

## 4.0 Additional Federal Land Access Issues

Additional statutory and discretionary requirements beyond lease stipulations impact Federal land access for oil and gas development. Many of these impacts were not quantified because GIS data do not exist, or they are issues that are not amenable to quantitative analysis. Many of these requirements can be considered restrictions on drilling because they have effects similar to stipulations on oil and gas development activities.

These issues can directly or indirectly impact Federal land accessibility for oil and gas development. Tables 4-1 through 4-11 present office-specific issues that were recorded from discussions with BLM and USDA-FS staff during field visits. Average APD processing time was calculated for each office using input from the offices supplemented by an analysis of BLM's Automated Fluid Minerals Support System (AFMSS).<sup>1</sup>

### 4.1 Issues Directly Impacting Access

**The National Environmental Policy Act of 1969.** NEPA is the nation's central environmental statute. It requires Federal agencies to consider environmental impacts before an action is taken. The NEPA process is intended to help public officials make better decisions based on an understanding of their environmental consequences.

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<sup>1</sup> These tables include only offices that were visited or specifically contacted during EPCA Phase I and Phase II data collection. Not all offices responded.

NEPA is embedded into the fabric of Federal land management decision-making and has become the most important procedural public land management statute because it requires agencies to comply with its processes in all situations where major actions are contemplated. When an activity or action is proposed on Federal lands, an interdisciplinary review of the environmental effects of the proposal is conducted and made available to citizens and public officials. The review can take one of four forms:

- a categorical exclusion (CX)
- documentation of NEPA adequacy (DNA)
- an environmental assessment (EA)
- an environmental impact statement (EIS).

In its 2003 report to the Council on Environmental Quality, the NEPA Task Force published an assessment of NEPA,<sup>2</sup> stating that "The term 'analysis paralysis' is used to address a broad range of concerns about inefficiencies such as agency specific procedural requirements, project priority setting, project management, and Federal consultation and coordination requirements. Many respondents are concerned that the development of these analyses and documents takes too long and results in documentation that is excessive in light of the significance of the actions evaluated."

The NEPA process impacts oil and gas development in terms of cost and time delays. Typically an EIS or EA is drafted in

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<sup>2</sup> See the website <http://ceq.eh.doe.gov/ntf/report/finalreport.pdf> for the "Modernizing NEPA Implementation" report.

**Table 4-1. Access Issues, Northern Alaska Study Area**

| Jurisdiction                              | Issue or Characteristic Noted by Office |   |   |                |   |  |
|---|---|---|---|----------------|---|--|
|   | Average APD Processing*                 | NEPA Documents  | Endangered Species Act and Species Generally of Concern         | Roadless Areas | Tribal Consultations  |  |
| Fairbanks, AK BLM (Northern Field Office) | No EA: 60 days, with EA: 30 days        | NE NPRA Final Integrated Activity Plan/EIS. NW NPRA Final Integrated Activity Plan/EIS. | Critical habitat not mapped, office takes conservative approach |                | Native coporations (subsistence resources), increased consultation required |  |

\*Calculated based on office interviews and analysis of AFMSS data

**Table 4-2. Access Issues, Paradox/San Juan Study Area (Utah)**

| Jurisdiction       | Issue or Characteristic Noted by Office              |   |  |                |  |  |
|--------------------|--|---|--|----------------|--|--|
|                    | Average APD Processing*                              | NEPA Documents  | Endangered Species Act and Species Generally of Concern                          | Roadless Areas | Tribal Consultations   |  |
| Cedar City, UT BLM |  | Cedar Beaver Garfield Antimony RMP, 1986  | Raptors  |                |  |  |
| Dixie NF           |  | Plan to be completed in July 2006   |  |                |  |  |
| Fishlake NF        |  | Plan to be completed in July 2006   |  |                |  |  |
| Kanab, UT BLM      | 6 to 12 months                                       | Lopez Project, Utah State BLM Statewide Stipulations                            | Raptors, bald eagle, Mexican spotted owl, flycatcher                             |                |  |  |
| Manti La Sal NF    | 1 year   | Land and RMP – Manti-La Sal NF, 1986. New plan to be released in December 2006. | Goshawks, raptors, Mexican spotted owl, sensitive plants                         |                |  |  |
| Moab, UT BLM       | Average 6 months, note deficient APDs from companies | Lopez Project, Utah State BLM Statewide Stipulations, Book Cliffs RMP, 1985     | Mexican spotted owl, raptors, pedio, <i>despainii</i> and <i>winklerii cacti</i> |                |  |  |
| Monticello, UT BLM | 60 days  | Lopez Project, Utah State BLM Statewide Stipulations                            | Mexican spotted owl, raptors   |                | McCraken Extension (50,000 acres) is split estate with Navajo lands (3 or 4 APDs per year); Navajo wants to reclaim mineral rights |  |
| Price, UT BLM      | 8 months   | Lopez Project, Utah State BLM Statewide Stipulations. Price RMP in draft.       | <i>Despainii</i> and <i>winklerii cacti</i> , raptors                            |                |  |  |
| Richfield, UT BLM  | 30 days or less                                      | Lopez Project, Utah State BLM Statewide Stipulations                            |  |                |  |  |
| St. George, UT BLM |  | St. George FO – ROD and RMP, 1999. No site specific NEPA coverage               | Mexican spotted owl, southwestern willow flycatcher                              |                | MOUs with Southern Piute and Hopis   |  |

\*Calculated based on office interviews and analysis of AFMSS data

|  | National Historic Preservation Act | O&G vs Coal and other Mineral Development | Visual Resources | Air Quality                             | Clean Water | Infrastructure Concerns           | Others  |
|--|------------------------------------|---|------------------|---|-------------|-----------------------------------|---|
|  |                                    |   |                  | Modeling required for each point source |             | Lack of infrastructure, ice roads | Coastal Zone Management Act, wetlands, oil spill plans, litigation, all slow down process |

|  | National Historic Preservation Act   | O&G vs Coal and other Mineral Development | Visual Resources  | Air Quality | Clean Water   | Infrastructure Concerns  | Others  |
|--|--|---|---|-------------|---|--|---|
|  | Cultural resource concerns on any area, but "can be mitigated"                         |   | Secondary issue   |             |   |  | Steep slope issues  |
|  |  |   |   |             |   |  |   |
|  |  |   | Issues associated with Bryce and Zion NPs   |             | Water disposal may be a problem in Navajo Sandstone |  |   |
|  |  | Conflict with deep gas vs. coal           | Retention and preservation areas near NPs (e.g., Arches, Canyonlands)   |             |   | Roads used for nonsummer months require 8 inches of gravel   | There exists a potential for land exchange with state such that these areas would not be leased; however, these areas have not been demarcated        |
|  |  |   | Can be an issue in larger field developments. RMP treats VR as an inventory process as opposed to management objective. Gas flaring would be an issue |             |   | Big flat areas-well spacing maximized and at capacity; in order for further field developments an EIS would be required. | Anticipate increased NSO due to wilderness recreation and wildlife concerns. Recreational conflicts vs APDs/geophysical surveys/oil & gas development |
|  | High density of cultural sites, cost issue for industry but does not prohibit activity |   | Similar to Moab office  |             |   |  | It would be advantageous for companies to be educated in NEPA and APD requirements  |
|  |  |   | Last Chance field near Capital Reef NP  |             |   |  |   |
|  |  |   |   |             | In process of assessing Clean Water Act amendment   |  |   |

**Table 4-3. Access Issues, Paradox/San Juan Study Area (New Mexico and Colorado)**

| Jurisdiction                                  | Issue or Characteristic Noted by Office |   |   |                |  |  |
|---|---|---|---|----------------|--|--|
|   | Average APD Processing*                 | NEPA Documents  | Endangered Species Act and Species Generally of Concern                               | Roadless Areas | Tribal Consultations   |  |
| Albuquerque, NM BLM (Rio Puerco Field Office) | 60 days                                 | Rio Puerco RMP, 1992. Updated in 2001   |   |                | 30 days for tribes to comment                                |  |
| Carson NF                                     | 6 months                                | Carson NF Plan, 1986  | Mexican spotted owls, goshawks, bald eagles   |                | Potential issue, esp. Gobernador                             |  |
| Cibola NF                                     |   | Cibola NF Plan, 1985  | Mexican spotted owls, goshawks, bald eagles   |                | Pueblo and Navajo Nation—sacred Mt. Taylor                   |  |
| Durango, CO BLM (San Juan Field Office)       | 3 months                                | San Juan/San Miguel RMP Amendment, October 1991. New plan to be released in 2007          | Sage grouse, flycatcher, ferruginous hawk, bald eagle                                 |                |  |  |
| Farmington, NM BLM                            | 60-180 days                             | Farmington Oil and Gas Leasing Amendment, 1991. Farmington RMP completed 01/2005          | Bald eagle, Nolton's cactus, designated Mexican spotted owl habitat, razorback sucker |                | Split estate with Navajo surface requires 6 months to a year |  |
| Grand Mesa/Uncompahgre/Gunnison NF            | 25 months                               | GMUG - Oil and Gas Leasing File EIS ROD, April 1993                                       | Lynx  | NLA            |  |  |
| Montrose, CO BLM (Uncompahgre Field Office)   | 30 to 60 days                           | San Juan/San Miguel RMP Amendment, October 1991. New plan to be released in December 2006 |   |                |  |  |
| San Juan NF                                   | 6 months                                | New plan to be released in December 2006  | Willow flycatcher, Mexican spotted owl, Canada lynx                                   |                |  |  |
| Santa Fe NF                                   |   | 1987 Forest Plan, amended 1996  | Mexican spotted owls, bald eagles   |                | High density of cultural resources                           |  |

\*Calculated based on office interviews and analysis of AFMSS data

|  | National Historic Preservation Act                                  | O&G vs Coal and other Mineral Development   | Visual Resources                                   | Air Quality                             | Clean Water  | Infrastructure Concerns  | Others  |
|--|---|---|--|---|--|--|---|
|  | Lindrieth Area-split estate with high density of cultural resources |   |  |   | Impaired watershed (Rio Puerco) not an issue yet but could develop; sediment loading issue               |  |   |
|  | Navajo—high density of cultural resources                           |   |  | Centralized compression                 | Sediment loading, produced water   | Road density   | Differing motivation (Fed. vs. state) for approval of well spacing (revenue issue for NM); compliance issues influence public perception; need for cumulative effects analyses (roads, wells) |
|  | High density archeological sites                                    |   |  | Compressors                             | Sediment loading   |  | Law suit in Zuni River watershed  |
|  | Archeological sites, esp. Canyons of the Ancients (existing leases) |   |  |   | EIS in progress; moderate but increasing concern with surface water depletion and its effects on species | Conflicts due to increased infrastructure (public use vs. industry), esp. near Durango |   |
|  | High density of cultural resources                                  | Conflict with underground mines and CBM (oil & gas rights are senior), BLM continues to issue APDs but only in center of long wall panels |  | Additional compression (public concern) | Endangered fish, consultation with Corp of Engineers   | Centralized compression (noise concerns)   |   |
|  |   |   |  |   |  |  |   |
|  |   |   |  |   | Concerned with surface water depletion   |  |   |
|  | High density of cultural resources                                  |   |  | Issues related to proximity to Durango  | Residential concern about methane contamination  | Public concerns about O&G development in general                                       | Do not have forest-wide stipulations  |
|  | High density of resources impacts road building                     |   | VR concerns make siting more difficult, esp. roads |   | Sediment loading from road construction  | Aging infrastructure   | Reclamation compliance and inspection   |

**Table 4-4. Access Issues, Montana Thrust Belt Study Area**

| Jurisdiction                                 | Issue or Characteristic Noted by Office |   |  |   |   |  |
|--|---|---|--|---|---|--|
|  | Average APD Processing*                 | NEPA Documents  | Endangered Species Act and Species Generally of Concern  | Roadless Areas                                    | Tribal Consultations  |  |
| Beaverhead-Deerlodge NF                      |   | 1996 Beaverhead Oil and Gas EIS, 1987 FP under revision (due late 2006)   | Lynx, sage grouse  |   | Nez Pierce Trail  |  |
| Butte and Lewistown, MT BLM                  |   | 1984 Headwaters RMP (revision to be completed by end of 2006), 1981 Butte District Oil & Gas environmental assessment   | Grizzly bears, grey wolf, Canada lynx, reptiles, plants, raptors, fish (spawning streams, trout) | Lease sale protest decision, 1989 impacts leasing | Old North trail (historical indian migration route but with no distinct area defined)                           |  |
| Dillon, MT BLM                               |   | 1979 MFP, Dillon RMP awaiting ROD signature   | Cutthroat trout, sage grouse, lynx, wolf reintroduction, bald eagles                             |   | Spiritual sites   |  |
| Gallatin NF                                  |   | 1987 Forest Plan scheduled for 2009 revision  | Lynx   |   |   |  |
| Helena NF                                    | 1 year                                  | Helena NF Plan and ROD, 1986  | Lynx, bear   |   | "Sense of Place", religious sites, historical sites; tribes getting more active in Dry Range and Big Belt areas |  |
| Kootenai, Bitterroot, Flathead, and Lolo NFs |   | Kootenai-FP revision to be completed winter 2006/2007, Bitterroot-1987 FP, revision to be completed 10/2006, Flathead-FP revision to be completed 10/2006, Lolo-1987 FP, revision to be completed 10/2006 | Bull trout, grizzly bear, lynx, wolf reintroduction  |   | Spiritual sites   |  |
| Lewis and Clark NF (east)                    |   | 1996 FP, 1997 Oil and Gas Leasing Decision  | Lynx   | NSO   |   |  |
| Lewis and Clark NF (west)                    |   | 1996 FP, 1997 Oil and Gas Leasing Decision  | Lynx   | NSO   | Leases suspended due to tribal consultation   |  |
| Missoula, MT BLM                             |   | Garnett RMP, 1986   | Lynx, bull trout, grizzly bear habitat, wolf reintroduction, bald eagle, cutthroat trout         |   |   |  |

\*Calculated based on office interviews and analysis of AFMSS data

|  | National Historic Preservation Act   | O&G vs Coal and other Mineral Development | Visual Resources                           | Air Quality  | Clean Water  | Infrastructure Concerns   | Others  |
|--|--|---|--|--|--|---|---|
|  | Lewis & Clarke Trail, Continental Divide Scenic Trail  |   | Concerns near west side of Big Hole Valley |  | Sediment loading in streams  | Potential concerns if development occurs in Big Hole  |   |
|  | "Sense of Place" (areas of spiritual interest to native tribes)  |   |  | Sour gas production  |  | Sour gas (only one sweetening plant), individual developments would require sweetening plants   | Litigation appeals; recreation vs. wild land, infrastructure vs. vacation homes (Butte)   |
|  | Trails   |   | Concerns near Big Hole Battlefield         |  | Sediment loading, esp. near steep slope areas  |   | Private access on large ranches to public lands   |
|  |  |   |  |  |  |   | Gallatin community vehemently against development   |
|  | High density of cultural resources: prehistoric and historic, modern cultural resources (homesteads, mining, etc.) |   |  |  | Cumulative impacts for sediment loading in streams (sensitive fish, total solids in streams) |   | Burned areas that will need stabilization for 3 to 6 years, such that potential for high levels of restriction; geographic constraints on concurrent activity |
|  | Trails (Bitterroot)  |   |  |  | Sediment loading, esp. near steep slope areas  | Flathead-FP Amendment for Grizzly Bear Habitat: 1 mile of road per square mile (limits new road construction, reclaims existing roads); road timing restrictions on roads (open only in summer) | Lolo and Flathead-900,000 acres of lease in suspension, FP 20 years out of date   |
|  |  |   |  |  |  |   | Plan calls for 4 wells per year   |
|  | Traditional cultural district (10,000 acres) that impacts current lease suspension                                 |   |  |  |  | H2S removal and facility location   |   |
|  | Historical mining sites and historical trails  |   |  | Cumulative impacts, especially during winter; competition for discharge capacity | Sediment loading in streams  | Roads and pipelines would be problematic because of local opposition and steep slopes   |   |

**Table 4-5. Access Issues, Powder River Basin Study Area**

| Jurisdiction                                      | Issue or Characteristic Noted by Office  |   |  |                |   |  |
|---|--|---|--|----------------|---|--|
|   | Average APD Processing*  | NEPA Documents  | Endangered Species Act and Species Generally of Concern  | Roadless Areas | Tribal Consultations  |  |
| Belle Fourche, SD BLM (South Dakota Field Office) |  | 1986 South Dakota RMP, 1994 Miles City Oil and Gas Amendment, Miles City RMP draft is to be released in 2007  | Raptors, grouse  |                |   |  |
| Black Hills NF                                    |  | Black Hills NF Land and RMP, 1991   |  |                |   |  |
| Buffalo, WY BLM                                   | Conventional wells—35 days/APD, CBNG (32 well permits)—60 days/APD, APDs are sometimes information deficient | Buffalo RMP 2005  | Big game, sage grouse, sharp-tailed grouse   |                | Developing routine consultation program as part of EIS, TCs can create problems in lag times common near drainages        |  |
| Casper, WY BLM                                    | 60 days/APD  | Casper RMP is currently being updated and is scheduled to be completed by 2008  | Mountain plover (issue with seismic), bald eagle, golden eagle, greater sage grouse and black-tailed prairie dog (currently sensitive but potential of listing would make it an issue) |                | Problematic with seismic surveying  |  |
| Custer NF   |  | Custer LRMP 1987, Sioux Ranger District O&G EIS 2005.   |  |                | High density archeological sites, tribal sacred sites   |  |
| Miles City, MT BLM                                | 3 months/APD   | Powder River Amendments to the Powder River RMP was completed in 01/2005. Powder River RMP will be amended by the Miles City RMP, which draft is to be released in 2007 | Bald eagle, mountain plover, black footed ferret (potential), prairie dog, sage grouse   |                | Off-reservation cultural values and historical issues; Northern Cheyenne more conservative; Crow more open to development |  |

|  | National Historic Preservation Act   | O&G vs Coal and other Mineral Development  | Visual Resources   | Air Quality   | Clean Water   | Infrastructure Concerns  | Others  |
|--|--|--|--|---|---|--|---|
|  | High density areas in northern edge of South Dakota portion of study area                  |  |  |   |   | Most wells drilled 1980 or before, such that continual break downs of infrastructure has closed down wells/ production   |   |
|  |  |  |  |   |   |  |   |
|  | Often Inadequate initial site investigation by companies                                   | 16 operating coal mines, but BLM addressing the issue adequately   | Bozeman Trail-view shed preservation consideration   | No. of vehicles results in increased road dust  | In western and northern portions, sodium absorption ratios are a concern for produced water, coal aquifer being affected by drawdown.   | Power requirement for submersible pumps will require small power plants that would result in surface disturbance, power line density increases and compressor noise, esp. around Gillette, increased compression | Split estate underlies over half of resources managed in the basin, requiring negotiations with surface owners, increased power lines result in increased raptor predation of sage grouse, prairie dogs, and mountain plover and raptor electrocution |
|  | Similar to Buffalo, religious concerns   | Insitu uranium development vs. shallow coal-flooding uranium sediments but taking water out of coal will result in need to monitor "hot" water production. DOE to take over remediation of mile tailings 2005-2008 | Trails often result in conflicts with linear facilities that bisect (pipelines, roads, etc.), esp. for the Mormon Trail  | No. of vehicles results in increased road dust, increased amount of compression   |   | Right of way corridors at capacity   | Anticipate NSO stipulations in the future due to erodable soils   |
|  |  |  |  |   | CBNG water discharge potential issue  |  |   |
|  | Current approach to cultural resources is considered inadequate, "block surveys" preferred | Active coal mines near WY border (potential issue)   | Remaining free stands, view sheds for Tongue, Rosebud and Rosebud rivers; major roads and Tongue River (potential issue) | Cumulative impacts from activities in WY as well as MT leading to limited discharge capacity; Northern Cheyenne is Class I air shed | CBNG ground and surface water impacts (cumulative) to be addressed in new EIS; WY uses 80% of allowable discharge capacity meaning only 20% left for MT; to the NW water quality decreases; water quality effects on ranching |  | Socioeconomic-increased activity in remote areas puts ranching way of life at odds with O&G development, esp. with regard to water issues, visual intrusion, wildlife issues (migratory birds and raptor electrocution)                               |

**Table 4-5. Access Issues, Powder River Basin Study Area (concluded)**

| Jurisdiction                    | Issue or Characteristic Noted by Office |   |  |                |                      |  |
|---------------------------------|---|---|--|----------------|----------------------|--|
|                                 | Average APD Processing*                 | NEPA Documents                                  | Endangered Species Act and Species Generally of Concern          | Roadless Areas | Tribal Consultations |  |
| Newcastle, WY<br>BLM            | 30-45 days                              | Newcastle RMP 2000                              |  |                |                      |  |
| Oglala NG,<br>Buffalo Gap<br>NG |   | Nebraska NF Revised Land and RMP, 2002          | Habitat preservation is a concern                                |                |                      |  |
| Thunder Basin<br>NG             | 12 months/<br>APD                       | Thunder Basin Nat. Grassland Land and RMP, 2002 | Black footed ferret reintroduction, sage grouse, mountain plover |                |                      |  |

\*Calculated based on office interviews and analysis of AFMSS data

**Table 4-6. Access Issues, Wyoming Thrust Belt Study Area**

| Jurisdiction  | Issue or Characteristic Noted by Office |   |  |                |  |  |
|---|---|---|--|----------------|--|--|
|   | Average APD Processing*                 | NEPA Documents                                      | Endangered Species Act and Species Generally of Concern  | Roadless Areas | Tribal Consultations   |  |
| Bridger-Teton<br>NF                                     | 180 days                                | Bridger-Teton NF Land and RMP, 1990                 | Pygmy rabbit, white tailed prairie dog, lynx             |                |  |  |
| Caribou-<br>Targhee NF                                  | 120 days                                | Targhee NF Revised Forest Plan, 2000                | Lynx, cutthroat trout, grizzly bear, wolves, sage grouse | NSO            | Ancestral area, Ft. Hill Reservation, ancestral rights to land and resources |  |
| Idaho Falls, ID<br>BLM (Upper<br>Snake Field<br>Office) | 120 days                                | Pocatello & Medicine Lodge Resource Areas RMP, 1988 | Lynx, cutthroat trout, grizzly bear, wolves, sage grouse |                |  |  |

|  | National Historic Preservation Act  | O&G vs Coal and other Mineral Development | Visual Resources                               | Air Quality  | Clean Water | Infrastructure Concerns   | Others                               |
|--|---|---|--|--|-------------|---|--------------------------------------|
|  | High density of cultural resources (potential issue); dinosaur fossils in Niobrara County                               |   |  | Receptor area relative to coal development, which may limit further development O&G or otherwise |             |   | Much split estate, litigation common |
|  | Could become an issue if development were to increase   |   | Open grasslands often require view mitigations |  |             |   |                                      |
|  | Moderate to high vertebrate/paleo resources ("block surveys" used to assess CBM), such that all of Thunder Basin is CSU | Substantial CBM/coal mining conflicts     |  | Increased road dust; increased amount of compression   |             | Aging infrastructure. Road Analysis Process (RAP), above/below ground power lines is safety issue near coal mines |                                      |

|  | National Historic Preservation Act  | O&G vs Coal and other Mineral Development | Visual Resources | Air Quality   | Clean Water | Infrastructure Concerns | Others |
|--|---|---|------------------|---|-------------|-------------------------|--------|
|  | Congressionally designated trails and cutoffs, concerns protecting viewshed (measured in miles) |   |                  | Limits due to air quality in Class I areas, currently close to thresholds |             |                         |        |
|  |   |   |                  |   |             |                         |        |
|  |   |   |                  |   |             |                         |        |

**Table 4-6. Access Issues, Wyoming Thrust Belt Study Area (concluded)**

| Jurisdiction      | Issue or Characteristic Noted by Office |  |  |                |   |  |
|-------------------|---|--|--|----------------|---|--|
|                   | Average APD Processing*                 | NEPA Documents   | Endangered Species Act and Species Generally of Concern  | Roadless Areas | Tribal Consultations  |  |
| Kemmerer, WY BLM  | 3 months                                | Kemmerer RMP/ROD, 1986   | Pygmy rabbit, white tailed prairie dog, lynx   |                | Tribes hesitant to state all concerns. Regional issues beyond site specific, are important. |  |
| Pinedale, WY BLM  | 3 months                                | Pinedale RMP, amended 2000 for oil & gas. New plan to be released 2007                 |  |                |   |  |
| Pocatello, ID BLM | 90 days                                 | Pocatello & Medicine Lodge Resource Areas RMP, 1988                                    | Lynx, cutthroat trout, grizzly bear, wolves, sage grouse, bald eagles, snails, Ute Ladies' Tress |                | Ancestral area, Ft. Hill Reservation, ancestral rights to land and resources                |  |
| Salt Lake, UT BLM | 6 months                                | Lopez Project, Utah State BLM Statewide Stipulations, Isotract MFP, Randolph MFP, 1985 | Sage grouse, lynx, pygmy rabbit, raptors   |                |   |  |
| Wasatch-Cache NF  | 1 year                                  | Wasatch-Cache NF, Revised Forest Plan, 2003  | Lynx   |                |   |  |

\*Calculated based on office interviews and analysis of AFMSS data

|  | <b>National Historic Preservation Act</b>   | <b>O&amp;G vs Coal and other Mineral Development</b> | <b>Visual Resources</b> | <b>Air Quality</b>   | <b>Clean Water</b>   | <b>Infrastructure Concerns</b> | <b>Others</b>   |
|--|---|--|-------------------------|--|--|--------------------------------|---|
|  | Congressionally designated trails and cutoffs, concerns protecting viewshed (measured in miles) |  |                         | An issue in SW Wyoming, compression is creating air quality problems | Change in size requirements from 5 acres to 1 acre for storm water discharge |                                | Potential conflict with wind energy (cumulative effects and infrastructure conflicts) |
|  |   |  |                         |  |  |                                | No Federal land in Wyoming Thrust Belt study area                                     |
|  | Lack of cultural resource inventory   |  |                         |  | Sediment and nutrient loading in streams                                     |                                |   |
|  |   |  |                         |  |  |                                |   |
|  |   |  |                         |  |  |                                |   |

**Table 4-7. Access Issues, Greater Green River Basin Study Area**

| Jurisdiction                              | Issue or Characteristic Noted by Office |  |   |  |   |  |
|---|---|--|---|--|---|--|
|   | Average APD Processing*                 | NEPA Documents   | Endangered Species Act and Species Generally of Concern   | Roadless Areas   | Tribal Consultations  |  |
| Craig, CO BLM (Little Snake Field Office) | 45 days                                 | Little Snake RMP Oil and Gas Revision 1991, new plan release in 2008     | White tailed prairie dog, pygmy rabbit, sage grouse are all candidate species with potential to severely impact O&G development |  |   |  |
| Kremmling, CO BLM                         | 28 days                                 | Kremmling RMP, 1984. Revision planned for 2009                           | Sage Grouse   |  | Tribes don't respond, O&G companies don't understand mandatory 30 day waiting period  |  |
| Medicine Bow-Routt NF                     | 1 year                                  | Medicine Bow LRMP, 2003. Routt LRMP, 1998. Thunder Basin LRMP, 2002.     |   | Misnomer which causes conflicts with environmentalists |   |  |
| Rawlins, WY BLM                           | 6 months                                | Lease Stipulations, Rawlins BLM, 2001. New plan to be released late 2006 |   |  | Affects timeliness  |  |
| Rock Springs, WY BLM                      | 90 days                                 | Green River RMP, 1997  |   |  | Contact and scheduling of tribal representatives often precludes 30 day permitting goal. Need to define operator/ agency responsibility for tribal representative compensation. |  |

\*Calculated based on office interviews and analysis of AFMSS data

|  | National Historic Preservation Act   | O&G vs Coal and other Mineral Development | Visual Resources  | Air Quality   | Clean Water                  | Infrastructure Concerns   | Others |
|--|--|---|---|---|------------------------------|---|--------|
|  |  |   |   |   |                              | Largely a "wildcat" region, there is no infrastructure to transport O&G out of area |        |
|  | O&G companies don't return complete survey with APD  |   |   |   | Erosion and siltation issues | No pipelines, railway pulled out  |        |
|  |  |   |   | Coal mines, O&G transport, trucks, contribute to air quality issues |                              |   |        |
|  | Trails are registered with NHPA, defined by rutting (which can be difficult to identify)   |   | Looming issue, Fort Laramie, Pony Express, Oregon Trail |   |                              |   |        |
|  | 30 day comment period for SHPO precludes meeting 30 day permitting goal. Need definitive guidance on visual impact distances and alternative mitigation regarding Historic Trails. |   |   |   |                              |   |        |

**Table 4-8. Access Issues, Denver Basin Study Area**

| Jurisdiction                                  | Issue or Characteristic Noted by Office |  |   |                |                        |  |
|---|---|--|---|----------------|------------------------|--|
|   | Average APD Processing*                 | NEPA Documents   | Endangered Species Act and Species Generally of Concern | Roadless Areas | Tribal Consultations   |  |
| Arapaho-Roosevelt NF                          | 5 months                                | Arapaho-Roosevelt NFs, Pawnee NG Revision of the Land and Resource Management Plan, 1997             |   |                |                        |  |
| Black Hills NF                                | 1.5 years                               | Black Hills NF Plan of Land and RMP, 1991  |   |                | Required for all lands |  |
| Cañon City, CO BLM (Royal Gorge Field Office) | 6 months                                | Royal Gorge RMP and NE Royal Gorge RMP, 1991   |   |                |                        |  |
| Casper, WY BLM                                | 50 days                                 | Casper RMP, 2001. Wyoming BLM Mitigation Guidelines for Surface-disturbing and Disruptive Activities |   |                |                        |  |
| Nebraska NF                                   | 60 days                                 | Nebraska NF Revised Land and RMP FEIS/ROD, 2002  |   |                |                        |  |
| Newcastle, WY BLM                             | 30-45 days                              | Newcastle FO, ROD & Approved RMP, 2000   |   |                |                        |  |
| Pike-San Isabel NF                            |   | Pike & San Isabel NF, Cimarron & Comanche NG RMP   |   |                |                        |  |
| Rawlins, WY BLM                               | 6 months                                | Lease Stipulations, Rawlins BLM, 2001. New plan to be released late 2006                             |   |                | Affects timeliness     |  |

\*Calculated based on office interviews and analysis of AFMSS data

|  | National Historic Preservation Act   | O&G vs Coal and other Mineral Development | Visual Resources  | Air Quality  | Clean Water            | Infrastructure Concerns  | Others |
|--|--|---|---|--|------------------------|--|--------|
|  |  |   |   |  |                        |  |        |
|  | Could cause activities to be limited   |   | Could require mitigation or surface limitations         | Potential issue near Rapid City                          | Riparian areas         | Inadequate road system   |        |
|  |  |   |   |  |                        |  |        |
|  | Trails are registered with NHPA, defined by rutting (which can be difficult to identify) |   | Looming issue, Fort Laramie, Pony Express, Oregon Trail |  |                        | Surface owner/split estate surface access for roads and pipelines, urbanization conflict |        |
|  | Often locations must be modified   |   |   |  | Easily erodable soils  | Easily erodable soils  |        |
|  | Trails are registered with NHPA, defined by rutting (which can be difficult to identify) |   | Looming issue, Fort Laramie, Pony Express, Oregon Trail |  |                        | Surface owner/split estate surface access for roads and pipelines, urbanization conflict |        |
|  |  |   | Recreation view sheds                                   | Potential problem, incremental loading from O&G activity | Sedimentation concerns | Urban interface concerns, public concern about drilling, trucks                          |        |
|  | Trails are registered with NHPA, defined by rutting (which can be difficult to identify) |   | Looming issue, Fort Laramie, Pony Express, Oregon Trail |  |                        |  |        |

**Table 4-9. Access Issues, Florida Peninsula Study Area**

| Jurisdiction                         | Issue or Characteristic Noted by Office |   |  |                |                      |  |
|--------------------------------------|---|---|--|----------------|----------------------|--|
|                                      | Average APD Processing*                 | NEPA Documents                                      | Endangered Species Act and Species Generally of Concern  | Roadless Areas | Tribal Consultations |  |
| Big Cypress NP                       |   | Big Cypress General Management Plan/Final EIS, 1991 | Florida panther, west Indian manatee, cape sable seaside sparrow, bald eagle, wood stork, red-cockaded woodpecker, snail kite, arctic peregrine falcon, American alligator, eastern indigo snake, Everglades mink, mangrove fox squirrel, Florida black bear, bachman's sparrow, swainson's hawk, reddish egret, swallow-tailed kite, southeastern kestrel, migrant loggerhead shrike, mangrove clapper rail |                |                      |  |
| Fish and Wildlife Service in Florida |   |   |  |                |                      |  |
| Jackson, MS BLM (Florida Peninsula)  |   | Florida RMP/ROD, 1995                               | Red-cockaded woodpecker  |                |                      |  |

\*Calculated based on office interviews and analysis of AFMSS data

|  | National Historic Preservation Act | O&G vs Coal and other Mineral Development | Visual Resources | Air Quality | Clean Water | Infrastructure Concerns | Others             |
|--|------------------------------------|---|------------------|-------------|-------------|-------------------------|--------------------|
|  |                                    |   |                  |             |             |                         | Office not visited |
|  |                                    |   |                  |             |             |                         | Office not visited |
|  |                                    |   |                  |             |             |                         |                    |

**Table 4-10. Access Issues, Black Warrior Basin Study Area**

| Jurisdiction                          | Issue or Characteristic Noted by Office |   |   |                |                      |  |
|---------------------------------------|---|---|---|----------------|----------------------|--|
|                                       | Average APD Processing*                 | NEPA Documents  | Endangered Species Act and Species Generally of Concern | Roadless Areas | Tribal Consultations |  |
| National Forests in Alabama           | 6 months                                | Alabama NFs – Revised Land and RMP, 2004. APD requires project-level NEPA of 3-6 months                   | Gopher tortoise, red cockaded woodpecker                |                |                      |  |
| Jackson, MS BLM (Black Warrior Basin) | 5 months                                | Assorted Leases   | Red-cockaded woodpecker                                 |                |                      |  |
| National Forests in Mississippi       | 2 months                                | Mississippi EA report – O&G leasing on the NF's, 1976. Done at APD stage. New plan to be released in 2007 |   |                |                      |  |

\*Calculated based on office interviews and analysis of AFMSS data

|  | National Historic Preservation Act | O&G vs Coal and other Mineral Development         | Visual Resources | Air Quality | Clean Water | Infrastructure Concerns | Others                                    |
|--|------------------------------------|---|------------------|-------------|-------------|-------------------------|---|
|  |                                    |   |                  |             |             |                         |   |
|  |                                    | Conflict between O&G and coal (state vs. Federal) |                  |             |             |                         | Hunting vs. resource conflicts in Alabama |
|  |                                    |   |                  |             |             |                         |   |

**Table 4-11. Access Issues, Appalachian Basin Study Area**

| Jurisdiction                        | Issue or Characteristic Noted by Office               |   |   |                |  |  |
|-------------------------------------|---|---|---|----------------|--|--|
|                                     | Average APD Processing*                               | NEPA Documents  | Endangered Species Act and Species Generally of Concern                               | Roadless Areas | Tribal Consultations   |  |
| Allegheny NF                        | 1 year  | Allegheny NF Land and RMP, 1986. New plan to be released early 2007               | Bald eagle, Canada lynx, Indiana bat  |                | Need for consultation  |  |
| Daniel Boone NF                     | 8-9 months (90 days for an APD on split estate lands) | Daniel Boone NF Revised Land and RMP, 2004  | Black sided dace, mussels (several varieties), Indiana bat, primarily aquatic species |                | Some consultation on historic Cherokee lands   |  |
| Finger Lakes NF                     |   | Finger Lakes NF O&G Leasing ROD 2001. New plan to be released 2006                | Bald eagle, Canada lynx, Indiana bat  |                |  |  |
| George Washington NF                | 1 year  | George Washington NF – Final revised Land and RMP, 1993                           | Indiana bat, aquatic species  | CSU            |  |  |
| Jackson, MS BLM (Appalachian Basin) |   | Assorted Leases   | Red-cockaded woodpecker   |                |  |  |
| Jefferson NF                        | 1 year  | Jefferson NF – Revised Land and RMP, 2004   | Indiana bat, aquatic species  |                |  |  |
| Milwaukee, WI BLM                   | 5 months for COE and Federal minerals (split estate)  | No RMPs to cover non-FS lands, develop NEPA on project-by-project basis           | Indiana bat, running buffalo clover, bald eagle                                       |                | Consultations done on ceded territories at the APD stage, often too late (consultations primarily needed in PA and NY) |  |
| Monongahela NF                      | 2 months  | Monongahela NF and Amendments Land and RMP, 1986. New plan to be released in 2006 | Bald eagle, Canada lynx, Indiana bat  |                |  |  |
| Wayne NF                            | 1 year  | Wayne NF Land and RMP, 2006   | Bald eagle, Canada lynx, Indiana bat  |                |  |  |

\*Calculated based on office interviews and analysis of AFMSS data

|  | National Historic Preservation Act   | O&G vs Coal and other Mineral Development | Visual Resources | Air Quality  | Clean Water   | Infrastructure Concerns                                      | Others  |
|--|--|---|------------------|--|---|--|---|
|  |  |   |                  |  |   |  |   |
|  |  |   |                  | Becoming an issue, coal plants, O&G activity near cities | State-listed impaired streams, sedimentation concerns |  |   |
|  |  |   |                  |  |   |  |   |
|  |  |   |                  |  |   | Forest benefits from energy infrastructure, good maintenance |   |
|  |  |   |                  |  |   |  |   |
|  |  |   |                  |  |   | Forest benefits from energy infrastructure, good maintenance |   |
|  | Need agreements with state historical presentation offices (SHPOs), need state protocols, opportunity for streamlining | Minor in PA                               |                  |  |   |  | COE & NY state cooperation is limited, Fed. leases in PA are being drained losing \$50 million/year royalty revenue, for most minerals Fed. have < 100% ownership (and often far less), BLM stipulations are developed on an ad hoc basis |
|  |  |   |                  |  |   |  |   |
|  |  |   |                  |  |   |  |   |

consultation with the cooperating agencies, presented for public comment, and reviewed by multiple agencies. A simple EIS can take 24 to 36 months to complete, while those with more complex issues may require three to six years to complete. The land use planning process as a whole takes well in excess of 36 months, particularly if there is oil and gas involved. NEPA documents analyze alternatives to the proposed action and must include a “no action” alternative. Impacts are classified as direct, indirect, and cumulative, and include the evaluation of economic impacts to counties and states to be considered, as well as impacts on resources.

When considering oil and gas leasing, the BLM has identified the need to obtain additional data on such issues as air quality and clean water as a part of the cumulative impact analysis required by NEPA and land use planning processes. This has been cited as an overarching issue that affects oil and gas lease parcel nominations. This lack of data can result in leasing delays when existing documents are deemed inadequate. The net result is that potential applicants are often aware of the problem and make decisions not to develop in areas that will be or could be held up by the NEPA process.

With respect to the NEPA process itself, concern was expressed by some government officials that individual documents provide “piecemeal” information and that better environmental decisions could be made based on larger scale studies that look at the “bigger picture.” For example, wildlife habitat fragmentation is better characterized when it is examined in the context of larger rather than smaller areas.

Delays can increase costs for oil and gas operations because, rather than waiting for

the Federal agency to complete the work, operators frequently pay a third-party contractor to perform the necessary work.

Based on the NPC 2003 natural gas study, to conduct wildlife, cultural, and other surveys related to Federal oil and gas permitting costs between \$21,000 and \$330,000 and causes a delay of 3 to 26 months per exploration well. Per-well survey costs and delays for development wells range from \$18,000 to \$21,000 and 2 to 32 months respectively.

Section 366 of EPOA 2005 sets a deadline for the consideration of applications for permits. The permit must be issued within 30 days (if NEPA and other legal requirements have been met), or defer the decision and provide to the applicant a notice.

**The Endangered Species Act of 1973.** The ESA requires Federal agencies to conserve listed species. Under the ESA, species are treated as either listed, proposed, or candidate species. In BLM and USDA-FS jurisdictions, listed and proposed species are treated similarly. Candidate species are generally handled in a discretionary manner. All BLM administrative offices treat sensitive species as defined by BLM and state governments the same as endangered species.

Federal agencies are responsible for managing wildlife habitat, while state governments manage the wildlife itself. In many areas, some habitat has not yet been mapped. This can become an added delay for oil and gas development, if habitat information is required before leasing and permitting can proceed. Habitat for candidate species has been generally withheld from oil and gas leasing by Federal

agencies during a consideration period of up to 2½ years.

**Inventoried Roadless Areas.** A total of 8.4 million acres of National Forest Inventoried Roadless Areas (IRAs) exists within the boundaries of the Phase II study areas. Forest Service representatives recognize the complexity surrounding the issue of IRAs. In July 2004, the Forest Service published a proposed rule to revise the Roadless Area Conservation Rule published in January 2001, which had been struck down in July 2003 by the Federal District Court for the District of Wyoming.

The final roadless rule was published in May 2005. The rule allows governors to petition the Secretary of Agriculture to develop regulations to manage roadless areas in order to meet specific needs within each state. USDA-FS will accept state petitions from governors for 18 months after the effective date of the final rule. During the state-petitioning process, the Forest Service will continue to maintain interim measures to conserve inventoried roadless areas.

In spite of the controversy surrounding the issue, leasing is occurring in some roadless areas. Leases in various forests within IRAs are issued with the caveat to industry that the disposition of roadless areas is unresolved and that the areas under lease may have to remain roadless.

**Visual Impacts.** Concern over visual impacts is affecting oil and gas development in some areas. For example, field developments can be delayed until impacts and other issues are assessed. Visual impacts were raised as a potential issue by many BLM and USDA-FS offices.

**Suburban Encroachment.** Opposition to oil and gas activities is increasing as residential construction spreads into previously undeveloped areas. This has not been a significant issue until recently and has not generally been incorporated into oil and gas planning activities. NSO stipulations to maintain open space near housing developments are being considered by some offices.

**Seasonal Restrictions in Alaska.** The primary constraint to access in the NPRA is the restriction that limits exploratory drilling activities to the winter season, which lasts approximately five months. During that time, ice roads need to be built, a task that can take one or two months and may be limited to 25-30 miles. Coupled with timing limitations for threatened and endangered species, the cumulative effects of these limitations make drilling operations difficult and significantly impact project economics.

## 4.2 Issues Indirectly Impacting Access

**Clean Water.** In the Uinta-Piceance Basin, the issue of clean water has been raised in the context of the need for examining entire watersheds. It is increasingly recognized that an entire watershed (rather than administrative jurisdictions) must be examined in instances where activity within one jurisdiction may affect another downstream. States and counties increasingly object to drilling in municipal watersheds, often resulting in added stipulations and/or conditions of approval for protection. In addition, localized clean water issues include mitigating selenium concentrations, salinity, and sedimentation.

**Air Quality.** Air quality can be a contentious issue in Rocky Mountain basins such as the Greater Green River Basin. Increasingly, air quality issues are being raised, especially in Utah.

**Staffing.** Workload requirements are increasing and the BLM is facing challenges with respect to the timely processing of APDs, energy-related rights of ways, and monitoring compliance. The number of APDs received increased from nearly 4000 in FY 2000 to over 8000 in FY 2005. Recruitment and retention of professional oil and gas staff is challenging.

Section 365 of EPLA 2005 requires the Secretary of the Interior to establish a Federal Permit Streamlining Pilot Project to improve Federal oil and gas permit coordination. A Memorandum of Understanding establishing staffing needs and funding protocols for the pilot offices was signed on October 25, 2005, by the Department of Interior, Department of Agriculture, Environmental Protection Agency, and the Army Corps of Engineers. The seven pilot offices (Rawlins and Buffalo, Wyoming; Miles City, Montana; Farmington and Carlsbad, New Mexico; Grand Junction/Glenwood Springs, Colorado; and Vernal, Utah) have been created.

**Native American Consultation.** The large number of APDs and leases impacts the timeliness of completing the consultation requirements of the National Historic Preservation Act. Consultation with Tribes is increasing and can extend the time required to obtain leases and drilling permits.

**Conflicts between Mineral and CBNG Developers.** In the Powder River Basin,

conflicts can occur between coal mining operators and coalbed natural gas producers. It is the policy of the BLM to encourage oil and gas and coal companies to resolve conflicts between themselves; when requested, the BLM will assist in facilitating agreements between the companies. The BLM will also exercise authority provided in the leases, applicable statutes, and regulations to manage federal mineral development in the public's best interest.

**Infrastructure.** The physical infrastructure to support oil and gas development and production is often strained. Existing pipelines may be at capacity and new pipeline construction is often a lengthy process. County roads are typically not designed for the volume of truck traffic that they can experience during oil and gas field development. Infrastructure issues can act to constrain future marketing capacity, especially for natural gas in the Piceance Basin, although new pipeline construction can relieve this bottleneck.

BLM's energy-related rights-of-way processing workload has increased along with the increase in APDs. These authorizations are required for such infrastructure as pipelines, roads, and power lines that are located outside of a lease or unit boundary.

**Snow Delays.** In the higher elevation areas of the Rocky Mountains, snow depths can be so great as to preclude drilling even if there are no winter drilling stipulations. This situation potentially makes for a short drilling window, especially if there are timing limitations during non-snow months.

**Industry Understanding of the Leasing and Permitting Process.** There is often less-than-optimal understanding and

planning within some companies with respect to these processes. The BLM encourages oil and gas operators to inform and work with the permitting agencies as early in the planned development process as possible. The issuance of the recently

updated *Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development* (the “Gold Book,” 4th edition, 2006, available at <http://www.blm.gov/bmp/goldbook.htm>) should enhance operators’ understanding and expectations.

