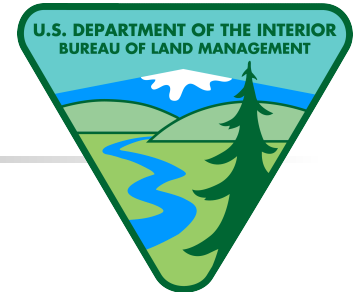


# Oil and Gas Leasing



Jim Albano – Lead Natural Resource  
Specialist  
Reservoir Management and Operations  
Section  
Montana State Office – (406) 896-5111



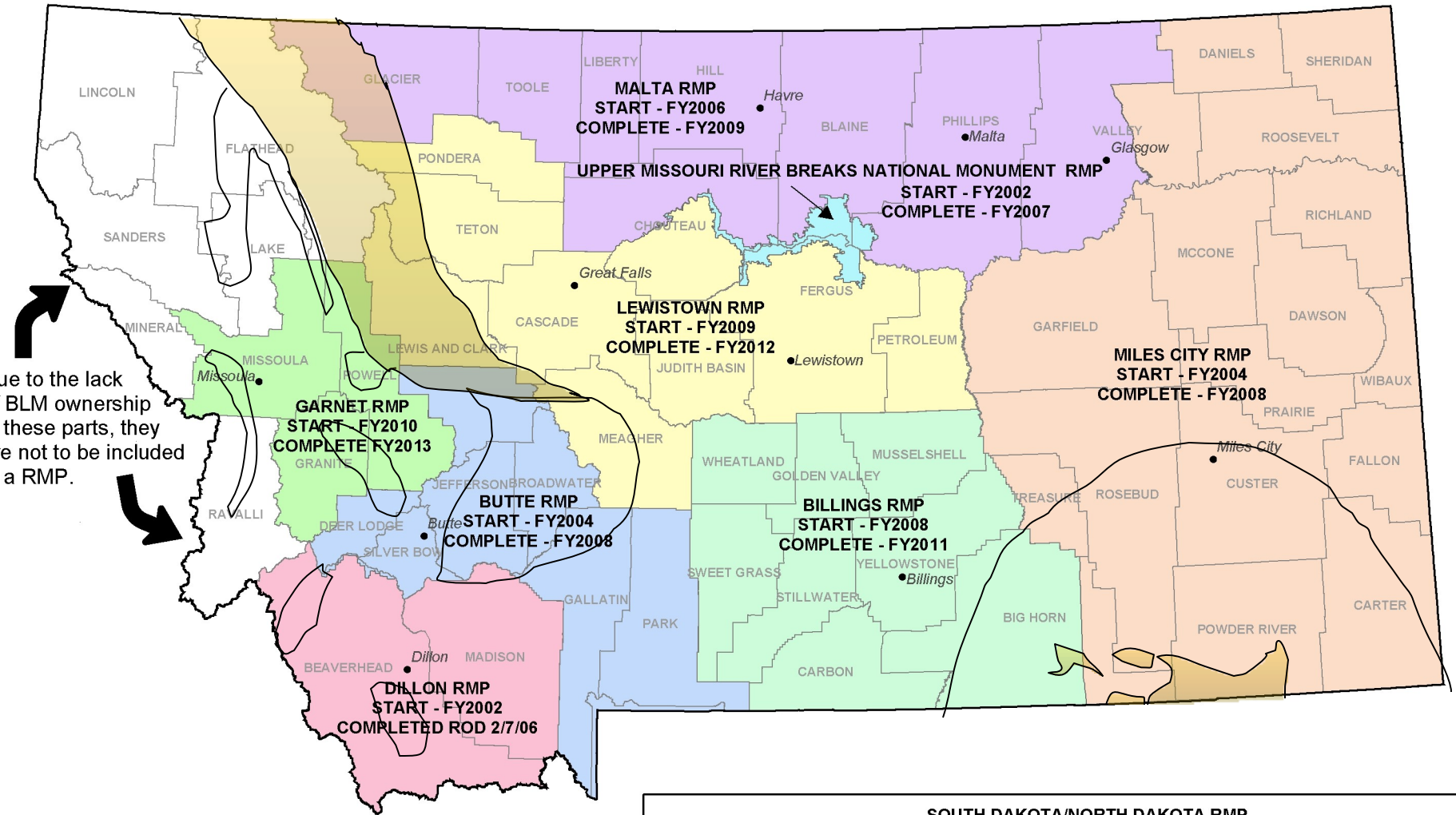


# Overview of Presentation

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- Land Use Planning Decisions
- Leasing Process
- Post Lease Mitigation
- Leasing Statistics
- Access to Information

# ONGOING & FUTURE LAND USE PLANNING BOUNDARIES MONTANA/DAKOTAS





# Land Use Allocations for Oil and Gas

---

- Open for leasing subject to standard terms
- Open for leasing subject to constraints
- Open for leasing subject to NSO
- Closed for leasing



# Oil and Gas Lease Stipulations

---

- Necessary – if it does not duplicate existing laws, regulations, lease terms, and existing regulations
- Justifiable – if there are resources, values, uses and/or users identified that in the absence of such stipulations cannot coexist with oil and gas operations or managed on other lands during oil and gas operations



# Lease Stipulation Policy

---

- Lease stipulations should be used to clarify our intent if we know in advance of the need to protect certain resources or resource values



# Lease Stipulation Policy

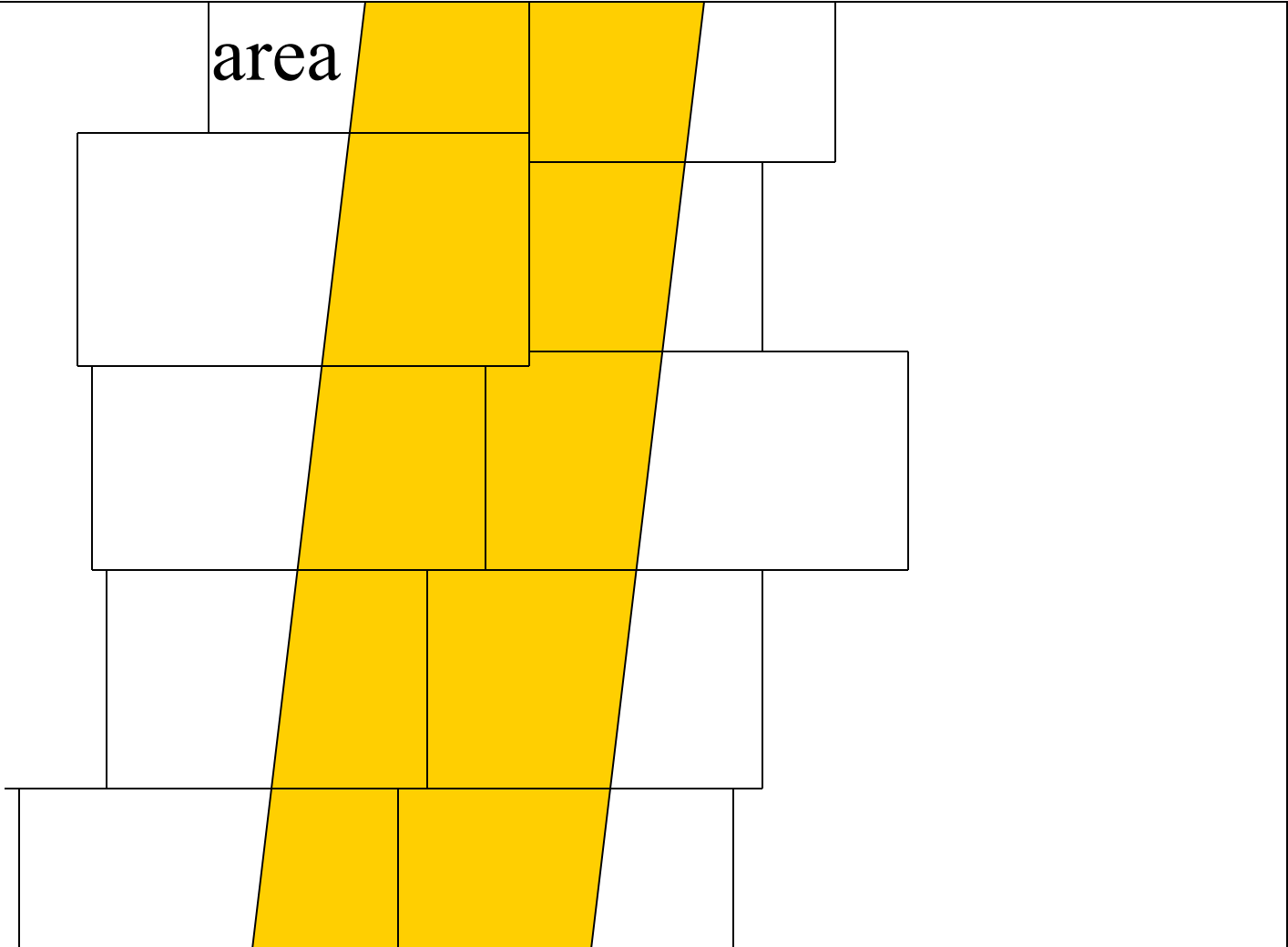
---

- Use the least restrictive stipulation needed to effectively accomplish other resource objectives or uses
  - Its better to lease with no surface occupancy (NSO) than not lease at all
  - Its better to have timing restrictions rather than an NSO lease



Narrow N S O sensitive

area







# Oil and Gas Occurrence Potential

---

- Existence of USGS oil and gas plays
- Thickness of the sedimentary rock sequence
- The presence of reservoir rock (the hydrocarbon “sponge”)
- The presence of adequate hydrocarbon seals and traps
- Favorable timing of hydrocarbon generation, migration, trap generation, & trap preservation



# Dillon RMP Area Potential

---

- Four Areas with limited potential for occurrence and development
  - Potential for the lack of effective reservoir seals
  - Lack of thermally mature source rocks
  - Potential for thermally over mature source rocks due to igneous intrusions in the area
  - Risk of trap integrity and hydrocarbon leakage due to faulting

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

**Dillon Field Office  
Draft RMP/EIS**



**Legend**

- Very Low Development Potential
- Low Development Potential
- Moderate Development Potential
- Forecast Areas
- Dillon Field Office
- Public Land Survey
- Federal Mineral Estate

Federal minerals include those being planned for in the Dillon RMP and do not include mineral interests within National Forest Lands.  
Map shows development potential based on geologic and industry information.  
Areas where exploration is forecast are based on leasing history, economic outlook, and other factors.

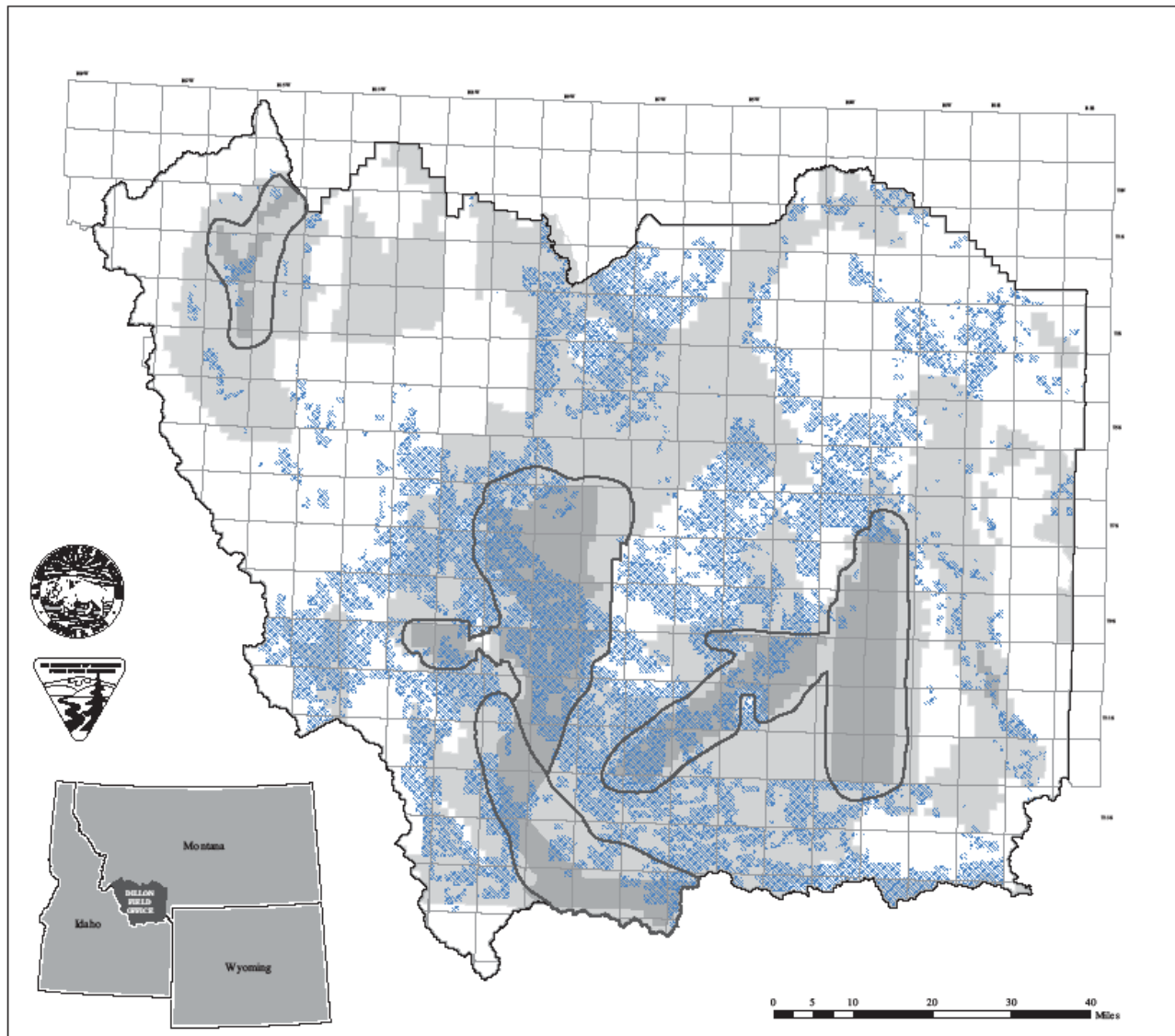
**Oil and Gas  
Development Potential  
and Forecast Areas**

Albers Equal Area, NAD27

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March 2004

**Map 83**





# Leasing Process

---

- State Office forwards nominated parcels to Field Offices
- Field Offices review parcels



# Lease Parcel Review Process

---

- BLM Conducts Review
  - Determine if action conforms with the land use plan terms, conditions and decisions
  - Consider if new information or changes warrant additional NEPA analysis
  - Apply appropriate stipulations



# Lease Parcel Review Process

---

- BLM may decide
  - More information is needed to determine if stipulations should be applied
  - Additional resource inventories or consultation is necessary
  - Additional NEPA documentation is necessary
  - Existing NEPA documentation is adequate



# Leasing Process

---

- State Office attaches appropriate stipulations and makes Notice of Sale available for 45 day review
- Parcels are offered for sale at quarterly (or more frequent) lease sales
- Parcels not sold are available for noncompetitive leasing for a 2 year period



## Montana Suspended/Deferred Acreage

---

**Field Office**

**Acres**

**Lewistown**

**188,197**

**Malta**

**421,802**

**Miles City**

**73,000**

**Total**

**682,999**





# Post Lease Mitigation

---

- Negotiations with the lessee/operator
- Restrictions deriving from specific, non-discretionary statutes
- Reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed



# Non-discretionary Statutes

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- Endangered Species Act
- NHPA, Clean Water Act, Clean Air Act
- FLPMA (basis of existing policy on the application of new mitigation to existing oil and gas leases)
- *Wyoming Outdoor Council, et al. v. Bosworth, et al.* Sept. 30, 2003

# Reasonable Measures



# Reasonable Measures







# Regulatory Definition of Reasonable Measures

---

- At a minimum measures are considered consistent with contractual lease rights if they do not;
- 2. Require relocation by more than 200 meters
- 3. Require operations off the leasehold
- 4. Prohibit new surface disturbance for more than 60 days



# Reasonable Measures

---

- Must be consistent with lease rights granted (does not significantly impair the economic recovery of the oil and gas resources of the lease as a whole)
- Analyze the technical feasibility of moving the well location
- Analyze the adequacy of less stringent measures for protecting the resource



# Example Conditions of Approval (Big Game Winter Range)

---

- Gate and sign roads
- Exploration, drilling and other development only from April 16 to November 30
- All non-emergency work over operations shall only occur from April 16 to November 30
- Minimize site visits to personnel needed to monitor well operations



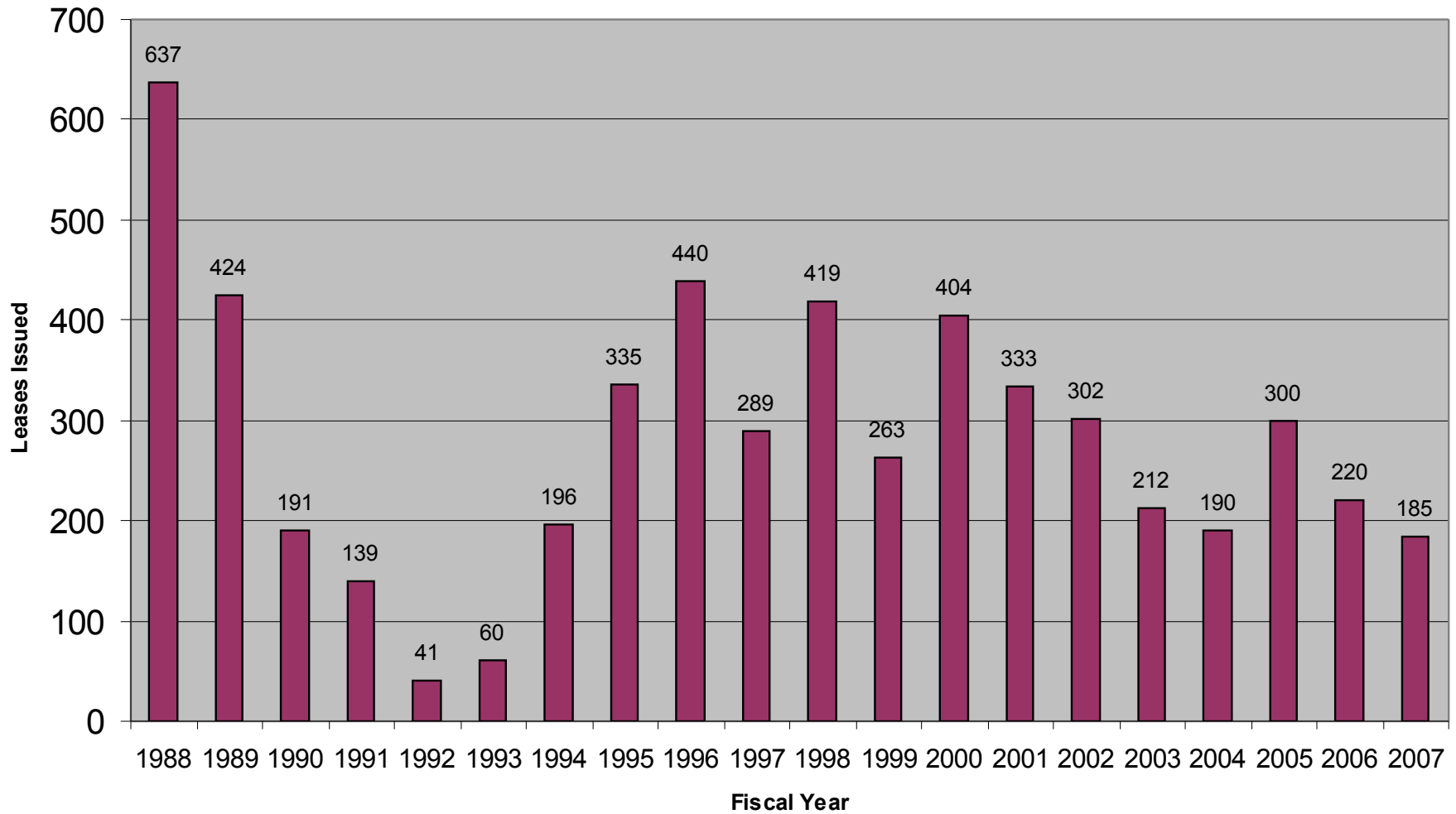
# Example Conditions of Approval (Big Game Winter Range)

---

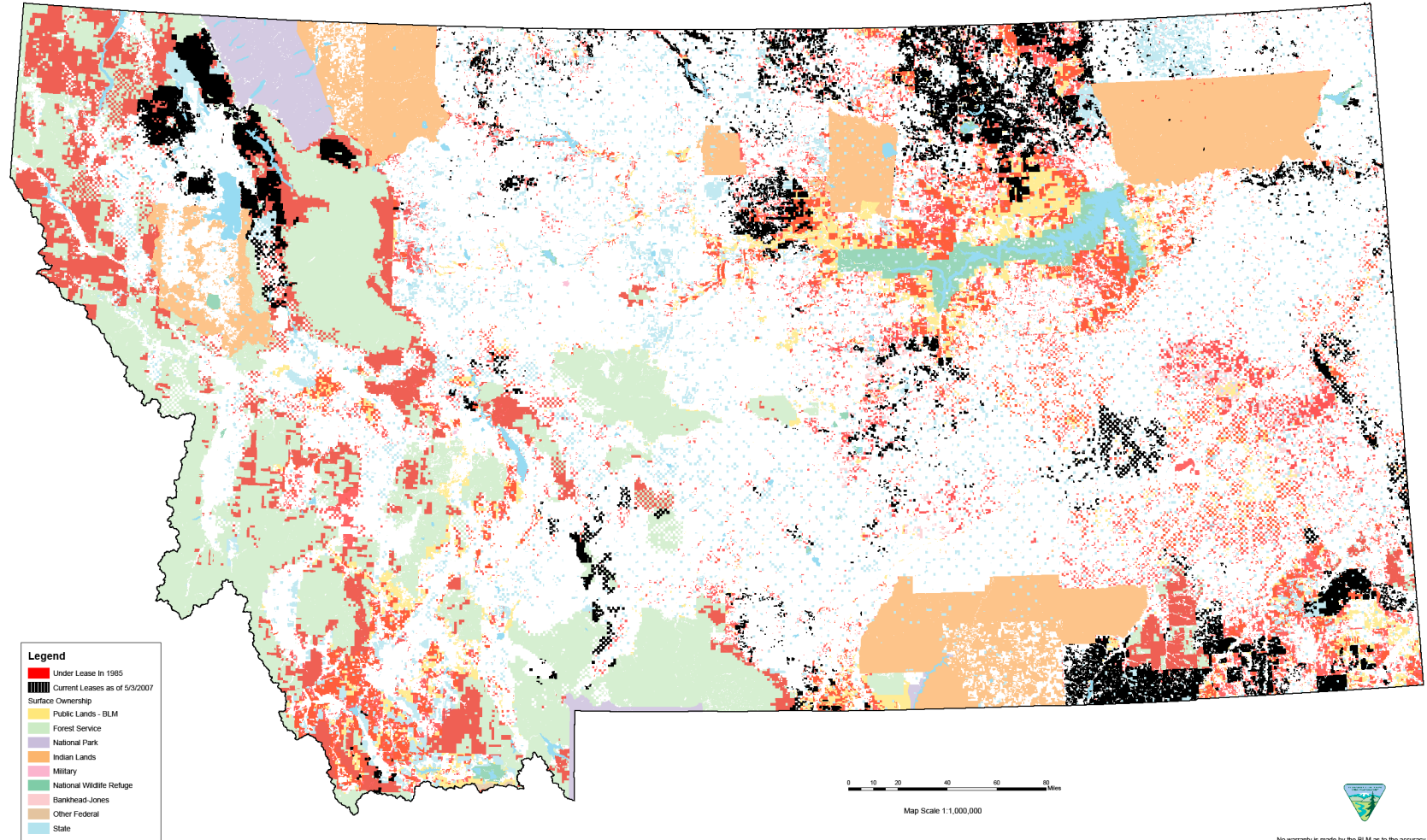
- Reclamation will include hand planting of seedling browse plants and use of seedling protectors
- Avoidance areas within corridors
- Off-site mitigation
- Yearly meetings to coordinate drilling plans and related activities for new wells



# Federal Leases Issued in Montana



# MONTANA FEDERAL OIL AND GAS LEASES

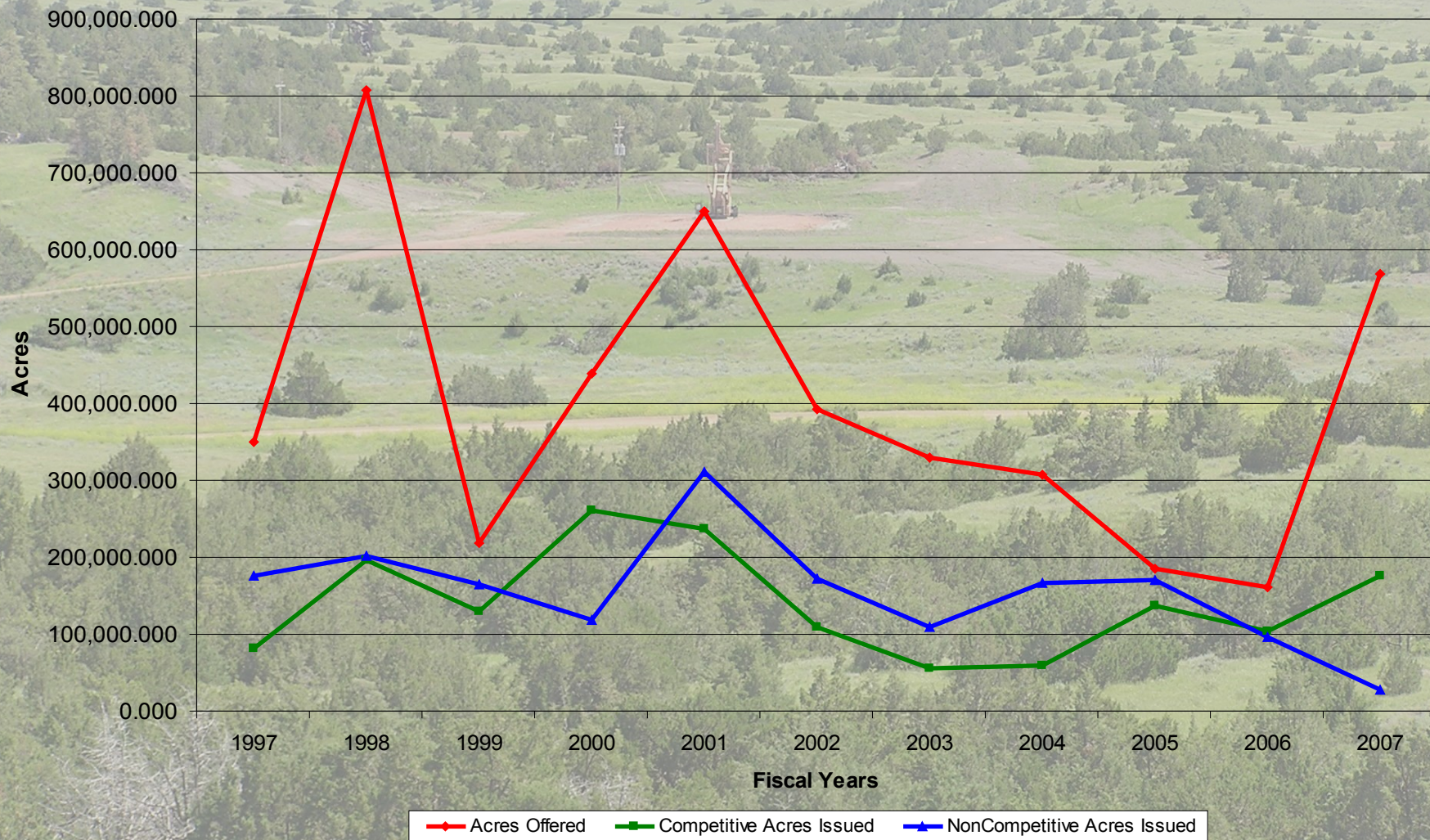


5/3/2007

  
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# Leasing Activity in Montana (Acres)



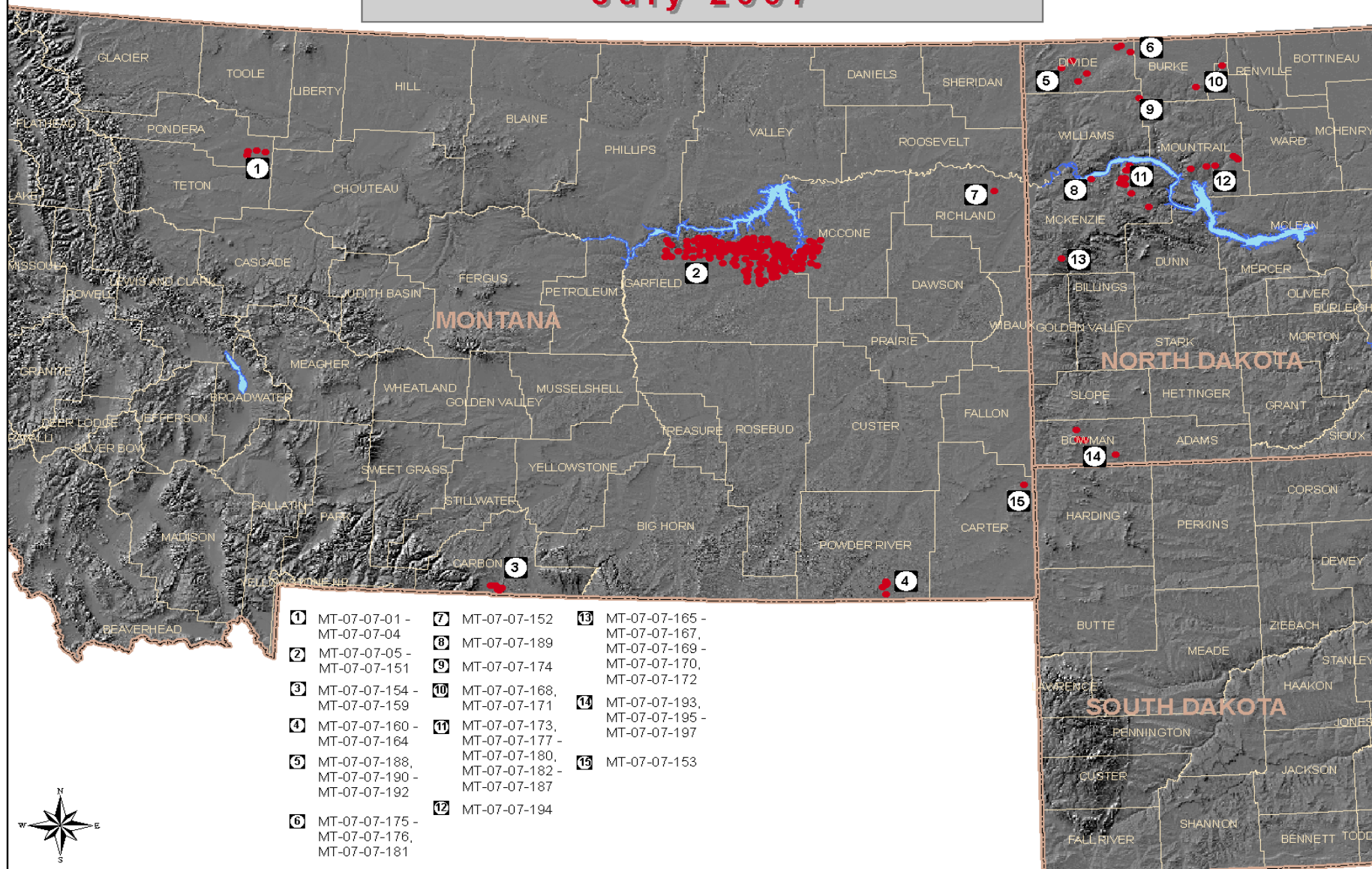
# LEASING ACTIVITY IN MONTANA

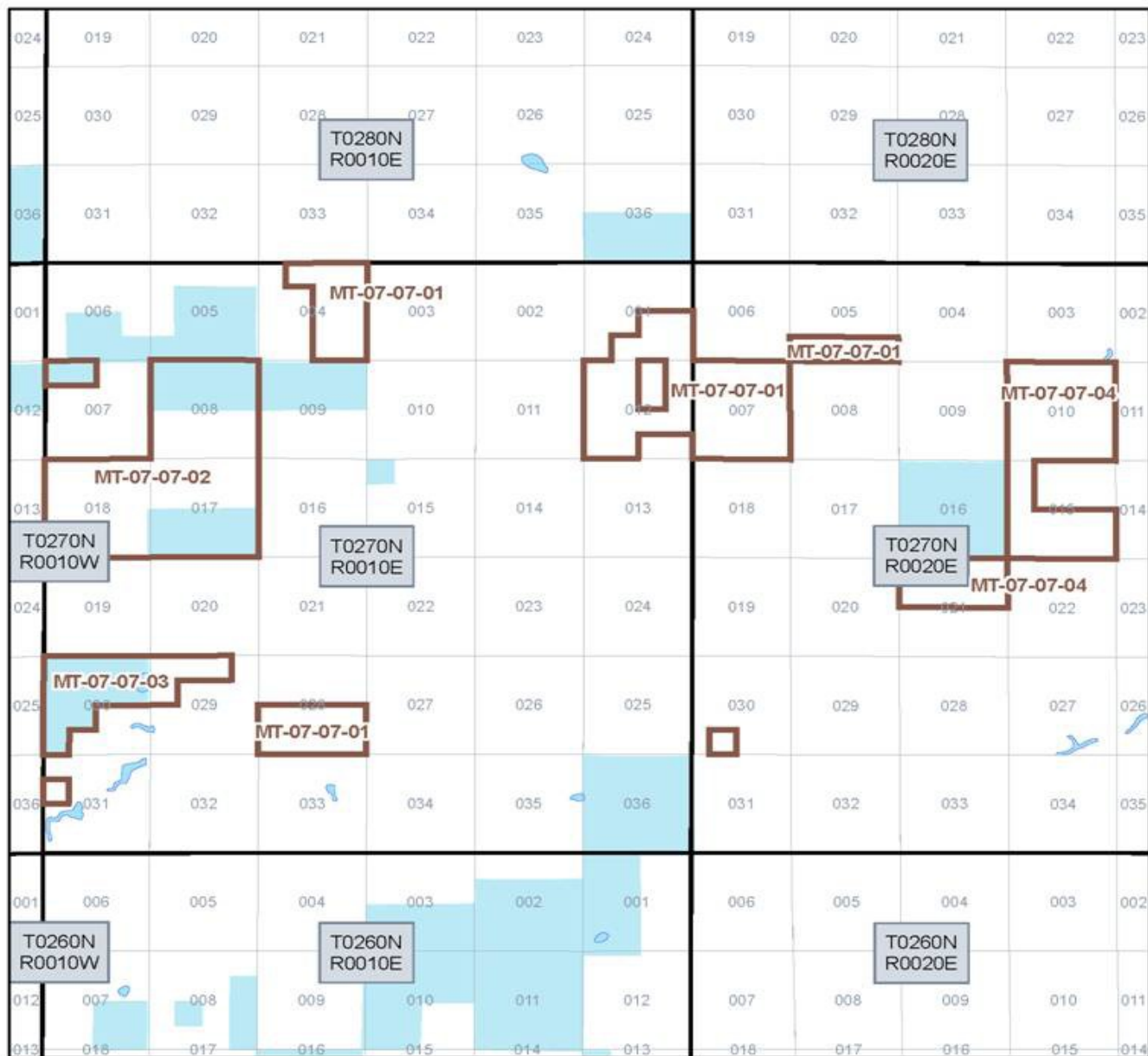
## Fiscal Years 1997 to Present

FISCAL YEAR (October 1 thru September 30)	NEW LEASES ISSUED	NUMBER OF LEASES IN EFFECT DURING FY RECEIVING NEW FIRST PRODUCTION (650) ACTION CODE	LEASES IN EFFECT AT CLOSE OF THE FISCAL YEAR
1997	289	14	5259
1998	419	24	5464
1999	263	8	4878
2000	404	8	4823
2001	333	14	5110
2002	302	16	5456
2003	212	18	5559
2004	190	19	5181
2005	300	13	5342
2006	220	13	5492
2007	159	8	5576



# BLM Oil and Gas Lease Sale July 2007

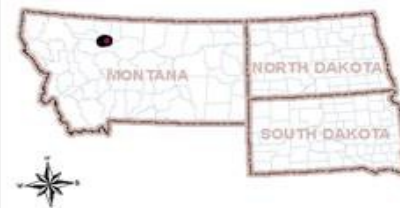




MT-07-07-01  
MT-07-07-02  
MT-07-07-03  
MT-07-07-04

### Legend

- Bankhead-Jones Land Use Lands
- Bureau of Land Management (BLM)
- Bureau of Reclamation
- Indian Reservation (IR)
- Military Res./Corps of Engineers
- National Grasslands
- National Park Service (NPS)
- Other
- Private
- State
- State, County, City Recreation Areas
- US Fish and Wildlife
- USDA Forest Service (USFS)
- Water







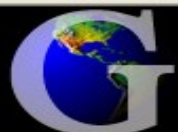
Search



Favorites



Links Geodata



# GeoCommunicator

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GeoCommunicator is the publication site for the Bureau of Land Management's **National Integrated Land System** (NILS) transaction applications (Survey Management, Measurement Management, and Parcel Management). GeoCommunicator provides searching, accessing and dynamic mapping of data for federal land stewardship, land and mineral use records from BLM's LR2000, and land survey information.

[Download PLSS](#) | [O&G Map](#) | [Mining Claims Map](#) | [Minerals Map](#) | [Energy Map](#)

## [Land & Mineral Use Records](#)

Search, locate, and map the BLM's land and mineral use records including: oil & gas, geothermal, solid minerals, agreements, unpatented mining claims, rights-of-way, mineral material disposal, miscellaneous uses, oil & gas lease sales, stipulations, and cases that affect the status of the land. Quick access to BLM's LR2000 serial register and township geographic reports.



[View USFS lands](#) potentially eligible for sale under the "Payments to States-President's FY08 Budget Proposal-National Forest Land Adjustment for Rural Communities Act"

## [Federal Land Stewardship](#)


Search, locate, and map the federal surface management agency for a

## Latest News

**June 13, 2007** - Lots of enhancements!  
Highlight of new features:

- Energy Map Viewer
- Changes to Rights-of-Way
- Subsurface Mineral Estate
- Surface Management Agency layers
- Links to more reports
- Links to Master Title Plats for UT & CA
- Mining Plans & Notices

File Edit View Favorites Tools Help

 Back    Search  Favorites  Geodata  Google.com  GeoCom serverAddress  http://www.geocommunicator.gov/NILS-PARCEL2/map.jsp?MAP=ENERGY

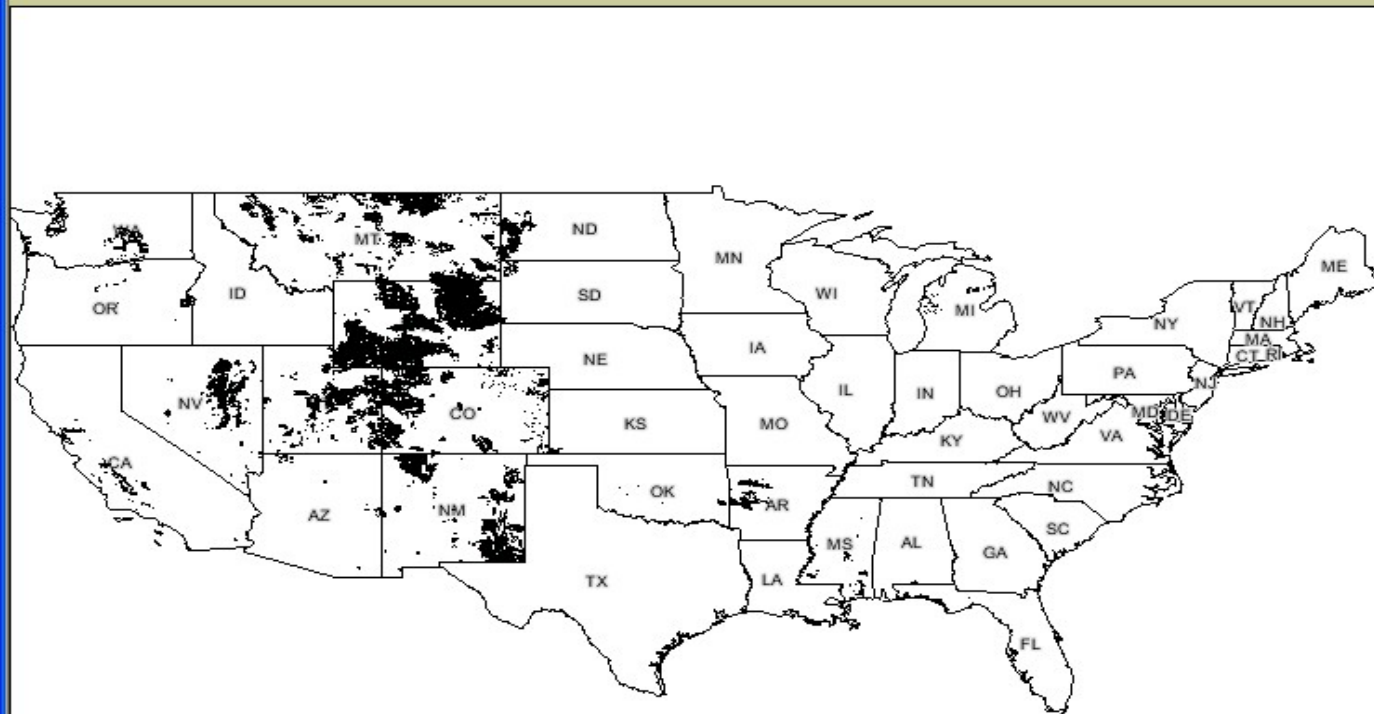
## Land and Mineral Use Records Viewer

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[Latest News](#)[Parcel Map](#)  
[PLSS Map](#)  
[NIFC GeoCoder](#)

Land and Mineral Use Records - Banner Map

**Layers** **Legend** **Quick Start**

- ☒ Selected Features
- ☒ Oil and Gas Leases/Agreements
  - ☐ Agreements - Authorized
  - ☐ Agreements - Authorized Labels
  - ☐ Agreements - Closed
  - ☐ Agreements - Closed Labels
  - ☒ Leases - Authorized
  - ☐ Leases - Authorized Labels
  - ☐ Leases - Closed
  - ☐ Leases - Closed Labels
  - ☐ Lease Sale Parcels
  - ☐ Lease Sale Labels
  - ☐ Stipulations
  - ☐ Stipulation Labels
- ☐ Oil Shale Leases
- ☐ Coal Authorizations
- ☐ Geothermal Leases/Agreements
- ☐ Solar Energy Rights-of-Way
- ☐ Wind Energy Rights-of-Way
- ☐ Rights of Way
- ☐ Cases
- ☒ Reference Themes
- ☒ PLSS



0 600mi

[DISCLAIMER](#)

Data last published on: 6/8/2007

[PRIVACY](#)

Longitude: -82.649329 Latitude: 56.947319

DMS(x,y): -82° 38' 57" , 56° 56' 50"

ScaleFactor: 0.078016

Unknown Zone (Mixed)



QUESTIONS

