## 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.

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

<sup>&</sup>lt;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.

<sup>&</sup>lt;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	isdiction 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			

<sup>\*</sup>Calculated based on office interviews and analysis of AFMSS data

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

Jurisdiction	Issue or Chara	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 and winklerii</i> cacti							
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.	Despainii and winklerii cacti, 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					

<sup>\*</sup>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 Chara	cteristic 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	

 $<sup>^{\</sup>star}\text{Calculated}$  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
Lindrith 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 Chara	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 ElS, 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								

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

<sup>\*</sup>Calculated based on office interviews and analysis of AFMSS data

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

Jurisdiction	Issue or Chara	cteristic Noted by Office				
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Bridger-Teton NF	180 days	Bridger-Teton NF Land and RMP, 1990	Pygmy rabbit, white tailed prairie dog, lynx			
Caribou- 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 BLM (Upper Snake Field 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 Chara	cteristic Noted by Office				
	Average APD Processing*	NEPA Documents	Endangered Species Act and Species Generally of Concern	Roadless Areas	Tribal Consultations	
Kemmerer, WY 3 months Kel		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			

 $<sup>^{\</sup>star}$ 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
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 Chara	cteristic 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 environ- mentalists		
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.	

<sup>\*</sup>Calculated based on office interviews and analysis of AFMSS data

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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 Chara	cteristic Noted by Office				
	Average APD Processing*		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	

<sup>\*</sup>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 Chara	cteristic 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			

<sup>\*</sup>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 Chara	cteristic Noted by Office				
	Average APD NEPA Documents Processing*		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				

 $<sup>^{\</sup>star}\text{Calculated}$  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					

<sup>\*</sup>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 EPAct 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 EPAct 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.