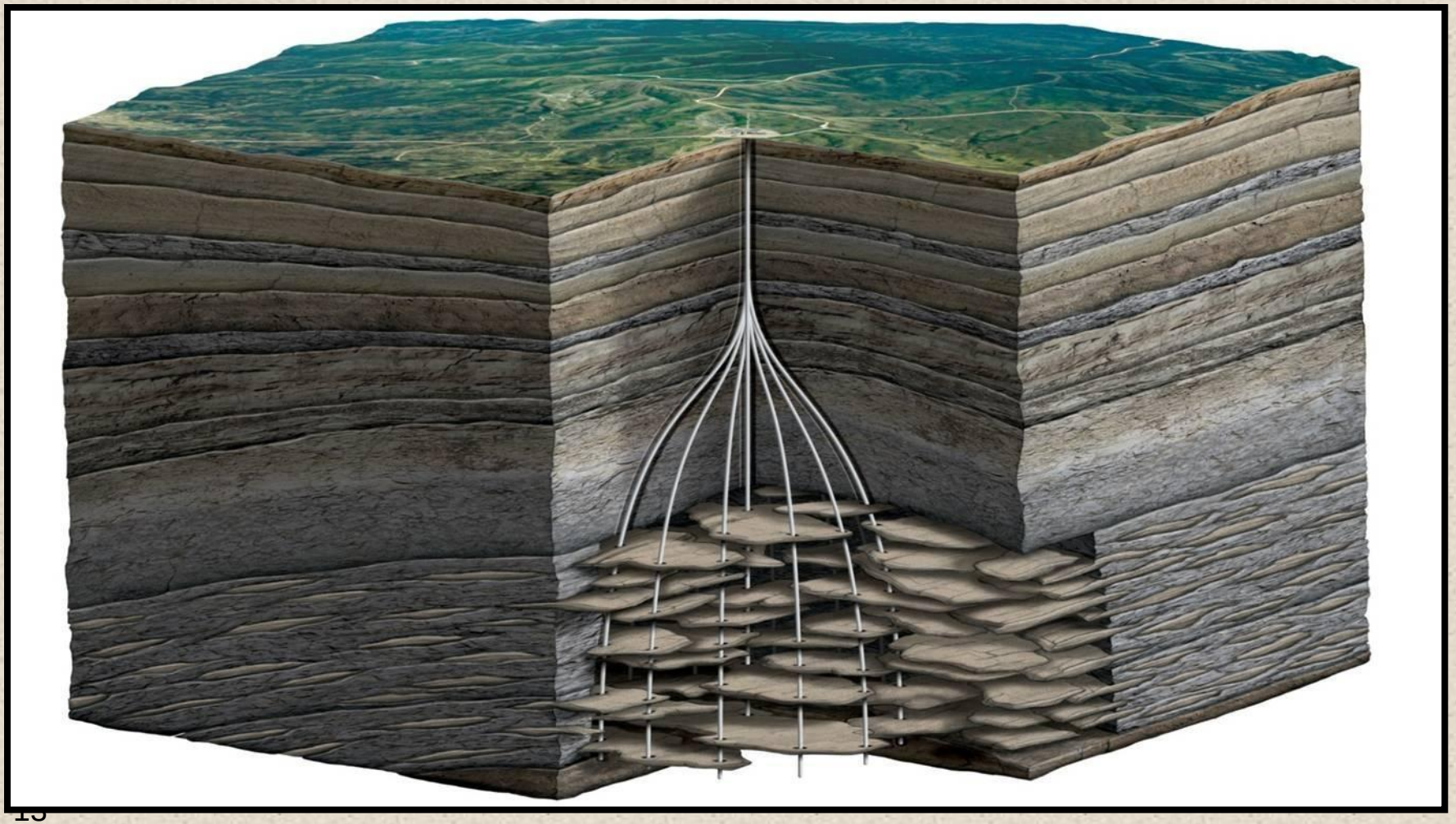
- Wamsutter Unit Boundary
- Mesaverde PA (same as Unit)
- Lewis AC PA
- Lewis B PA
- CG Road Unit
- CG Road Uncommitted Tract
- Almond CA
- Almond\Lewis CA
- Lewis CA

CA Number: WYW-000000

- Federal Lease
- State Lease
- Fee Lease
- Wamsutter A-6 Central Compressic Facility Site - Custody Meter

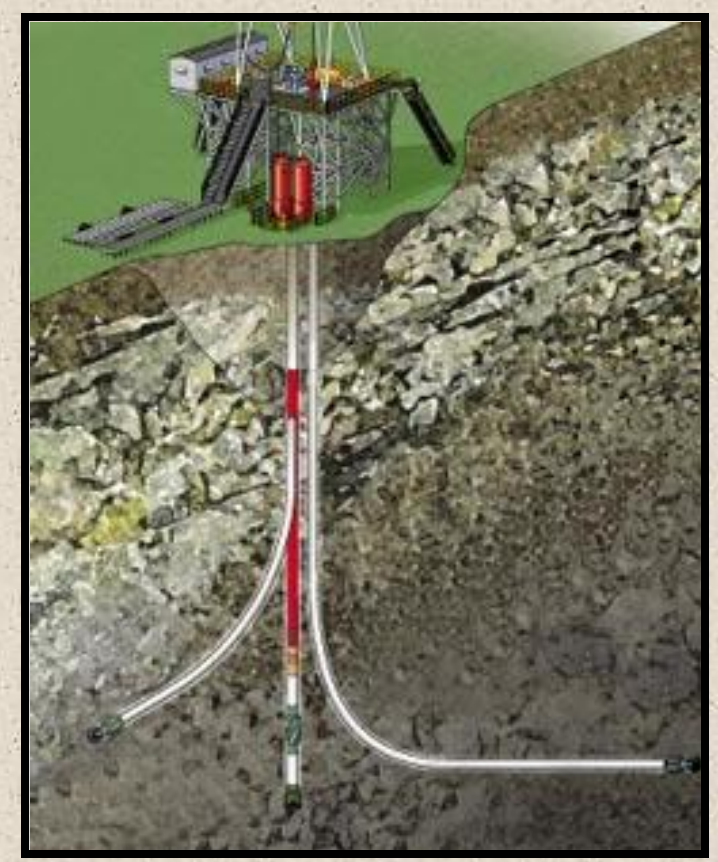
5 Federal Leases
9 Federal/Private CAs
4 Private Leases
3 Federal/Private PAs
87 wells (meters)

Drilling Permit



Drilling Plan

- Geology
- Blowout Prevention
- Casing Program
- Cementing Program
- Mud Program
- Testing & Logging
- Pressures or Potential Hazards
- Directional Design

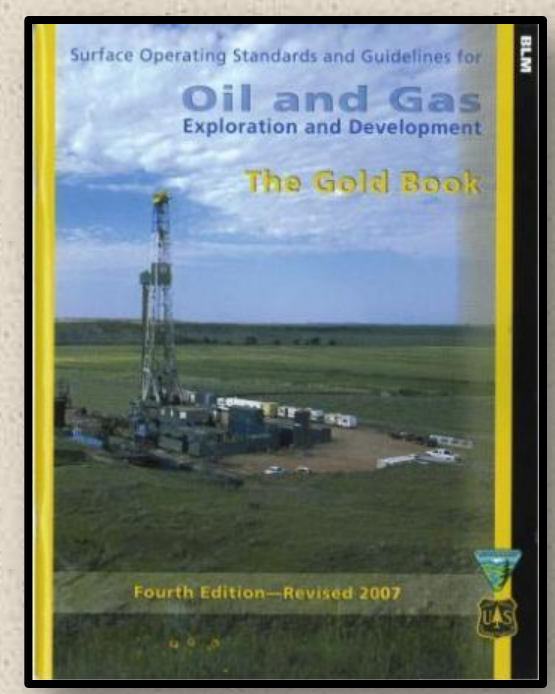


Surface Use Plan of Operations

- Further NEPA, level of review (EIS, EA, CX, DNA)
- Resource Surveys (Cultural, Wildlife, Vegetation)
- The Gold Book is the Gold Standard
- Sound operations is critical, due diligence , often scrutinized by the Public, Groups
- Mitigation Measures attached to the Permit

Minor Constraints such as:

- Move location to a site with less impact
- Control erosion, dust, noise, emissions
- Ensure Interim & Final Reclamation

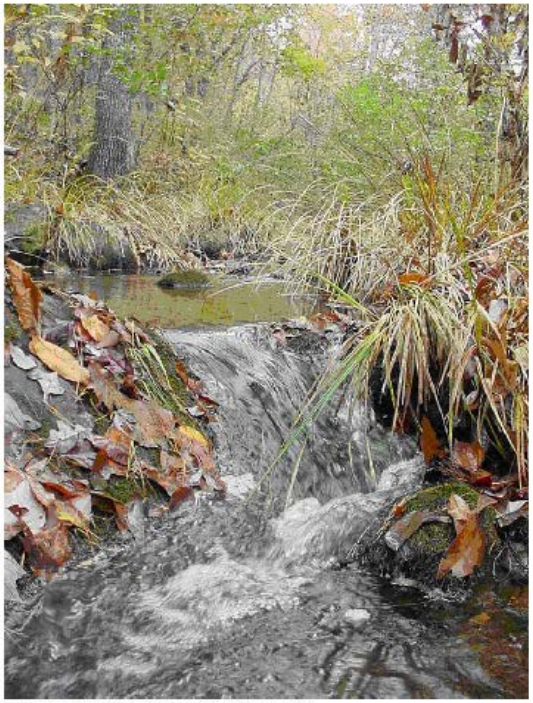


Best Management Practices (BMP) Emphasis

It is the BLM's policy to require state-of-the-art mitigation measures.

www.blm.gov/bmp

Arkansas
Best Management Practices
for Fayetteville Shale Natural Gas Activities



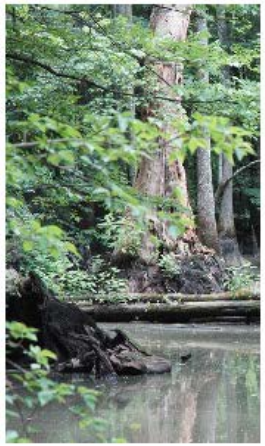
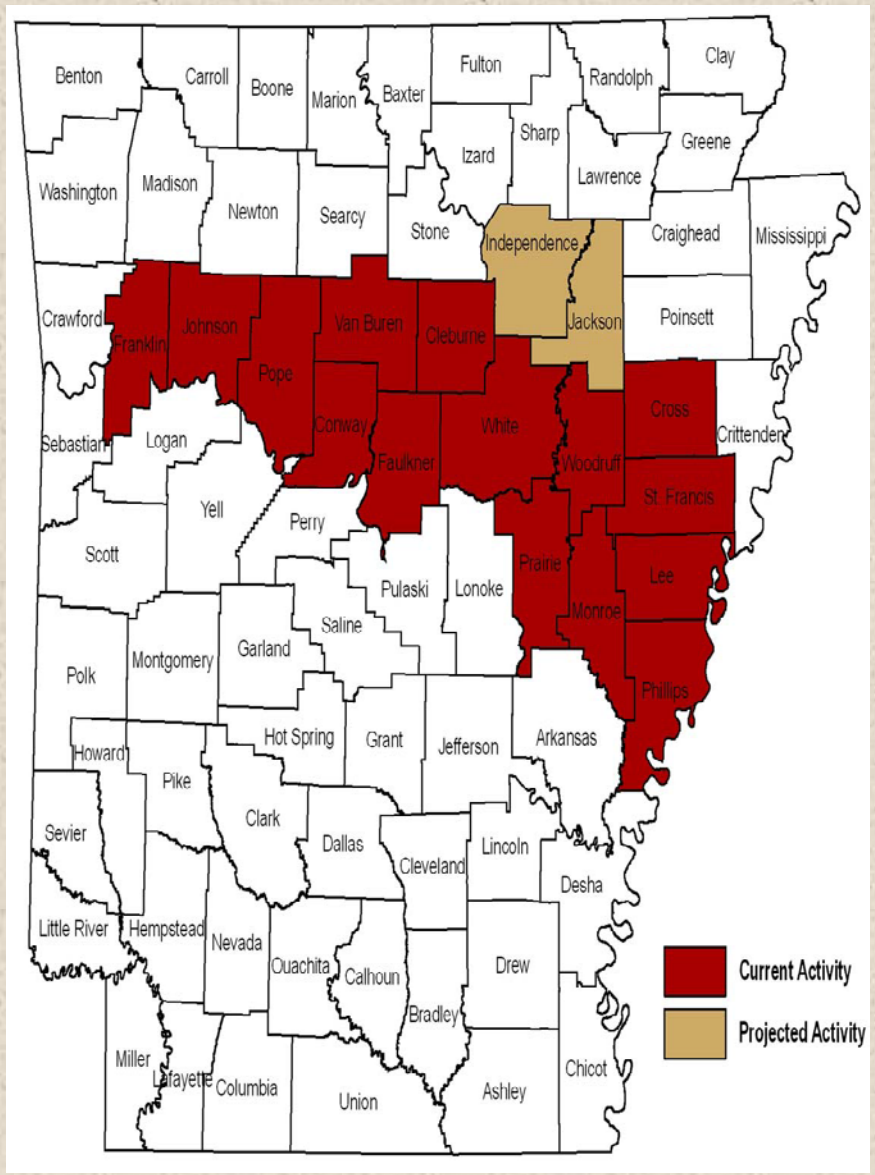
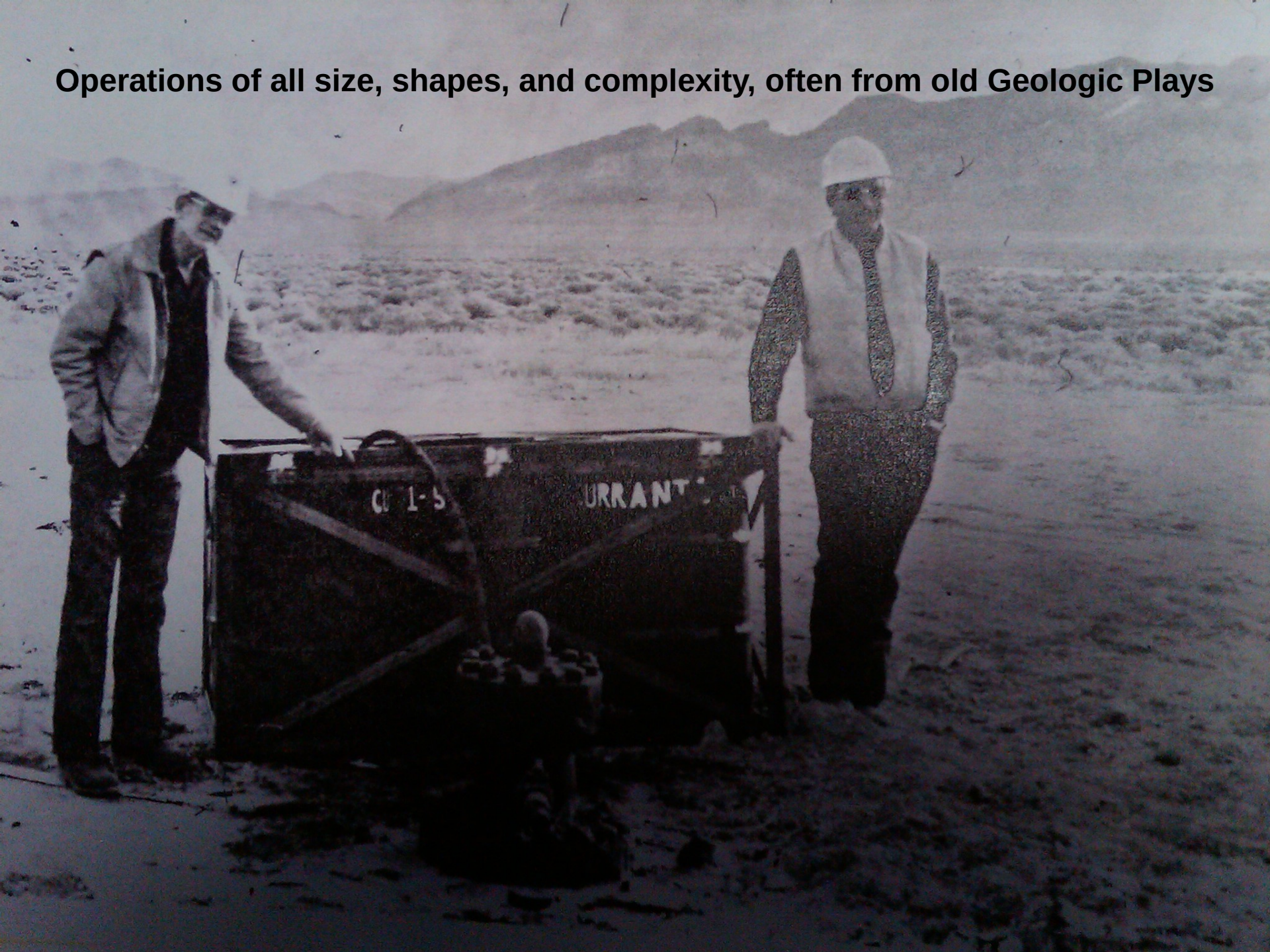


Photo above: USFWS, both at right: USFWS/Garry Tucker



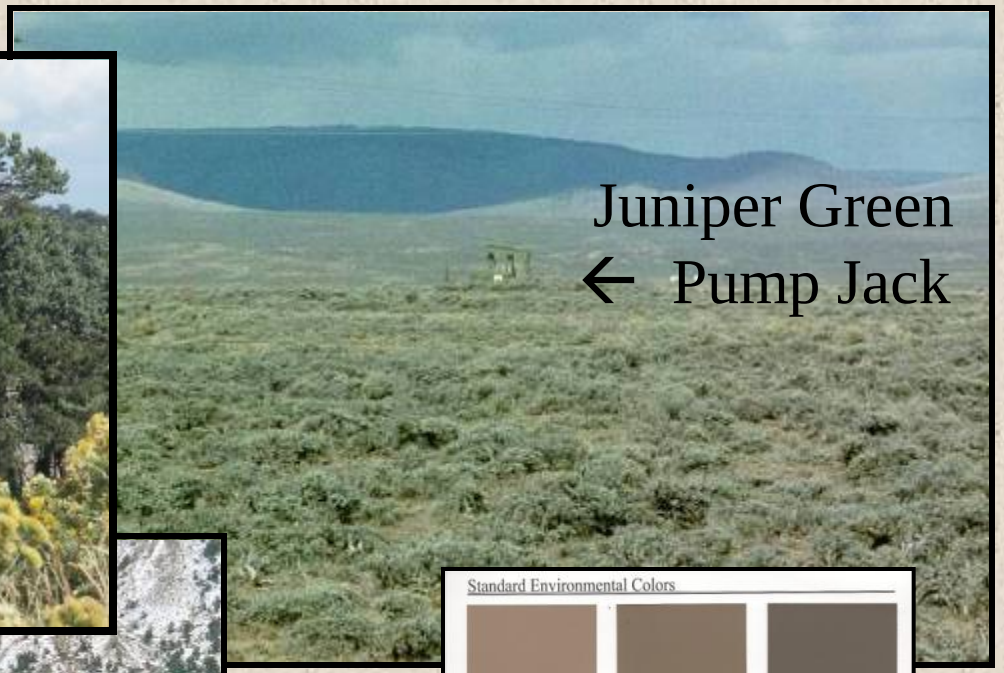
Operations of all size, shapes, and complexity, often from old Geologic Plays



Inspection Strategy & Production Accounting

- Inspection program = 1/3 of oil and gas
- Annual determination – required and planned inspections are identified
- Track all hours – office, field, travel
- Risk-based, identify and focus priorities
- Drilling, plugging; production (high risk) – 10,000 production inspections
- 34,000 total inspections completed; with 20,000 as environmental – 175 PETs, plus additional Natural Resource Specialists

Blending Into the Landscape



Oak or Plastic Mat Pads (one creative solution)

Flowering sagebrush one year after mat pads removed.