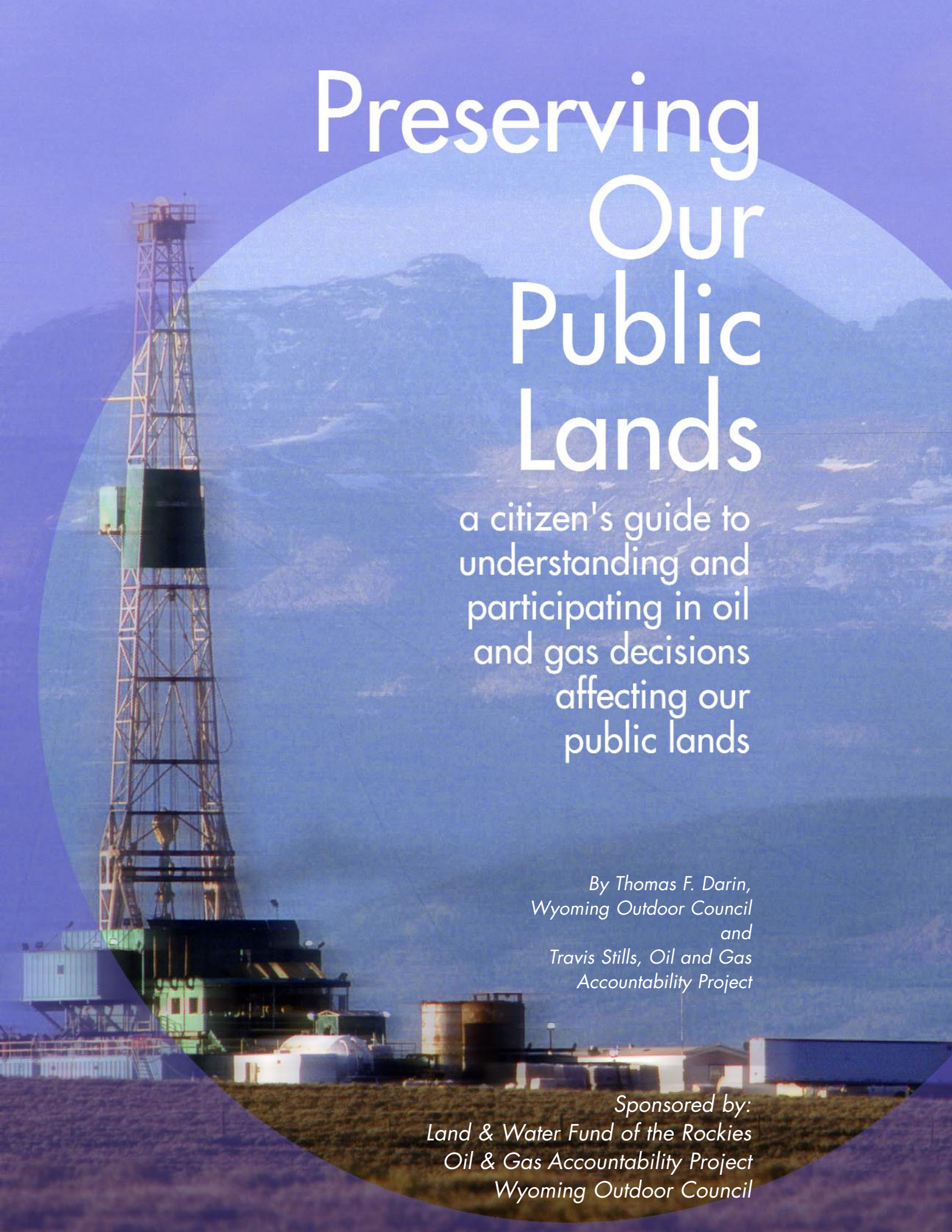

Preserving Our Public Lands

a citizen's guide to understanding and participating in oil and gas decisions affecting our public lands

By Thomas F. Darin,
Wyoming Outdoor Council
and
Travis Stills, Oil and Gas Accountability Project

Sponsored by:
Land & Water Fund of the Rockies
Oil & Gas Accountability Project
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Also in the Public Lands Owner's Manual Series:

How Not to be Cowed—Livestock Grazing on the Public Lands
(Natural Resources Defense Council and
Southern Utah Wilderness Alliance 1991)

Claiming Your Stake—Mining on the Public Lands
(Land and Water Fund of the Rockies 1992)

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Contents

Foreword

In 1993, citizens across the West decided it was time to put together their collective experience and knowledge concerning the continuing degradation of western public lands due to oil and gas exploration and development. Hence, the first edition of this pamphlet was created, authored by Kathleen Zimmerman of the Land and Water Fund of the Rockies. In 2001, in response to changes that had taken place since the first edition, the Oil and Gas Accountability Project and Wyoming Outdoor Council joined efforts with the Land and Water Fund of the Rockies to expand upon Kathleen's earlier work.

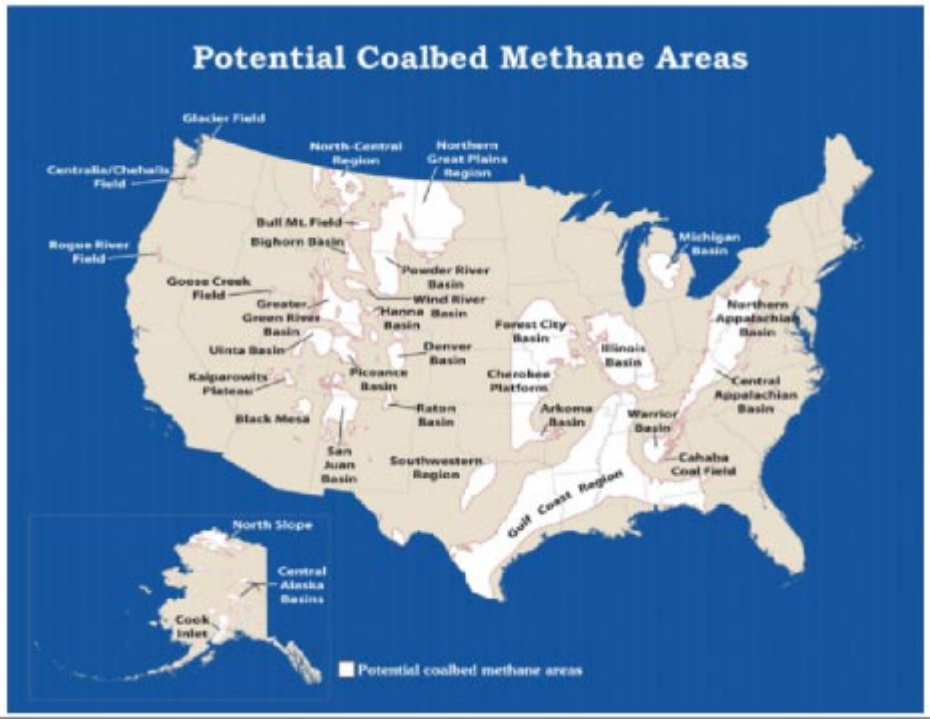
Oil and gas exploration increased on public lands in the West throughout the 1990s, mainly due to natural gas production. Natural gas consumption grew steadily from 19 trillion cubic feet (TCF) in 1992 to 22 TCF by 1998. The projected U.S. demand by 2015 is 31 TCF. Some of the increased demand is due to the forecast of new gas–fired electricity plants in the next decade, as an effort to better comply with Clean Air Act standards. At the power production phase, it is true that natural gas does burn many times cleaner than coal–fired plants. However, one purpose of this Guide is to highlight what is often ignored in this debate: the many environmentally damaging impacts to our public lands from the full-cycle of natural gas production, including: exploration, drilling, full-field development, and the associated infrastructure including roads, pipelines, waste pits, compressor stations and related activities.

It is useful to examine the political realities that exist during this update – Summer/Fall 2001. The current administration in Washington, DC has set its sights on increasing energy production on the public lands of the Interior West with a specific eye on natural gas drilling. When policy makers immediately jump to the traditional, fossil fuel-based "supply" side of the equation when addressing energy issues (as opposed to focusing on energy efficiency and conservation or developing non-traditional renewable resources), the inevitable result is heightened pressure to drill for more oil and gas in our National Forests and other public lands. As this document goes to press, national energy policy is being debated in the United States Senate, after the House passed its energy policy bill this summer that contains troublesome provisions concerning expediting and increasing oil and gas production on federal lands. Finally, the national tragedy suffered on September 11th has led several lawmakers to call for an immediate energy policy primarily focused on increasing domestic oil and gas production. These political realities underscore and highlight the need for concerned citizens to acquaint themselves with the tools provided in this updated Guide.

There are two major categories of onshore oil and gas development considered in this Guide: conventional and non-conventional. (Offshore development, e.g., on the coasts of Alaska, California and Florida, is not covered here even though it does impact public land.) "Conventional" natural gas and oil production involves "draining" methane gas or oil that have been trapped underground. "Non-conventional" oil and gas development involves underground manipulations that liberate oil and gas from sandstone and coals. These technologies are being driven by enormous federal spending, made economical through federal tax credits, and are misleadingly touted as "alternative energy" programs. Some of the types of non-conventional production includes: coalbed methane, tight sands, oil tars, Devonian shales, and deep gas. Basically, anywhere hydrocarbons exist underground, the industry, using federal dollars for free research, is trying to develop technologies to get to it.

A relatively new and rather insidious form of non-conventional gas production

has developed significantly since the early 1990s. "Coalbed methane" is one of the newest sources of methane (or natural gas) and has garnered tens of billions of dollars in federal tax credits for producers. As late as 1988, coalbed methane was widely considered extremely speculative and experimental, but now production and profits are booming. This is true even though the technology remains experimental and the impacts remain largely unstudied and undisclosed. The industry and the federal government are investigating the possibility of coalbed methane recovery anywhere there are underground coal deposits.



Coalbed methane development is now common throughout the West – particularly in Wyoming, Colorado, Montana, New Mexico and Utah. This form of natural gas extraction requires enormous volumes of water to be pumped out of coal aquifers to release the methane and allow it to freely vent to the ground surface for capture. What to do with this by-product water, and the fact that in many western semi-arid regions ground aquifers may be depleted for hundreds of years, are just two of many concerns that require coalbed methane extraction to receive special attention in this Guide.

The new boom in oil and gas development has brought increased focus to the "split-estate" issue. A "split-estate" refers to the situation where the landowner owns the surface of his property, but not the underlying minerals. In essence, therefore, the landowner does not own the rights to develop oil and gas (mineral estate) under the surface of the land (surface estate). The federal government can be involved in a "split-estate" situation as either the mineral or the surface owner. Where the government owns the underlying minerals, BLM may (and often does) lease the rights to develop the estate to industry. Impacts caused by oil and gas developers (including

the federal government's lessees) who do not own the surface estate have heightened tensions between surface and mineral estate owners in the West. These tensions deserve attention, particularly the existing regulations that fail to afford the surface owner – and the environment – additional safeguards. Accordingly, these issues, and a discussion of existing safeguards, are added to this edition.

Finally, a word about appeals. In this version, we have not provided a sample appeal to the Department of Interior Board of Land Appeals (IBLA). Appeals to a quasi-judicial body such as IBLA are fact dependant and are not conducive to a one-size-fits-all form. In addition, any IBLA decision can set important precedent for future cases. Since the lawyers in the Interior Solicitors Office can handle any appeal, and the industry is likely to intervene in an appeal, IBLA appeals must be approached with the same care as if filing a federal lawsuit.

It is our hope that this Citizen's Guide will be used by grassroots organizations, the general public, and the concerned citizen to take a more active role in preserving our public lands in the face of increased oil and gas development pressures. As in any democracy, the voice, concerns, participation and comments of the citizens that own the public lands are absolutely critical in the ongoing efforts to preserve not only some of the last wild and remote public lands, but also those areas which play an important role in the communities of everyday people.

Oil and gas wells and their impacts on rural communities in the West. Depicted here, the stimulation of a newly drilled well by cavitating and flaring tons of coal and drilling wastes. Taken near Durango, Colorado, May 2001.

Thank you, and please feel free to contact us with any questions or concerns.

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Introduction

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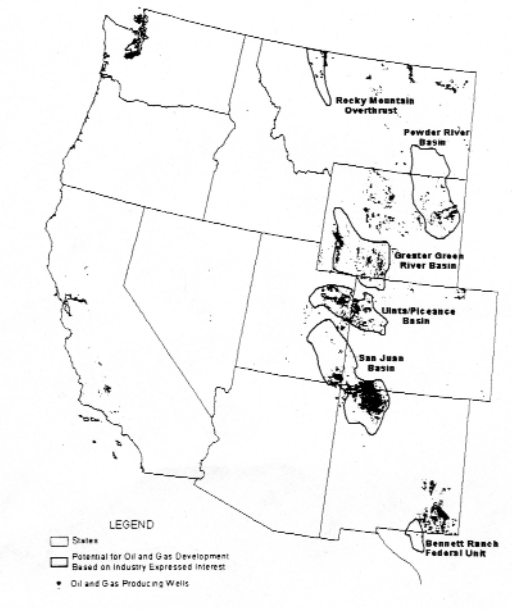
For purposes of this guide, "public lands" include lands managed by both the Bureau of Land Management and the U.S. Forest Service. The Bureau of Land Management (BLM), an agency within the United States Department of Interior, is charged with managing 264 million acres of surface federal lands, primarily in the West. In addition, BLM manages over 300 million acres of below-surface mineral estates, owned by the United States.

Between 35 and 40 million acres of federal land (onshore) in the United States currently are under lease for oil and gas development.[1] Demonstrating the disproportionate nature of leasing, and reflecting industry interest in known reserves, approximately **20 million acres, or over half, of all onshore leased acreage is in Wyoming.**[2] That's close to 40 million acres already designated for road construction, vegetation removal, storage of toxic materials, loss of wildlife habitat, and diminished scenic value – all of which accompanies oil and gas development. For FY 2000, the administration proudly reported that BLM had "1,537 new holes [for oil and gas wells] started, 10.72 million acres in producing status, [and] 57,687 currently producing wells."[3] Of course, it would be wrong to assume that only existing oil and gas production areas are under threat. According to the National Petroleum Council Report, the "driving factor behind the growth in the Rockies is the non-conventional resources, primarily in the tight and the coalbed methane resources."[4] The BLM does not have an accurate inventory, but most sources agree that at least 90% of federal public lands are open for oil and gas leasing.[5] And, the push to hasten the leasing of these lands, which brings them into the active oil and gas program, continues at a rapid pace. In FY 2000, 38 oil and gas lease sales were conducted, involving over 3,600 parcels and 3.7 million acres of BLM-managed public lands. FY 2001 saw the number rise to 36 sales of 4,712 parcels, totalling over 6 million acres. The Bush Administration's FY 2002 budget request expects BLM to offer more than 39 sales on 4,000 parcels encompassing more than 5 million acres. The ill-informed, aggressive oil and gas leasing program is more reminiscent of an extraction-based 19th century land disposal program than a sustainable 21st century public land management system that has been

Oil and Gas Development on Federal and Indian Trust Lands



Industry oil and gas targets as expressed by BLM.

proudly created by thousands of agency employees, conservation organizations, and ordinary citizens.

The U.S. Forest Service (FS) manages 155 National Forests and 22 National Grasslands, encompassing 192 million acres. Nationwide, few people realize that a vast majority of these public forests are available for oil and gas leasing and development. Fortunately, however, the lands actually under lease (as opposed to just open for leasing) have dropped from 35 million acres in the mid-1980s to about 5 million acres today.

Oil and gas leasing on public lands – both those managed by BLM and FS – occurs pursuant to the Mineral Leasing Act of 1920, as amended in 1947 and significantly overhauled in 1987. In very general terms, BLM is responsible for oil and gas lease sales for all public lands. Importantly, however, the FS decides in its land use plans which lands are initially subject to leasing and, after turning the process over to BLM, still retains authority to deny leasing for specific lands prior to BLM lease issuance of FS parcels. If leased, the Forest Service retains the authority to require protective stipulations and to approve or reject surface use plans for oil and gas operations. Unfortunately, the BLM and the FS also have discretion to waive protections that are imposed at the leasing stage. As with most environmental protection, all protection victories are temporary while most impacts and development threats are permanent.

This Guide is intended to show you how to influence BLM/FS's decisions regarding oil and gas in order to promote better management practices and protect wildlife, recreation, watersheds, and other environmental values on the public lands, specifically on BLM and National Forest lands. Oil and gas leasing and operations can also take place on other federal land types – wildlife refuges, national seashores, and in limited areas in the national park system.[6] Most federal land next to active oil and gas development, even those not usually available for leasing, may be leased if federal oil and gas reserves are being affected.[7] In these other public lands, BLM still plays its usual role as mineral manager, and the surface management agency (e.g., U.S. Fish and Wildlife Service) will play a role similar to the Forest Service, with some significant differences. This Guide does not attempt to go beyond effects on the National Forests and BLM-managed lands. For more information on other public land types, please contact the groups who published this handbook or a group familiar with the public land type or the specific land at issue.

Chapter 2 provides a brief overview of the life cycle of an oil and gas well. Chapter 3 discusses the environmental impacts associated with oil and gas development. Chapter 4 discusses impacts and issues unique to the newest form of natural gas – coalbed methane. Chapter 5 provides the legal framework governing the issuing of leases and permits to drill. Chapter 6 discusses the different agency land use planning stages that must occur before *any* oil and gas well can be drilled. Chapter 7 delineates four key opportunities for public involvement in federal oil and gas development. Chapter 8 contains suggestions on key issues to raise as a public participant in the oil and gas decision making process. Chapter 9 deals with special issues that arise with split-estate lands. Chapter 10 provides suggestions on how to be more effective in your discussions with BLM and the FS. Finally, Chapter 11 provides an overview of pursuing administrative reviews of oil and gas leasing decisions.

Terms used in this handbook that may be unfamiliar are explained in the glossary. Numbered notes within the text are mostly legal citations found in endnotes.

Introduction

1

These citations can be found in several places online, but you do not need to cite them when writing an effective letter, protest, or comment about oil and gas development on public lands.

2 The Life Cycle of an Oil or Gas Well

The lifecycle of an oil well or a gas well involves much more than drilling a well and installing a pumpjack. It involves numerous federal agencies, federally-funded research, and decades of daily operations carried out by some of the most powerful corporations in the world. This section gives a brief sketch of the many facets that activists should anticipate when responding to oil and gas threats or development on public lands.

The inroads leading to oil or gas wells on public lands begin with United States Geological Survey studies, seismic studies, and other investigations into oil and gas potential of public lands. If the initial studies generate sufficient interest in further oil and gas exploration, BLM sells leases which give private parties a contractual right to explore, develop and sell the oil and gas that may be located on federal mineral estates. Physical exploration involves drilling of "wildcat wells" to determine both the location and size of potential deposits. Upon discovery of an economically viable field, a "full field development" plan is implemented with spacing of wells and other production concerns set out in a variety of corporate, local, state and federal proceedings.

The oil or gas field is then developed site-by-site with the drilling of production wells. Pipelines, treatment facilities, compression stations, and a variety of other production infrastructure facilities are constructed at the well site to extract the raw oil and gas, separate the saleable materials, prepare for transporting the oil and gas to market, and dispose of wastes and by-products. Gathering pipelines lead to centralized field facilities for further treatment, compression and waste disposal. From there, transportation pipelines are used to ship oil and gas products to refineries and other treatment and distribution facilities located near the end users, which range from household users to electric generation plants to industrial facilities to chemical manufacturing plants.

The field is operated for decades with daily maintenance checks and frequent construction work required to keep these industrial facilities operating. Production data is constantly gathered during the full field development and can lead to changes in well-spacing and operations requirements. However, little data is gathered on the environmental impacts of production, treatment and transportation.

Eventually, the oil or gas sources are drained and fall below profitable flow levels. The wells are then "abandoned." The abandonment phase includes plugging wells, removing infrastructure, and, in theory, returning the land back to the condition that existed before full field development. Since each of these phases can have detrimental impacts on the surrounding environment, the ability to return the land and water to the condition before full field development is still a theory that has not been proven on the ground. Each phase of development is sketched out in detail below.

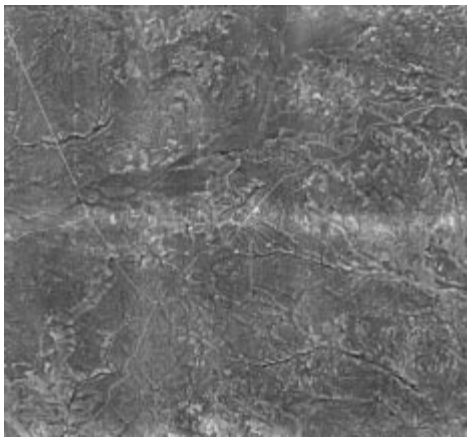
Exploration

The exploration phase includes various different activities that range from mapping to drilling. United States Geological Survey ("USGS") studies are the main source of information on future oil and gas development expected to be economically feasible. Extensive information is available on the USGS website (www.usgs.gov) and in numerous publications. Industry relies upon USGS and other government studies to chart the course for new oil and gas plays, thereby receiving a significant R&D subsidy.

Seismic exploration has become the most important tool for discovering oil and gas reserves. This type of exploration uses seismic waves to map the depth and contours of geologic formations in order to determine probable locations of oil or gas deposits. The waves are created either by detonating explosives in shallow holes, or by using a truck equipped with a device that strikes the ground called a "thumper." Small devices called geophones are spread out in linear formation away from the hole, or the truck, to detect the waves as they are reflected back by the ground. The return speed of the waves is used to map the contours of the oil and gas reservoir. Geochemical surveys may also be used to determine a likely location for oil and gas development. Geochemical surveys involve taking earth samples anywhere from inches to several feet underground. The samples are tested for chemicals that may indicate the presence of oil or natural gas. Geochemical surveys normally involve the use of heavy equipment to drill the core samples and to haul supplies to and from the site. Road construction is often a by-product of this form of exploration.

Anyone wishing to conduct geophysical exploration for oil and gas on public lands administered by the BLM, outside the state of Alaska,[8] must submit a Notice of Intent to Conduct Oil and Gas Exploration Operations. The notice of intent must be filed with the BLM District Manager. BLM then notifies the operator of the practices and procedures to be followed during exploration. When the operator signs the notice of intent, it signifies an agreement to comply with all of the practices and procedures specified by BLM. The operator must also provide a bond of at least $5,000.00 conditioned on "full and faithful" compliance with the terms and conditions of the notice of intent. When exploration is completed, a Notice of Completion of Oil and Gas Exploration Operations must be filed. Thirty days after filing, BLM notifies the operator whether land rehabilitation is satisfactory, or what additional reclamation measures must be taken by the operator. If BLM does not notify the operator of the rehabilitation requirements within 90 days, the operator is no longer liable for that exploration operation.

"Wildcat" drilling still plays a central role in exploration and these wells can only be drilled on validly leased lands. Until there is a hole in the ground to test the actual production capacity, the potential for full field development of the oil or gas is considered speculative. A proposal to drill a wildcat well requires the issuance of a permit to drill, the accompanying NEPA Process, and full compliance with environmental laws. (See Chapter 7 for an overview of the NEPA Process). The wildcatter often threatens to degrade public lands just to satisfy a hunch that there may be a remote chance of striking it rich. Just one exploratory well threatens to punch miles of road into the middle of once wide-open public lands, destroying valuable wildlife habitat and the existing character of the area. Depending on the significance of the impacts, a single well can require a full-blown environmental impact study (as discussed in Chapter 7).



Top: *Aerial photography showing gas fields in Wyoming in 1994, prior to major expansion of gas play.*
Below: *Satellite image from 1999 showing the same area at the same scale. New well pads and roads are clearly visible as bright patches and lines; wastewater pits are dark spots on the well pads. This image shows about 97 of the 233 new wells drilled since 1994 in the Jonah project. BLM has already permitted over 6,000 gas well pads or locations in the same vicinity out of 10,000 to 15,000 that are planned for this area in southwestern Wyoming in the next decade.*

Another aerial view of Jonah field in 2000.

Full Field Development

Once exploration is completed, preparation for full field development begins. "Full Field Development" means that the developer will drill and construct a web of wells, well pads, roads to the wells, collector pipelines, water disposal pipelines, wellhead compressors, separators, dehydrators and storage tanks. These land-scarring and fragmenting webs connect to central facilities that are used for compression and treatment and ultimately to another web of interstate transportation pipelines.

The "spacing" of wells will usually be done for the entire field. This means that a state oil and gas commission will set forth the density of the grid of wells needed to extract the oil or gas from a particular geological formation. Federal agencies will usually (and illegally) adopt that state commission's ruling without public scrutiny or involvement. Spacing is usually done on a well-per-acre basis (e.g., 1 well per 160 acres). It is not uncommon for wells to be spaced on a grid pattern of 440 yards or one well per 20 acres. Of course, most state oil and gas commissions often grant exceptions to spacing requirements at the request of an operator. Well density varies according to the geological characteristics of the field, but generally increases as the field is depleted. The density of these facilities have turned once remote and pristine public lands into permanently scarred industrial zones.

Construction of access roads and the well pad and installation of pipelines to carry the oil or gas away from the drill site are the most obvious impacts. The installation of pumpjacks, compressors, treatment facilities, and oil and waste storage tanks are the most visible facilities. However, these easily viewed facilities are tied by a web of pipelines to more intense compression

and treatment facilities that are often located on private land. The noise, air emissions, and water discharges from these treatment, compression, and transport facilities, even if located on private land, can have a devastating effect on public lands near, and especially downwind of the field.

Construction

Construction activities almost always involve heavy equipment and radical impacts to the landscape. Road construction requires the use of heavy equipment such as bulldozers, road graders and gravel trucks. The well pad is cleared and prepared using the same kinds of heavy equipment. Ditches for the pipelines must also be dug, and pipe laid and buried.

Centralized facilities are often large and require removing all vegetation and leveling dozens and sometimes hundreds of acres. Intense vehicle traffic carrying heavy equipment, crews, hazardous chemicals, and production wastes characterizes the construction phase. The initial construction activities are often irreversible in terms of impacts to public lands and private residences, and are compounded by long-term construction and maintenance activities. Much of the construction of the actual facilities takes place after drilling is completed.

Drilling

Once the well pad is completed by eliminating vegetation and leveling the site, the drilling derrick is erected. Engines power the hoist that lowers and raises the drill stem and bit. A large crew of workers uses numerous pieces of heavy equipment and pumps to send a solution of drilling fluid, or "mud," down the wellbore to lubricate the bit, remove the cuttings, and dispose of the wastes. The drilling fluids and cuttings are supposed to be captured in a lined pit for disposal or reuse, but are often spilled and splashed around the well pad due to the high pressures, dangerous working conditions and lack of government inspection and oversight.

This reserve pit is designed to hold wastes while work is being done on the well. The plastic used to line the pit is often torn, allowing contaminents to seep into soils and groundwater.

Completion and Stimulation

Once the wellbore is drilled, various completion and stimulation techniques may be employed. To complete the wellbore, a steel casing is dropped into the hole and cemented into place. The casing may or may not extend to the full depth of the well. Many times, even though well depths of 2,000-3,000 feet are quite common, the casing may only run down a few hundred feet. The casing must be perforated or eliminated altogether across the producing zone to allow the gas or oil to enter.

Stimulation techniques are used to speed production from a well. **Hydraulic fracturing** ("fracing") involves injecting a solution of water that is in many cases laced with over 1,000 gallons of hazardous materials (biocides, solvents, gelling agents, etc.) and tons of sand. Fracing fluids are injected underground at high pres-

sure to create and hold open underground fractures. **Cavitation** stimulates the well using explosions to ream out the well bore and results in unregulated detonation of about 100 tons of coal per well into the open air. **Underground nuclear detonations** were used in the 1970s near the Colorado River in Colorado in failed attempts to stimulate gas production. Nuclear bombs are no longer used to stimulate production.

The last stage of completion is to construct permanent valves and tubing, the installation of necessary pumps and attaching the well to the pipeline systems. Large amounts of fluids and gas are "blown off" (or "vented") the well into the atmosphere (sometimes burned or "flared") to clean out contaminants left in the well and the lines after drilling. Venting/flaring often continues after production begins – in many cases, to demonstrate the economic viability of a well to induce capital expenditure for pipeline investment. In Wyoming, for example, intentional venting/flaring of pure methane into the atmosphere results in annual releases in the *billions* of cubic feet of this destructive green house gas each year.

Flaring wastes from a cavitation near Durango, Colorado, May 2001. Note the flag on the Sunnyside Elementary school in the background.

Production

The production phase of a field development can last decades. Most new fields are expected to produce for 20-50 years, depending on the geological conditions. Some fields, particularly the Salt Creek field in Wyoming, have been producing for over a century.

The production phase involves daily monitoring of the well and associated production equipment. The engines and treatment facilities emit tons of chemicals by design. Small spills are an extremely common occurrence. As an example, just one production company hopes to get its production down to one small spill every other day (160 spills per year) for the wells it operates in La Plata County, Colorado. It is not clear how many spills occur on all federal wells currently in operation. Although BLM regulations require that operators document and report all spills, this requirement is not strictly enforced.

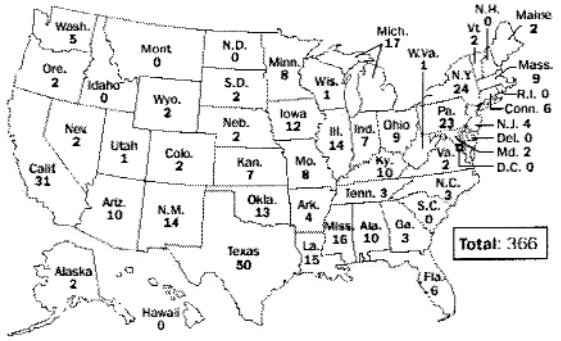
Power lines and other facilities from the aging Salt Creek oil field outside of Midwest Wyoming.

The potentially devastating cumulative effects of the emissions and numerous small spills are unknown, but they certainly carry long-term environmental impacts and chronic health effects including the potential risk of cancer.[9] Yet, production

wastes and numerous oil and gas production emissions are exempt from federal pollution laws. Oil and gas production is generally exempt from the Toxic Release Inventories and other federal Right-to-Know laws. Larger spills and explosions occur less regularly, but their impacts can be deadly and immediate. Industry, which finds it cheaper to pay for leaks and put out fires instead of focusing on prevention, has caused fires and explosions that have killed more than 200 people and injured more than 1,000 in the past decade.[10]

Pipelines' death toll

From 1984 through 2000, Texas led all states in the number of fatalities from pipeline incidents.



Sources: Fuel Safe Washington, U.S. Office of Pipeline Safety — Linda Scott/American-Statesman

Periodic reworking and maintenance of the wellbore includes major repairs and stimulation techniques. Reworks and re-completions involve setting up a drilling rig and can involve weeks of intense operations and traffic. Reworks are often indistinguishable from the drilling and completion phases.

In addition to the well, all of the facilities operate on a 24-hour basis, disrupting wildlife, watersheds, recreation and other purposes for which public lands were set aside and held in trust for the American people. Increased vehicular traffic on the network of newly constructed roads occurs throughout all phases of production, adding significantly to air and noise pollution. Where the federal minerals are developed under private lands, these ranches and neighborhoods are disrupted, often diminishing real estate values.

Plugging and Abandonment

"Plugging and abandonment" is an industry term that refers to the stage at which a well becomes uneconomic to operate and is therefore abandoned. Once production ends, the well is capped. This involves placing cement plugs into the wellbore and at the surface. Abandoned wells are the source of numerous water well contaminations.

Instead of properly plugging and abandoning wells, many companies just walk away from uneconomic wells by selling them to undercapitalized corporations near the end of the profitable stages of the lifecycle of the well. These are termed "orphan wells" and become the responsibility of the federal agency and ultimately that of the taxpayer. In a survey completed by BLM in 2001, it was reported that dozens of orphaned wells have been left behind on western public lands, leaving everyday taxpayers on the hook to clean up industry's mess. Current bonding requirements are inadequate to ensure that orphaned wells are properly plugged and abandoned.

Reclamation

Full reclamation should leave the land, air and water in the same condition as before oil and gas development was carried out. However, the BLM and other federal agencies are understaffed and underfunded, resulting in a lack of monitoring and enforcement of reclamation requirements. Reclamation can occur throughout the production process, but often is based on the local land manager taking a snapshot

inspection to determine whether grass is growing in the second year and if so, calling the job done. Should a company choose to abandon its reclamation requirements, federal bonding requirements (discussed below in Chapter 7) are woefully inadequate to ensure proper reclamation.

Environmental Impacts of Oil & Gas Development

3

Considering the broad range of impacts it brings to the environment, water, air, open spaces, ecosystems and wildlife, an oil and gas field should be considered on the same disruptive scale as a large timber sale or any other exploitation of natural resources. Just as a large scale timber sale results in the destruction of wildlife habitat, the construction of roads, and the noise and air impacts from large-sized machinery, so too does full field oil and gas development.

CBM development in northeastern Wyoming. Lower right displays the impacts from just a few wells; upper left across the road, shows relatively undisturbed pastoral landscape.

Destruction and loss of wildlife habitat is a major environmental concern with oil and gas development. Oil and gas wells require well pads and compressor station complexes that denude the land of vegetation, causing soil loss, increased erosion and the opportunity for weed infestation. Many miles of roads are constructed, further disturbing the ground surface, and seriously fragmenting once unspoiled wildlife habitat. Add to that miles of pipelines and power lines, and once wide-open and undisturbed areas become industrial sacrifice zones.

Compressor stations not only disturb the surface, they are also a tremendous source of noise and air pollution. The wells and pipelines themselves create risks to human health and safety – pipeline explosions have occurred and over time, wells, even if properly drilled, cemented and cased, can cause drinking water problems by

Wellhead compressor near an elementary school in Colorado.

Compressor station, vegetation removal and weed infestation around Montana CBM compressor station.

One CBM drilling rig and the associated impacts in Wyoming's Powder River Basin.

allowing cross-contamination of aquifers.

Oil and gas development can have a wide range of impacts on the people and the land. The impacts range from disruption of views to deadly health effects; from weeks of intense round-the-clock drilling to daily visits by maintenance crews; from sudden loud noises that startle farm animals to persistent uncontrollable noises that diminish human health; from pipelines trenched across driveways to pipeline explosions that kill entire families. These are just some of the impacts.

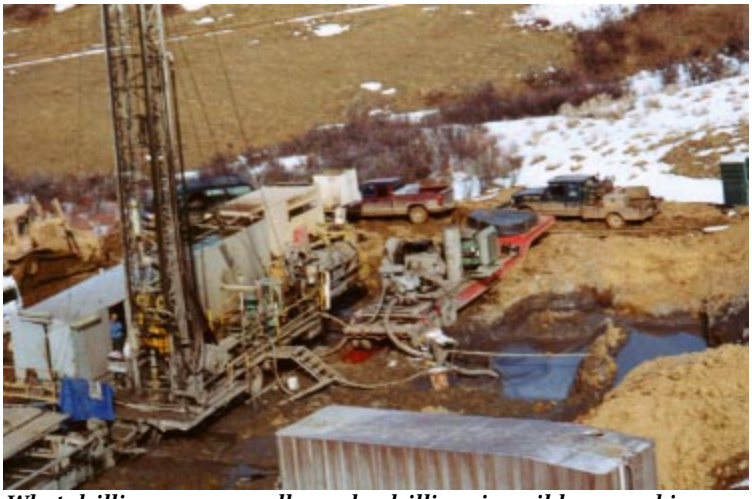
While people may place different priorities on their concerns over the impacts of oil and gas drilling, all of the concerns stem from common causes: oil and gas exploration, drilling, operations, abandonment and reclamation. As one considers the impacts, the drilling of the well often comes to mind because it is traumatic in its intensity and impact. But the direct impacts of drilling usually last for about a month. Some wells can be drilled in a matter of a couple of weeks, but it can also take much longer, as drilling can last for years depending on the depth of the well being drilled and other factors. Regardless of the actual drilling time, the legacy of drilling a well will

remain during the 20-30 years (or more) that production continues in full field development. The other legacy is the pollution of the land, water, and air that may never be eliminated.

One of the most disturbing aspects of oil and gas development on public lands is the combined effects of all these impacts on some of the remaining areas of roadless and still wild Interior West. The aesthetic qualities of these once wide-open places may be lost forever – unbroken horizons will be shattered with images of drilling rigs, compressor stations and power lines. Some of these impacts may be mitigated after the production cycle of a well, but once despoiled, these remaining few wild lands in our National Forests and BLM areas may forever lose an intrinsic quality that cannot be replaced.

Power lines and drilling rig for CBM development in Motana's Powder River Basin.

Aboveground pipelines, exposed and crossing a creek in Colorado. Note the size of the pipelines in comparison to the equipment in the background.



What drilling one gas well can do: drilling rig, soil loss, machinery and toxic releases to drill one CBM well near Sheridan, Wyoming.

Hydrogen sulfide, a deadly gas commonly associated with oil and gas drilling, is seeping into the Animas River near Durango, Colorado. This section of the free-flowing Animas is designated Gold Medal Trout waters and is used heavily by the active boating community in Durango.

This portion of the Upper Green River basin is potentially threatened by oil and gas development. Presently, the Forest Service is performing an environmental study deciding whether to open this area and others like it in the Bridger-Teton National Forest to oil and gas exploration.

The Square Top formation is in a wilderness section of the Bridger-Teton National Forest. Areas immediately adjacent to Square Top, including a portion of the foreground river valley, are potentially threatened by oil and gas development.

4 Coalbed Methane

The Latest and Fastest Growing Form of Natural Gas Development

The newest and most insidious form of natural gas extraction is coalbed methane (CBM). CBM production has one marked difference from conventional natural gas wells: in order to mine methane gas, companies must first free the gas from coal seams, where water pressure causes the gas to remain adsorbed to the coal. To free and capture this gas for market, water from the coal seams must be removed, freeing the methane and allowing the methane gas to migrate to the surface. This process, known as "dewatering," has severe and unique impacts.

Above three: CBM discharges from one outfall can wreak havoc on the environment, particularly soils and native vegetation.

The environmental impacts of CBM extraction are severe and include additional impacts not associated with deep methane gas (or "conventional") drilling. Perhaps the most significant impact is on water quantity. Currently, the hotbed of CBM development in the United States is the Powder River Basin in northeastern Wyoming, slotted for 50,000 to 80,000 wells by 2010. In Wyoming, unlike some CBM development in Colorado, the water is not injected back into the ground. The state average of water that must be pumped out of, and dumped onto the ground is 15 gallons per minute (gpm). At 15 gpm per well and using the "low" number of 50,000 wells, this type of development will deplete aquifers of, and dump up to **1 billion gallons of water per day** onto the ground. This waste of water in a semi-arid region may seriously compromise the ability of aquifers and water tables to recharge. The enormous volumes of discharged CBM water are literally ripping through and destroying much of the landscape in the semi-arid West. Problems with produced water have forced producers to build massive

reservoirs to contain the high volumes of produced water. In many places, no credible studies have been conducted by BLM to ascertain if the local aquifers upon which the citizens and aquatic systems depend for survival will ever recover.

Equally important is the quality of the CBM well water discharge. The water is usually high in salt concentration and, depending on the coal seam, is generally unsuitable for irrigation. Due to the shale rock formations high in salt and mineral content that are common in the West, the total dissolved solids and salinity of the water will only increase as the floodgates open and water is poured over the surface, leaching these minerals. Where injection does not occur, the millions of gallons of water discharged onto the surface each day eventually find their way into creeks, streams, rivers and major watersheds. Untold – and as of yet unstudied – consequences will befall fisheries populations, recreation opportunities, wildlife, and domestic livestock. Other impacts include methane migration to the ground surface (posing a serious health risk to humans as well as wildlife, soils and vegetation), soil erosion from the well discharges and the documented risk of underground fires sparked by spontaneous combustion.

Produced CBM water flooded this grove of cottonwoods on Bill & Marge West's Wyoming ranch, eventually killing the trees with year round saturation

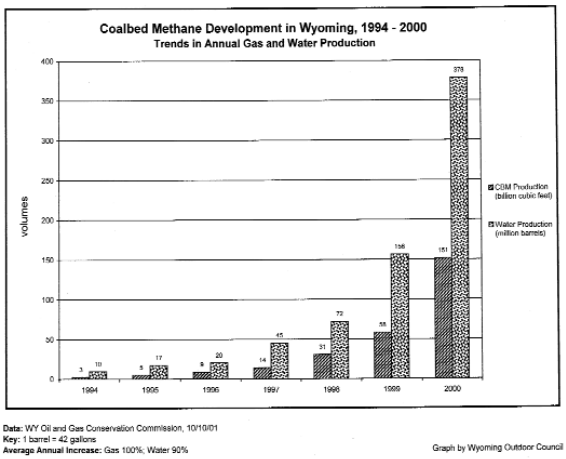
Water from CBM wells flooding out a cottonwood grove in southeastern Montana.

While the Powder River Basin in Wyoming is currently the focus of CBM producers – described recently as the "hottest gas play in the United States" – other areas of CBM intensity in the West include the San Juan Basin in Colorado and New Mexico, Uinta Basin in Utah, Piceance and Raton Basins in Colorado, the Powder River Basin extending into Montana, and forthcoming, the Green River Basin in southwestern Wyoming. Therefore, in adequately safeguarding public lands, activists

should familiarize themselves with the nature of these impacts, and areas of public lands that may be leased and developed for CBM extraction.

The following groups are excellent resources for CBM development issues:

- Oil and Gas Accountability Project: www.ogap.org;
- Powder River Basin Resource Council: www.powderriverbasin.org;
- Wyoming Outdoor Council: www.wyomingoutdoorcouncil.org; and
- East of Huajatolla Citizens Alliance: http://206.165.212.14/cbmgas/info_sheets.htm.



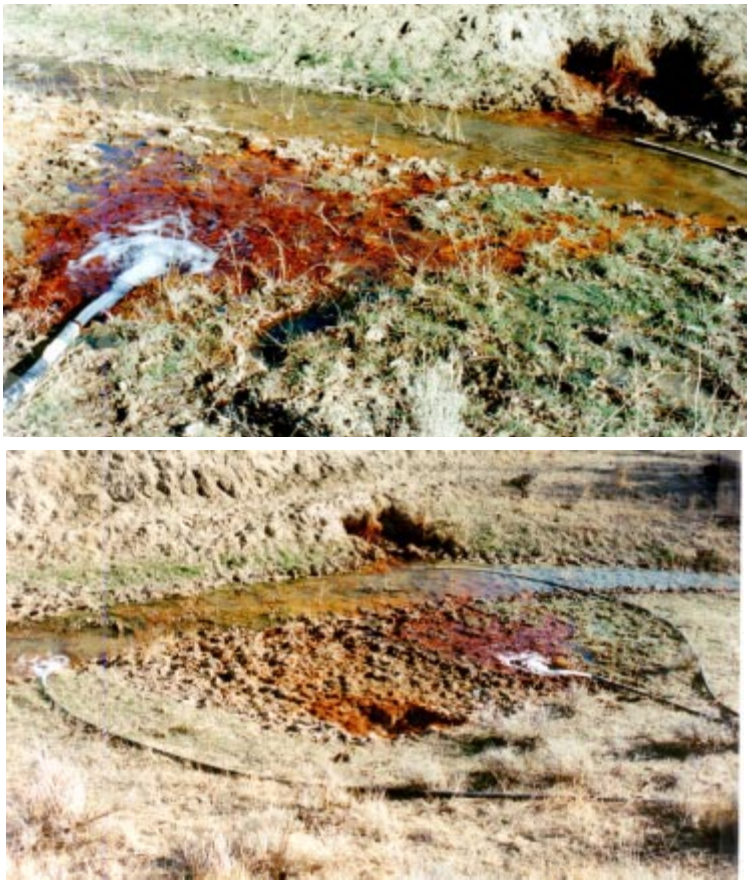
Produced CBM water compared to produced gas in Wyoming: 1994-2000.

The construction of one reservoir in Wyoming's Powder River Basin for CBM-produced water containment. Wyoming already has over 1,000 reservoirs in place or permitted, and can expect thousands more over the life of the CBM play with at least 50,000 wells predicted by 2010 for the basin.

Methane from CBM wells can migrate through underground faults following the path of least resistance. Migrating CBM causes this previously capped water well to explode just feet from a Wyoming residence.

Before and after CBM discharge water hits the Swartz ranch in Wyoming.

Congressional aides for New Mexico Senators Bingaman and Domenici and Representative Tom Udall, representatives of environmental groups, and the press took a tour hosted by New Mexico ranchers to review alarming impacts caused by oil and gas operations on BLM lands in Northern New Mexico, September 2001. The BLM's response to their concerns was to state that BLM lacks funding and internal support to carry out adequate inspection and enforcement programs.



CBM water discharged into naturally ephemeral draws, flooding native vegetation and leaving behind mineral deposits.

The Legal Framework

5

The Mineral Leasing Act

The primary statute governing oil and gas development on the public lands is the Mineral Leasing Act of 1920 (MLA), as amended by the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (FOOGLRA). This statute authorizes the Secretary of the Interior to issue leases to private individuals and corporations to extract oil and gas from the public lands.

Initially enacted in 1920, the primary objective of the Mineral Leasing Act was to ensure that the federal government received royalties for the sale of these resources. Until that time, the extraction of oil and gas had been governed by the General Mining Law of 1872, under which no compensation is paid to the federal government for the value of minerals removed from the public lands (Unbelievably, this still remains the case to the present day for hard rock minerals including, but not limited to, gold, silver and copper). The Mineral Leasing Act contained no provisions for protection of other natural resources, but the range of modern environmental laws applies with full force to oil and gas leasing and production operations.

Like the Mineral Leasing Act, which was driven primarily by economic concerns, FOOGLRA was passed in order to ensure a greater return to the federal treasury from the issuance of oil and gas leases. Under the MLA, most leases were issued on a "first come, first served" basis for a minimal fee. FOOGLRA mandated that all federal lands must first be offered for lease at auction. The hope was that a competitive bidding process would increase the money received for federal leases. In developing onshore leasing rules to implement the FOOGLRA changes, the Department of Interior admitted that:

> BLM has long known that the leasing system was subject to fraud and abuse, and that the Bureau was not taking enough care in protecting the environment affected by development of Federal oil and gas leases. In 1987, the FOOGLRA was passed and, according to BLM, environmental provisions were added, and BLM was required to have Forest Service consent before leasing oil and gas on Forest Service lands. The Reform Act also required BLM to post a notice of the lands it proposed to include in a lease sale. It also required BLM to post a notice of proposed drilling operations to allow the public and environmental groups an opportunity to comment before BLM made a final determination. Congress dealt with fraud and abuse by making it unlawful to be involved with any plan to defeat the purposes of the Reform Act or its implementing regulations. The Reform Act also provided for severe penalties for violating these fraud provisions.[11]

FOOGLRA also contains some important provisions directed specifically at protection of other natural resources on the public lands. Procedurally, it requires BLM

to provide the public 45 days advance notice of all oil and gas lease sales and 30 days notice prior to approval of Application for Permits to Drill. FOOGLRA also codifies the requirement that permission to drill hinges on submission of an acceptable plan of operations and a reclamation bond.

It is important to remember that while the Mineral Leasing Act authorizes BLM to issue oil and gas leases, it does not require that leases be issued. Unlike the law that governs mining on the public lands, the Mineral Leasing Act does not mandate that all public land be available for oil and gas development. BLM and the FS retain discretion to preclude such development to protect other public land values, such as wildlife habitat, scenic values, and recreation. In fact, both agencies operate under a mandate of multiple use of the public lands, meaning that these areas must be managed not only for oil and gas, but also for aesthetics, recreation, grazing, watershed values and fisheries, although every acre of public land need not support all multiple uses. As the activist knows all too well, BLM seems to put oil and gas development ahead of these other multiple uses, and often at their expense. This Guide is an opportunity to preserve these other natural resource values on our public lands.

Lands Available for Leasing

Congress specifically has mandated that some federal lands cannot be subject to oil and gas development. National Parks are closed to oil and gas leasing with the exception of some recreational units. National Wildlife Refuges are closed to leasing unless specifically opened by the Secretary of the Interior.[12] In practice, the Secretary has leased only those refuge system lands subject to **drainage**.[13] Wilderness areas were open to leasing until 1984.[14] FOOGLRA formally closed wilderness study areas to oil and gas leasing as of 1987.[15]

Of course, pretty much everything else is open for oil and gas development. In 2000, the National Petroleum Council reported that 91% of natural gas under federal public lands in the Rocky Mountains is accessible and available for oil and gas leasing. Of the sum total of all public lands in the West, 59% is open to leasing under standard stipulations and 32% is available for leasing with some additional restrictions, such as seasonal limits on drilling to protect wildlife resources. Accordingly, given that National Parks, National Wildlife Refuges, Wilderness areas and Wilderness study areas comprise a small fraction of the public lands in the West, the conservation activist has to be aware that oil and gas development is a possible public land use practically everywhere.

The Leasing System

Prior to the 1987 amendments, only lands that were part of a "known geological structure of a producing oil and gas field" (KGS) were leased competitively; all other lands (about 95% of all leased lands) were leased non-competitively through a lottery. Today, all lands not covered by prior leases must first be offered competitively at oral auction. This system does not, however, ensure that BLM receives what it considers fair market value for leased lands. As long as the highest bid by a qualified bidder for an offered lease parcel exceeds $2 per acre, BLM must accept it. BLM cannot withdraw parcels it offers simply because no bid equals or exceeds the lease's value. If no such bid is received, BLM must offer that lease parcel non-competitively (in a hybrid system between first-come, first-served and a lottery) for a period of two years, after which an unleased parcel may again be offered only if it is first offered competitively.

FOOGLRA states that lease sales must be held quarterly in states with eligible lands.

An important fact to consider is that industry generally selects the parcels in which it has some interest to be placed on the selling block: operators tell BLM what lands they have an interest in developing. Therefore, the fact that a lease parcel is being offered for sale in the first place is a good indication that pilot projects or seismographic testing have led industry to believe valuable reserves may be present, or at least to believe that it is worth the gamble to drill a speculative wildcat well. The concerned activist, therefore, should pay close attention to BLM oil and gas lease sales. In short, these lands are being offered for leasing for a reason – otherwise they probably wouldn't be on the selling block.

1. Competitive Leasing

BLM starts the competitive leasing process by posting a notice in the appropriate BLM State Office (as well as in the appropriate Forest Service office for any National Forest lands) stating which parcels are being offered, the time and place of the auction, and any stipulations to be included in the leases. This notice must be posted at least 45 days before the auction is held. If such a notice is not posted for a parcel in accordance with the law, any lease issued on that parcel is invalid. BLM regulations require that competitive lease sales within each state be held at least quarterly – BLM Wyoming, for example, holds competitive oil and gas lease sales every two months.[16]

2. Non-competitive Leasing

Once offered for lease sale, a parcel must be leased either competitively to a qualified bidder or, if not, non-competitively to a qualified applicant. BLM may retract only those parcels whose leases have expired, been terminated, canceled, or relinquished, or that do not go at auction or in the two-year period of non-competitive leasing following auction. BLM offers leases non-competitively in a combination first-come, first-served and lottery system. A non-competitive application may be made for any unleased parcel at any time other than the period between its being posted for competitive sale and its auction. Assuming the competitive auction yields no qualified bids, BLM accepts non-competitive applications filed before the competitive sale process began on a first-come, first served basis. If no such application is accepted (i.e., if none is made or if none meets the bonding and reclamation requirements described below), a lottery is held among all applications filed on the first day following the auction. Should none of these be accepted, a lottery is held among all applications filed on the second day following the auction, and so on.

Eligible Leaseholders

By signing a lease, the bidder certifies that he is qualified to purchase and hold a federal mineral lease. Eligibility requirements include not only citizenship, but also a certification that the bidder is in compliance with the anti-fraud provisions of FOOGLRA, the reclamation requirements of the Mineral Leasing Act, and the diligent development requirements for all leases issued to him under the Mineral Leasing Act.

Criminal penalties as well as lease cancellation can be imposed for untrue statements.

Post-FOOGLRA Leasing: Forest Service Oil and Gas Leases

After the Mineral Leasing Act was amended in 1987 by FOOGLRA, primary authority of leasing all public lands (FS and BLM) was vested with BLM. However, the MLA amendments provide that the FS regulate all surface-disturbing activities on the National Forests – including those from oil and gas operations.[17] In addition, the MLA provides that BLM cannot issue *any* lease in the National Forests over the objection of the FS.[18] In 1990, the FS amended its leasing regulations to comply with the new law, and a brief overview of the FS oil and gas leasing system is provided here.

Essentially, the FS developed regulations that break down its responsibilities under the MLA into a two-stage process. The first stage involves the identification and mapping of areas that may be suitable for leasing; this is generally done through the FS land use planning process, or the development of land and resource management plans (LRMPs).[19] The second stage is when specific lands are actually being considered for leasing – at that time, the FS shall review the underlying leasing decision and authorize BLM to sell the lease parcels.[20] The second stage requires three separate findings by the FS prior to authorizing BLM to lease the site-specific area: (1) a verification that leasing the land in question has been adequately documented in a NEPA document and is consistent with the LRMP for the particular National Forest; (2) an assurance that the proposed leases contain the proper stipulations related to surface occupancy; and (3) a determination that operations and development could be allowed somewhere on each lease, except where leases are offered with no surface occupancy.[21]

After completing the first stage, the FS, often without making the requisite three findings of stage 2, turns the leasing process over to BLM.[22] BLM then designates FS lease parcels that it intends to sell at the next competitive bidding process. At that point – and this may be several years after the completion of stage 1 – BLM contacts the FS for final approval, whereby the FS conducts its tri-partite stage 2 analysis. Upon approval from the FS after completing this analysis, the lease parcels are made part of the competitive lease sale, conducted by BLM.[23]

From Land Use Planning to Producing Wells:
An Overview of the BLM/FS Oil & Gas Decisionmaking Process

6

BLM and FS make several kinds of decisions about oil and gas development on public lands. At the national level, BLM decisions include adopting regulations and management policies. Both agencies make decisions at the local level by preparing land use plans (called resource management plans—RMPs—for BLM; LRMPs for FS). These land use plans identify areas that are closed or open to oil and gas leasing, as well as areas that require special development practices in order to preserve other resource values. Both agencies also make decisions about individual oil and gas operations. You have the right to participate in all of these decisions.

BLM and FS Land Use Plans

The Federal Land Policy and Management Act (FLPMA) requires that land use plans be prepared for all public lands managed by BLM. There are, at least, two decisions concerning oil and gas that should be addressed at the land use planning stage:

(1) Identification of areas available for oil and gas development; and,

(2) Identification of any special development practices or requirements that may limit oil and gas activities in certain areas (management directives).

BLM has a detailed process for developing resource management plans (RMPs). BLM must identify issues raised by the public, identify resource conditions, develop planning criteria, inventory data and collect information, analyze resource information and the appropriateness of certain land uses throughout the planning area, formulate alternatives, analyze the impacts of each alternative and select a preferred alternative.[24] An important consideration to note is that all future resource actions must conform to the RMP – a key example of an action that in most cases requires RMP amendment is coalbed methane development, which has typically not been analyzed in many outdated RMPs throughout the West. [25] Also be sure to check to see whether reasonable foreseeable development scenarios ("RFDs") outlined in RMPs have been or will be surpassed by proposed projects.

The FS has its own set of land use planning requirements, which are very detailed and found at 36 C.F.R. Pt. 219.

From Land Use Plans to Operating Wells

After public lands are slotted for potential oil and gas leasing in the land use plans, the next step is oil and gas leasing. After an initial determination that lands are available for leasing, BLM next offers the leases for sale in quarterly or bi-monthly public auctions, as more fully described in Chapter 5. Once an operator has obtained a valid lease, he has a contractual right to develop those public lands for oil and gas. This makes the leasing stage critical – once the lease is bought, this gives the develop-

er a right to develop that will rarely be denied. After obtaining a lease, an operator will most likely drill exploratory wells or "wildcat" wells, to test for commercial quantities of oil and gas. If successful, the next stage is submitting a proposal to BLM/FS for an oil and gas project – ranging from 10 or fewer exploratory wells to, for example, a recent 5,000 CBM well project in northeast Wyoming. Once the project is approved, the operator must submit an Application for Permit to Drill (APD) for each well. This is the last stage prior to drilling and the last opportunity for public participation. Approval of the APD requires consideration of site-specific factors, e.g., for CBM, a water management plan, in addition to a reclamation bond and a complete plan of drilling operations.

NEPA:
Four Key Entry Points to Public Participation in Oil & Gas Development

7

The National Environmental Policy Act ("NEPA") was adopted in 1969 in order to ensure that the public and decision-makers are aware of impacts to the environment before undertaking any major federal action. The practical result of NEPA on oil and gas on public lands is the opportunity for public involvement in the "NEPA process." The NEPA process is most widely recognized for the opportunity that is provided by law for the public to comment on environmental impact statements (EISs), environmental assessments (EAs), and scoping requests (scoping). BLM/FS are also required to seek out comment from other federal agencies and local governments that might be impacted by the project.

The NEPA process is designed to put the onus of disclosing likely impacts, alternatives, and mitigation measures on the federal agencies and the proponents of the project. The public participation requirement was included in recognition that agencies and developers often "overlook" important impacts. Unfortunately, the BLM oil and gas program has devolved the NEPA process into an insidious game of "gotcha" that requires vigilant oversight to ensure that both the public and the agencies are fully involved and fully informed. This section describes the NEPA process as it applies to oil and gas development and is broken out into four stages: planning, leasing, full field development, and permits to drill.

Stage One: Public Participation in Land Use Planning

BLM must allow the public to participate in developing or amending land use plans.[26] Usually BLM writes an environmental impact statement (EIS) along with the land use plan. BLM must seek your views at several points in the EIS process.

• Commenting on Land Use Plan Development

NEPA requires BLM/FS to prepare an environmental impact statement whenever it proposes to take an action "significantly affecting the quality of the human environment." Preparing a new land use plan, or making major amendments to an existing plan, almost always requires an EIS.[27] If BLM or FS decides to prepare an EIS, you should get involved in the "scoping" process. "Scoping" is a public process required by NEPA geared at obtaining input from concerned citizens, state and federal agencies, and the scientific community concerning the issues and alternatives to be discussed and analyzed in the EIS process. It is performed by the BLM/FS before a draft EIS is formulated. Pay particular attention to this stage, which determines much of the subsequent analysis. Be sure to raise oil and gas as an issue of concern, as many of BLM's land use plans contain little or no discussion of mineral development. Suggest portions of the planning area that should be off-limits to leasing or will require special management to prevent harm to environmental resources. In a letter to BLM, identify such issues as fish, wildlife, cultural resources, water quality, and recreation. A sample scoping letter for issues to raise in the development of RMP/LRMPs is included in Appendix 3.

Next, BLM will circulate a draft EIS and invite the public to comment on it. The EIS is supposed to be a detailed analysis of the direct, indirect, actual, potential and cumulative impacts of a proposed action. In other words, in compiling an EIS, BLM is supposed to look at everything that would happen to the environment if the proposed land use plan goes into effect. Check to see if the EIS contains detailed information about the soils and vegetation of the area, the kinds and numbers of wildlife species that use the area and the effects of oil and gas development on those species, the effects of drilling on water quality and quantity, and the scenic and recreational resources in the area and the effects of development on those resources.

Pay particular attention to the *cumulative impacts* of the proposed action. For example, in a mineral-rich region, BLM must add the impacts from *all* activities – private, state and federal – that could affect one resource, including those already existing and those projects likely to exist. As an example, the impacts to wildlife from roads involved in private, state and federal oil and gas development must be assessed in combination with other likely wildlife impacts from hard rock mineral activity, timber sales, grazing and all other land uses.

The alternatives section is the "heart" of the environmental impact statement, and you should insist that BLM/FS explore meaningful alternatives to its proposed land use plan. The alternatives should be realistic – not just straw men designed to make the preferred alternative look good. There should be a detailed description and analysis of each alternative, and – this is important – a detailed comparison of alternatives. Look for the following kinds of alternatives and, if they are not discussed, ask BLM/FS to do so:

Alternatives to land use plans:

- Is there a full range of oil and gas leasing alternatives, including different levels of development, as well as BLM's "preferred alternative?"
- Did BLM/FS consider the cumulative impacts on the planning area if all leased properties were to be developed?
- Has BLM/FS considered a "no action alternative" of no leasing?
- Has BLM/FS considered alternatives that discuss which areas, due to topography or paleontological concerns for example, should be closed to leasing, or closed to surface occupancy?

• Comment on Availability of Specific Lands

Contrary to the message you may have received from BLM or the Forest Service, not every acre of public land must be made available for oil and gas development. BLM has considerable discretion in determining whether particular public lands ought to be subject to this activity. It is important to remember that BLM and FS have full discretion to withhold land from leasing. BLM/FS can decide that recreational, scenic, wildlife, or other values on the surface exceed the benefit of leasing the underlying oil and gas reserve. If there are lands that you believe should not be developed because of their unique environmental resources, you should make your views known to the BLM/FS Resource Area Manager (Field Manager or Forest Supervisor) in your comments on any proposed land use plan for the area.

• Comment on Management Directives

A land use plan should also include management directives for how oil and gas operations will be conducted on different tracts within the planning area. For exam-

ple, the land use plan might require that exploration be suspended in elk habitat during the calving season or that operations not take place within a certain radius of a sage grouse lek. These limitations become part of any leases issued and are known as "seasonal" or "timing" stipulations. On steep slopes with serious erosion problems, the land use plan might set out strict requirements for road construction. In specially designated zones, such as areas of critical environmental concern (ACECs) or research natural areas (RNAs), the land use plan might adopt very stringent controls on oil and gas activity. The plan might include a ban on surface operations in these fragile areas. All leases issued in these areas should include a "no surface occupancy" (NSO) stipulation. In addition, in areas with special visual qualities, the land use plan might provide no derricks be erected. Unlike a decision not to make lands available for leasing, none of these plan provisions are likely to prohibit the area from being developed. However, they will result in better protection for other public lands resources... if fully enforced by BLM.

The final EIS and final RMP decision will be issued after BLM has reviewed the public comments. If the decision doesn't adequately redress issues you are concerned about, you can protest or appeal it. (See Chapter 11)

Stage Two: Lease Sales

Prior to conducting any oil and gas related activity on public lands, the individual or oil company must first obtain an oil and gas lease from BLM. Public notice that lands have been proposed for leasing must be posted 45 days prior to the sale. (See previous discussion of competitive and non-competitive leasing in Chapter 5.) That 45-day period is your window of opportunity to raise your concerns about environmental impacts to the areas being leased. "Posting" generally means placing written notice of the sale in the BLM state headquarters office, as well as each separate field office where lease parcels will be sold. The sales are not usually announced in newspapers or other public media – Wyoming, however, in recent years, added the "posting" or notice to its state BLM home page on the Internet. Consult your local BLM officials to inquire about pre-leasing postings and other notice.[28]

It cannot be overstated how critically important effective public participation is at the lease sale stage. Once a lease sale is final, the developer has a contractual right that allows him entry onto the land surface, subject to lease stipulations. True, site-specific conditions may be added at the APD approval process (see below), but once the lease is sold, the right to say "no" to development becomes extremely difficult – of course, like any contract, BLM could breach and pay damages, but this is very unlikely and not something to count on.

A key distinction at the leasing stage is those leases that proscribe all surface occupancy (no surface occupancy or "NSO" leases) and those that allow some level of surface occupancy (non-NSO leases). In very simple terms, if the lease is non-NSO, the courts have held that as the right to say "no" to development and surface occupancy is lost, this is a full and irretrievable commitment of federal resources, necessitating a full EIS.[29] The 10th Circuit Court of Appeals (which is binding law on the federal district courts in Wyoming, Colorado, New Mexico, Utah, Kansas and Oklahoma) has reached a different conclusion, holding that in non-NSO lease sales, NEPA is satisfied with an EA or EIS.[30] Public participation and full consideration of the "no lease" alternative, however, is always required before a lease sale.[31] In many cases, both BLM and the FS will rely on the EIS prepared for the RMPs/LRMPs for the

pre-leasing NEPA EIS compliance. The public and activists should be ready to protest and challenge any lease issued without a new NEPA process, in order to examine the impacts, alternatives and stipulations for each specific lease of public oil and gas that is put up for sale. In many cases, as BLM has recently admitted to Congress, the land use plans (RMPs) in place are grossly out of date (many of them developed in the mid-1980s or earlier) in terms of resources analyzed (e.g., no CBM analysis) or the RFD (reasonably foreseeable development) scenario for oil and gas productions.

Stage Three: Project-Level or Full Field Development NEPA Analysis

After obtaining a lease in a valid sale, the operator will apply to BLM/FS for approval to develop exploratory (or "pilot") projects, and in the case of proven reserves, for full-field development. This is a third level of public participation – as these projects all require compliance with NEPA. An environmental assessment (EA) is usually prepared, and if the impacts are significant to the human environment, an EIS must be prepared. This is a key time for the interested and affected public to voice their concerns with the project, as at this time, the proposed oil and gas development will be identified by township, section, range and quarter-section. Accordingly, unlike the land use plan and pre-leasing NEPA decisions, this is the first time the public knows specifically where the development will occur on public lands. As such, site-specific factors can be raised, such as wildlife corridors, brooding or nesting sites and important aesthetic, cultural and paleontological concerns. (A sample NEPA scoping letter for a specific oil and gas project is included in Appendix 4).

Stage Four: Applications for Permits to Drill (APDs)

No lessee can undertake any activity that disturbs the surface of a leased parcel and require reclamation without an approved Application for Permit to Drill (APD). The APD is the fourth and final stage before the drill bit breaks the ground – therefore, it is a critical time for public involvement, as NEPA requires an EA at the very minimum in terms of APD environmental analysis. In essence, this is the public's last crack at providing input, voicing concerns, and appealing, if necessary, APDs that are approved in violation of the law.

A complete APD must contain both a "drilling plan" and a "surface use plan of operations." The drilling plan describes the drilling program, maps out the surface and underground locations to be disturbed, provides geological data, predicts hazards (such as releases of oil to nearby streams), and proposes ways to avoid such releases or to mitigate their effects. The surface use plan describes the location of the roads and drill pads, provides specifics of the pad construction, details methods for containing and disposing of waste material and sets out plans for reclaiming the surface. Before activities can begin, BLM must approve both plans.[32]

Most importantly, before the BLM can approve an APD, it must first post a notice of the proposed action, including the terms of the lease and a map or description of the affected lands. The BLM may not act on an APD until this notice has been posted in the appropriate BLM state office (and, for Forest Service lands, the appropriate Forest Service office) for thirty days, regardless of other considerations. BLM must also notify and consult with any "interested parties" upon receipt of an APD.[33] The notice issued by BLM should include the name and address of the responsible

BLM official. This 30-day period may be your only opportunity to tell BLM of your concerns about the proposed drilling activity. Importantly, inadequate NEPA analyses at Stage 1 (RMP), 2 (lease) or 3 (project-level) can be remedied by challenging a single APD, which could halt development until the NEPA process is correctly followed and completed. A detailed checklist of the procedural and substantive BLM APD approval requirements is contained in Appendix 5.

Public Participation in the First Few Wells is Critical

A note here about FOOGLRA mandated posting of APDs is necessary. The concerned activist has to be very much "on the ball" and on the lookout to catch initial exploratory, pilot project or "wildcat" wells. We have often first heard of stage 3 full field development projects, which are based on the success of one or just a few initial wells, without knowing that the first few wells had been permitted. In other words, those first couple of wells had APDs approved, in most cases, without any public involvement or comment. We recommend therefore, unless and until BLM revises the manner in which it buries APD postings in local field offices, a weekly trip to your local BLM field office to inquire about all pending APDs. Currently, this is the best way to ensure knowledge of all oil and gas well approvals and is important, because once these first few wells "slip by" public scrutiny and are approved, the cat is more or less out of the bag, and BLM will be more likely in subsequent projects to choose a preferred alternative to allow the maximum number of industry requested wells based upon the success of these first few. The point is for the activist to catch wind of these projects early, and voice important concerns and pursue administrative appeals for illegal APD approvals.

FS APD Approval

The FS has its own regulations regarding APD approval, and can be found at 36 C.F.R. §§ 228.106; 228.107; 228.108; 228.109 and 228.110. Importantly, unlike BLM, which follows the bare minimum FOOGLRA requirement of an obscure posting of the APD, usually buried in a notebook in the appropriate Field Office (which is a FOOGLRA and NEPA violation), the FS explicitly requires full compliance with NEPA as part of the review of APDs *prior* to approval.[34]

• Public Participation in the APD Approval Process

As stated, each APD is accompanied by an environmental assessment (EA). The EA should include brief discussion of the need for the project, alternatives to the project, and the environmental impacts of the proposed action, as well as the alternatives. This discussion must be sufficiently detailed to determine whether impacts may be significant and the preparation of an EIS is required. BLM also has identified some common activities that normally do not result in significant environmental effects. These activities are usually confined to such things as mowing lawns and maintaining campgrounds and have been "categorically excluded" from the requirement to prepare an EA. No EA is prepared prior to authorization of these activities.

Approval of a single, exploratory well, for example, (see above) might be granted a ***categorical exclusion***, but any use of a categorical exclusion in the oil and gas program should be viewed with extreme suspicion and is quite likely in violation of NEPA. If BLM/FS believe that no significant impact will occur, either as a result of an EA or categorical exclusion, no further environmental analysis will take place and no

public comment will be invited before the action is approved. Again, the NEPA process requires public participation and any APD that is issued without public involvement is quite likely a violation of NEPA. A simple Decision Notice or Decision Record (DN/DR) will be issued by BLM. If approved, a permit goes into effect immediately. The DN/DR and accompanying ***Finding** of **No Significant Impact (FONSI)*** are, however, subject to protest to the State BLM Director and appeal to the ***Interior Board of Land Appeals (IBLA).*** (See Chapter 11.)

• **Have the Alternatives to proposed APDs been Adequately Considered?**

As the APD approval process is the last chance for public input, the following alternatives should be evaluated in the EA:

• Did BLM analyze alternative drilling methods, such as directional drilling from off-site, that would cause less surface disturbance?

• Did BLM consider downsizing the proposed development or gradually phasing in development?

• Did BLM examine alternative locations for haul roads, drill pads, or other facilities?

• Is there a serious "no-action" alternative? No action means just that: BLM takes no action to approve the proposed development and no drilling takes place. Even if BLM feels constrained to approve drill permits because leases have already been issued, a no-action alternative is needed as a basis for comparing the impacts of the development.

• If there are likely to be very severe impacts, did BLM examine the option of lease rescission and estimate the cost of breaching the lease.

• **Bonding Requirements**

Prior to the breaking ground and *before* an APD is approved, a bond must be provided by the operator in order to ensure compliance with well plugging, reclamation of the leased area, and restoration of any lands or surface waters affected by drilling operations.[35] The minimum bond amounts are $10,000.00 per lease, per operator (note, not per well), $25,000.00 blanket for all leases an operator has in one state and $150,000.00 blanket for all leases nationwide.[36] A prior history of causing BLM to require payment under a bond, drilling violations or unpaid royalties may result in a higher bond amount – in addition to situations where BLM determines that estimated costs of plugging and reclamation exceed the minimum amounts.[37] Evidence of sufficient bond coverage must be provided as part of a complete APD.[38]

An important consideration for public involvement is raising the amount of the minimum bond requirement due to anticipated costs of reclamation. An informed activist should be prepared at this stage to demonstrate to BLM recent reclamation estimates for similar projects, and, in the case of CBM activities, a point-by-point checklist of all surface and sub-surface (e.g., water wells) impacts that must be protected by bond coverage. Reclamation of *one* well will usually exceed the $10,000.00 minimum, which is the amount for *all* wells drilled under a valid lease. A recent study by BLM indicates that "orphaned" wells in the West will cost an average of $19,000.00 *per well* to reclaim, with some sites costing $75,000.00. The concerned activist should be armed with evidence and points of concern to ask that bonding amounts be raised much higher than the statutory minimum. **Be sure to point out this information and local clean up estimates to BLM officials who have the discre-**

tion to raise the bond minimums pursuant to 43 C.F.R. ß 3104.5(b). Bonding is important – if operations do not go as expected or the operator simply wishes to abandon its operations, often, the only monies available to restore and reclaim these public lands in your backyard are those provided for in the bond.

8 Issues to Raise

Oil and gas production has various environmental effects throughout the life of a well from the initial exploration operations, construction of the roads and well pad, the drilling of the well, preparation for production, to the actual production of oil and gas. This chapter is a "toolbox" of issues to raise when you review BLM/FS resource management plans, and oil and gas leasing and production decisions. It is not necessary to bring up every issue. Focus on the ones that most concern you. Remember that the following issues can and should be raised at all phases of NEPA (initial scoping, EAs, draft EISs and final EISs) as well as all stages of oil and gas development (land use plan development, pre-leasing, full field development and APD approval).

Soils

BLM/FS are required to manage their lands to protect soil resources. Exploration activity, construction of the roads and well pads, and installation of pipelines can cause mixing of soils and loss of vegetative cover due to explosives used and the digging, leveling, and scraping required. The use of trucks and other heavy equipment also compacts the soil. The results can be erosion, loss of soil productivity, increased runoff, landslides and flooding.

Water

Both surface water and groundwater may be adversely affected by drilling operations. Surface waters may be dirtied by increased sediment levels due to erosion, increased flows from runoff, and by the construction of road crossings. Stream beds may be altered by changes in the volume or location of flows that feed streams. Water quality may also be affected by leaks or disposal of wastewater from wells. Groundwater may be contaminated if drilling fluids and chemicals from the well hole escape into underground reserves, or minerals migrate between geological formations during drilling. Pipeline or storage tank leaks, leaks from mud pits, or wastewater disposal by injection wells may also contaminate the groundwater in the area of the well. If the groundwater feeds surface water, the contamination may also spread to neighboring bodies of water. BLM/FS have a duty to ensure that their leasing decisions will not lead to violations of water quality standards and other provisions of state water quality programs.[39] The agency cannot simply claim that it has no evidence of water quality violations. BLM/FS are responsible for gathering the needed data and determining the likely impacts of oil and gas operations on water quality.

Your state water pollution control agency can provide a copy of the water quality standards that apply to the streams you are interested in. The state agency will also know if any streams have been designated for special protection under its antidegradation program. BLM/FS must also guarantee that existing water quality in such streams is maintained or improved, even if it is already better than the standards. Also ask BLM/FS for copies of all water quality monitoring data for the streams in the area you are interested in, and compare those data with the standards to see if the

standards are being violated. If water quality data is lacking, BLM/FS should use computer models, past experience, comparisons with similar, nearby watersheds, or any other reasonable and available techniques to estimate impacts on water quality. If the impact of a proposed action on water quality cannot be predicted, then BLM should not take the action. The Clean Water Act requires that BLM/FS must modify or abandon the action if necessary to ensure that water quality standards will not be violated.

For specific water issues related to coalbed methane, see the end of this chapter.

Hazardous Waste

Drilling for oil and gas often involves toxic materials, and BLM is required to list hazardous wastes for proposed projects in its NEPA documents. Drilling mud, for example, is a mixture of water, bentonite, polymers, caustic soda, barite, and, in some cases, oil. It is usually stored either in earthen pits on the location, or in tanks. This mud, together with any wastewater that is produced from the well, must be disposed of properly. Injection wells are frequently used to dispose of these wastes by pumping them into another underground formation, but wastewater may also be placed in neighboring bodies of water. According to BLM/FS, this is an acceptable method of oil waste treatment. A permit from the state's water quality agency should be required, however.

Plants and Wildlife

Earth-moving required in exploration activity and in constructing roads and well pads destroys vegetation and leaves the precious top layer of fertile soils extremely vulnerable to erosion. If the drilling sites are located in forested areas, construction may also require destroying trees. New and noxious weeds introduced during construction may replace the original vegetation. Other types of plant life, such as stream-side grasses and trees, or plants that live in wetlands, can be poisoned by leaks or spills that occur during drilling as well as the production phase of a well. The effects of drilling on fish and wildlife are related to the impacts on soil, vegetation, and water. Erosion, sedimentation, and chemical contamination of surface waters destroy fish habitat. Stream crossings may affect the ability of fish to migrate upstream to spawn or may destroy spawning areas. When vegetation is removed, wildlife that depend on those types of plants must go elsewhere to forage or hide. In addition, roads and vehicular traffic may disrupt wildlife migration and travel routes or break up the habitat of animals that will not cross roads. Fragmentation of habitat may limit the forage that is available to those species or make them easier prey. It may also limit their gene pool. The mere increase in human access can also force some kinds of wildlife out of the area. These effects can be especially harmful if they involve ***endangered or sensitive*** species.

BLM/FS have special responsibilities if a lease area contains, or may contain, any federally-listed species or species that have been proposed, or are being considered, for listing under the Endangered Species Act. BLM/FS must thoroughly evaluate the impact of oil and gas operations on those species and their habitats, including potential habitat. You should ask the agency to carry out a thorough, on-the-ground inventory before offering any lands for oil and gas leasing.

Contact the regional office of the U.S. Fish and Wildlife Service (FWS) for listings of endangered, threatened, proposed, and candidate species for your area of

interest. If oil and gas operations may affect either a protected species or its habitat, then BLM must formally consult with the FWS regarding the impact. BLM should also consult with the state's wildlife agency and protect all plants and wildlife, not just threatened or endangered species. In many areas, the activities associated with leasing can interfere with species such as elk, bighorn sheep, and cougars. If BLM/FS have completed a land use plan for the area, check to see if it identifies these or other species of concern. Also ask if BLM (or your state wildlife agency) has special management plans or guidelines that are not a part of the land use plan. Find out if there are additional species of concern not listed in the land use plan. Ask for copies of all habitat management plans for these species. Using this information, you may identify potential impacts that the agency has overlooked.

Archaeological and Historical Sites

Frequently, public lands are home to archaeological or historic sites that are listed or eligible to be listed in the National Register of Historic Places. The National Historic Preservation Act (NHPA)[40] requires BLM/FS to make a literature search to determine whether oil and gas leasing may affect any areas listed or eligible to be listed on the National Register.[41] In addition, BLM must request the views of the State Historic Preservation Officer and seek information from other interested parties who are likely to know about historic properties in the area. The agency must make a "reasonably good faith effort" to identify historic properties that may be affected by its undertaking and gather sufficient information to evaluate the eligibility of these properties for the National Register.[42] If you believe an area has significant cultural resources, ask BLM to perform a thorough on-the-ground cultural resource survey before any construction begins or before any leases are issued. If potential adverse effects are identified, BLM must consult with the Council on Historic Preservation, the State Historic Preservation Officer, and other interested parties about mitigation measures.[43]

There may also be Native American burial grounds or other sites that are important for worship or ceremonial uses in the area. The Native American Graves Protection and Repatriation Act of 1990[44] requires federal agencies to consult with Native Americans concerning activities that may affect archaeological resources of importance to them. Native American access to sacred sites for the purpose of worship or other ceremonial use is protected by the American Indian Religious Freedom Act of 1978,[45] and BLM must ensure continued access to these sites. Drilling can affect these sites directly, by destroying them during construction, or indirectly, by changing the character of their surroundings, and by providing improved public access that leads to vandalism.

Visual Quality

Even in areas without specific cultural significance, the ongoing presence of production equipment and the well sites themselves may destroy the scenic value of the area. Especially along major travel routes, or public lands that are unique or especially beautiful, the presence of oil or gas wells can be devastating to the vista. Check the land use plan for the area to determine what visual quality guidelines applies.

Air Quality

Oil and gas drilling may affect the air quality in the region near a well. Wilderness areas, National Parks and other pristine areas designated as Class 1 air-sheds are protected against diminished views. Dust from the road, emissions from exploration, construction, drilling and production equipment, and exhaust from the traffic to and from the well area can lower air quality. Development and production of gas wells may require releases of methane gas and a myriad of toxic gases into the atmosphere. The Clean Air Act[46] requires agencies to "affirmatively protect the air quality related values" (AQRV) in an area. Check the land use plan to determine whether there are AQRV standards for the area, and whether BLM's leasing decisions and actual drilling operations are consistent with them. Also check with the state air pollution control agency regarding any permits that must be obtained for activity affecting air quality.

Special Concerns With CBM Development

When the issue is CBM extraction, remember to raise all the above issues. In addition, the following considerations should be raised:

- Water quantity and management: how will BLM/FS manage the massive amounts of produced water. If reinjection is involved, issues arise under the Safe Drinking Water Act as underground drinking water sources may be contaminated. Is the agency adding mitigation stipulations to adequately protect existing water rights, in particular, nearby water and stock wells?
- Water quality: CBM by-product water is typically high in total dissolved solids (TDS), minerals and salts. Have BLM/FS, if the water is to be stored in reservoirs or dumped onto the ground, provided baseline information for existing water quality? Have they assessed the impacts of high saline water on soils, vegetation, fisheries, domestic livestock and wildlife?
- Has the agency thoroughly examined the potential for spontaneous combustion in partially dewatered underground coal seams?
- Has the agency studied the potential impacts due to migrating methane (gas that vents to the surface other than through the well), and the impacts to wildlife, soils and human safety?
- Has the agency studied the possibility of ground subsidence that may occur when the structural integrity of underground geological substrata is compromised due to massive dewatering?
- Has the agency adequately assessed and modelled the time for underground aquifers to recharge and replenish?
- Is the agency requiring an adequate number of monitoring wells to keep an eye on changing water quality, drops in hydrostatic pressure, lowering of the water table and rates of aquifer recharge?

These are but a few of the major impacts associated with CBM extraction and it is important to raise the issues that are germane to the project being proposed. Since CBM extraction remains experimental, contact one of the groups listed in Chapter 4 to obtain a current list of concerns. The purpose of NEPA, of course, is to study, understand, disclose and assess mitigation alternatives for all of these impacts *before* the project is approved, and not years later, when the environmental impacts will most likely be irreversible.

9 Special Concerns Dealing with Split-Estates

Background

A key tension in the West involves the split-estate, a phenomenon resulting in two or more different owners of the same parcel of land. Many of the lands in the West – over 30 million acres – were acquired under the Stock Raising Homestead Act of 1916 ("SRHA"). Essentially, this law severed the mineral estate from the surface estate – the Act was meant to curb prior homesteading abuses. Therefore, folks that homesteaded this land received ownership of the surface, while the federal government retained ownership of the minerals. BLM leases out the minerals, including natural gas/CBM, at a competitive bidding process described in Chapter 5. The Act provides for a Right of Entry for the mineral lessee. The tension involves the surface owners – typically ranchers and agricultural producers in the West – and the mineral owners, as the former have little or no control over what the mineral owners can do. The mineral owners/lessees can build roads, pipelines and power lines, dam up gullies, build reservoirs to contain CBM water and build compressor stations and well pads – simply by providing a bond. Landowner consent – amazingly – is not needed. State eminent domain laws protect the mineral owner by allowing him to "condemn on" and wreak this havoc, as the surface owner, generally left with few protections, is forced to sit back and watch.

A pump jack is used to pump water to create coalbed methane near a home outside of Durango,. State regulations, which can be waived, generally require drillers to drill wells at least 150 feet from Coloradans' homes.

The Brannaman ranch near Sheridan, Wyoming, where the mineral rights are severed from the surface rights. In the late 1990s, these first few wells and roads were constructed.

As an example, consider Wyoming's Powder River Basin. In this region, BLM administers 10% of the land surface in the Basin, yet it controls 56% of the natural gas reserves. Three counties, Sheridan, Johnson and Campbell, totaling 7,338,880 acres, comprise a majority of the Powder River Basin. In fact, nearly 4 million of these acres are categorized as "federal mineral

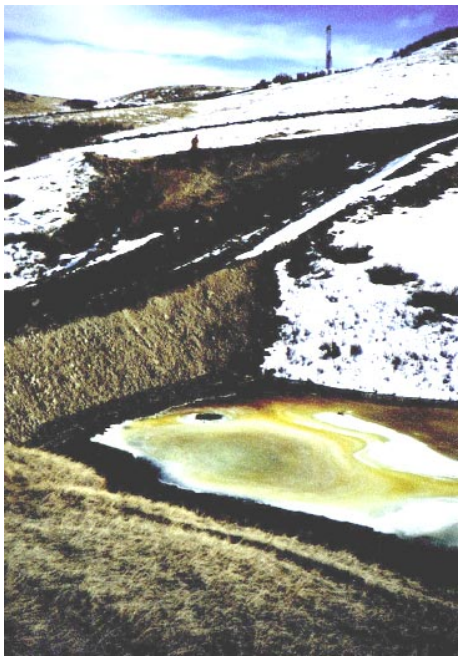
under non-federal surface" – meaning that 53% of the entire Basin has the tension-filled ownership pattern with the surface estate severed from the mineral estate. Indeed, with over half of the landowners in the Basin being told that they are "subservient" to the dominant mineral estate, the split-estate phenomenon serves to divide the people living in the West in the same fashion its divides one estate from another. Fortunately, modern trends in the law recognize the surface and mineral owners as co-equal, with each owner required to respect the rights of the other.

Steep topography can make surface disturbances significant: one road constructed at the Brannaman ranch to provide access.

Additional Protections for Split-Estate Surface Owners

As stated, the split-estate creates two estates – the surface and mineral. The SRHA provides for an automatic right of entry: "Any person qualified to locate and enter the coal or other mineral deposits . . . shall have the right to enter upon the lands entered or patented . . . for the purpose of prospecting for coal or other mineral therein, provided he shall not injure, damage, or destroy the permanent improvements of the entryman . . . and shall be liable to and shall compensate the entryman or patentee for all damages to the crops on such lands by reason of such prospecting."[47]

Due to the nature of the split-estate, Congress and BLM have provided at least a few protections to the surface owner – these must not be overlooked by citizens living on or near these lands.



Earthen dam filling in natural drainage on Brannaman ranch to provide well access.

• Consent or Bonding. Prior to occupying the surface to retrieve minerals, the operator must: (a) secure written consent or waiver of the landowner; (b) secure a written agreement for payment of damages to crops or other tangible improvements; or (c) in lieu of (a) or (b) post a sufficient bond, the amount of which is subject to appeal.[48] **Note that if a written surface use agreement is signed, the special SRHA bonding rights and appeal procedures do not apply. This underscores the importance of the surface owner taking the necessary time and resources – consulting neighbors who have entered into similar contracts is a good start – to enter into the best surface use agreement possible.**

• Bonding procedure:

The bond must be at least $1,000.00 (1998 amount) (this is a separate bonding requirement from the other bonding requirements explained in Chapter 7), and filed with the BLM Field office *and* provided to the landowner. Evidence of service of the bond to the landowner must be filed with the BLM officer as well. If after 30 days from receipt there is no objection to the bond amount, the BLM officer may approve the same. If there is a timely objection to the amount, the officer "will immediately" consider the bond and objections. If he decides that the bond ought not be approved, he shall give notice to the operator, including information on appeal rights. If the officer approves the bond notwithstanding the objection, he shall, in writing, duly notify the landowner and allow the owner 30 days in which to appeal. In either case (approving or disapproving the bond) the officer shall wait until the expiration of the 30 days, and if there is no timely filed objection, he may then approve or disapprove the bond, per his original decision.[49]

•Special State BLM Protections

In Wyoming, BLM adopted an Instruction Memorandum on the SRHA split-estate issues that affords additional protections. Check with your state BLM on any special rules on split-estate oil and gas drilling that must be followed. For example, this Instruction Memorandum provides that:

- A surface use agreement is "desirable," but not mandatory.
- The operator may choose either bond amounts as set forth in 43 C.F.R. § 3814 or 43 C.F.R. § 3104. Importantly, the *procedures* set forth in 43 C.F.R. § 3814 must be followed, regardless of which section is used to determine the bond.
- Importantly, *even if* a surface use agreement is reached, a bond per section 3104 is still mandatory. 43 C.F.R. § 3104.1(a) requires that the bond amount is adequate to cover complete and timely well plugging, reclamation of the lease areas, and the restoration of any lands or surface waters adversely affected. The bond must be at least $10,000.00 per lease (note, not per well); $25,000.00 may be posted statewide, and $150,000.00 nationwide by one operator for all leases.[50] If the total cost of reclamation will exceed the bond amount, the BLM officer may raise bond amount requirement.[51]
- Oil and gas bonds are not "insurance policies" and are not designed to ensure access to lands; as such, the term "bonding-on" is misleading, not to be used by BLM.
- Onshore Order No. 1 must be followed. Within 15 days of receiving a Notice of Staking or APD, the officer shall schedule and shall invite the landowner to an on-site inspection. A complete APD must include evidence of adequate bond coverage.

- Importantly, the BLM officer must determine whether the bond is sufficient to ensure compliance with the MLA and SRHA. The officer should increase the bond above the minimum amounts if not enough to cover adverse impacts, including, but not limited to:

(i) damage to crops;
(ii) damage to tangible improvements;
(iii) loss of grazing land; and
(iv) adverse water impacts.

- After the landowner has had an opportunity to review the adequacy of the bond and file any objections, the officer must make a determination regarding the adequacy of the bond, and provide, via certified mail, his decision to the landowner, and allow 30 days to appeal. If no objection is filed within 30 days, the bond may be approved. Approval of the APD comes after the 30-day period during which the landowner may appeal the bond decision. If the officer is aware of a surface use agreement, it is not necessary to provide the landowner a 30-day period to review the bond.

Any landowner must familiarize him or herself with these important safeguards, particularly as they relate to special notice requirements, on-site inspections and bonding procedures/amounts. These regulations do not come near enough to protect the interests of the surface estate owner – it would be foolish, however, to ignore the few protections out there. For a detailed APD checklist, including protections provided under the SRHA, see Appendix 5.

10 Being an Effective Advocate

Get to Know the BLM and FS

BLM is organized by state, but you will work most closely with the Resource Area Field Manager. The Forest Service in turn is organized by Region, National Forests within that Region, and Ranger Districts within each National Forest. These are the people who make the key leasing decisions: what lands will be leased, and under what conditions. Don't overlook the wildlife biologists and recreation specialists, who may well be more helpful than other staffers. The oil and gas program requires the same interdisciplinary evaluation as any other activity, so be sure to contact the agency personnel that deal with all resource conditions – wildlife, fisheries, watersheds, air, etc.

Arm Yourself With the Facts

Ask the BLM/FS District or Resource Area staff for copies of the agency's planning and leasing regulations; the regulations establish the rules both they and you will need to follow. Also ask for copies of all relevant environmental and planning documents for the lands you are concerned about, including:

- The leasing or drilling permit Environmental Impact Statement or Environmental Assessment, if there is one;
- the draft and final land use plan and EIS;
- any analysis of available monitoring data on air and water quality;
- any proposed or final habitat management plan or other special activity plan that has been prepared for the area;
- a copy of the lease; and
- a history of the use of the lands, and the lease applicant, including any violation of drilling permit terms.

If the lease offering overlaps a Wilderness Study Area, the draft or final wilderness EIS for the area may also contain valuable information. Read these documents carefully. They are almost certain to contain information that will help you get started as well as help you determine whether changes in management are necessary. Then, pay a visit to the District or Resource Area office and carefully inspect the file for the lease offering or APD. All files are public information with the exception of personnel files. You have the right to review them. If you can, it is probably worth going through the files twice: once at the beginning of your involvement and again later when you are more knowledgeable and able to recognize the real significance of the documents that are there. Ask for copies of the documents that look useful or important.

- **Make Use of the Freedom of Information Act**

If BLM/FS refuse to provide access to, or copies of, documents that you want, use the Freedom of Information Act (FOIA).[52] Just put your request in writing,

describing as specifically as you can the documents that you want to look at or have copies printed. Agencies are quick to find any reason these days for denying public access to these public documents – as such, FOIA practice has become a fertile litigation ground for public interest attorneys, who, if successful, may be able to recover their attorneys' fees. Sample Freedom of Information Act requests (BLM and FS) are included in Appendices 1 and 2; be very specific concerning the documents you need and **pay close attention to the specific requirements to obtain a fee waiver.**

Refusals of FOIA requests are rarely justified. If your request is denied by BLM (or any other Dept. of Interior agency), you should appeal the denial by writing a letter to:

Freedom of Information Act Appeals Officer
Office of the Assistant Secretary—
Policy, Budget and Administration
U.S. Department of the Interior
18th and C Streets N.W.
Washington, D.C. 20240

Forest Service appeals must also be made in writing and "FOIA APPEAL" should be placed in capital letters on the front of an envelope addressed as follows:

Chief
USDA Forest Service
P.O. Box 96090, Stop 1143
Washington, D.C. 20090-6090

• Get to Know Your Neighbors

Contact organizations and agencies that may be able to provide information, assistance or support. These include state agencies like the wildlife or water quality agency, local offices of national environmental organizations, grassroots groups, and federal agencies like the Environmental Protection Agency. One good way to locate the names of individuals and organizations who share your interest in a particular area is to see who commented on any draft EIS or land use plan for the area. Comments are usually printed in the back of the final EIS.

• Get to Know the Areas You Want to Protect

Visit the area as often as you can. Take your camera and keep a journal. Your observations and photographs can provide powerful support for your recommendations. **Document management problems with your camera and/or camcorder.**

Be Persistent

Make sure you let BLM/FS know, in writing, that you want to be informed of, and consulted about, all decision, plans, and environmental documents affecting the area. Ask questions, and follow up on the answers you get. For example, if you are told that the approved surface use plan is being complied with by the company, look at the requirements of the plan and inspect the drilling site yourself. Ask to see BLM/FS's inspection reports on the operation. Keep a record of your letters, and, if problems are not being resolved, send copies to your congressional representative and your senators. Use these examples, or let other use them, in oversight hearings by

committees of Congress. Make them available to other federal agencies and investigative reporters. If you decide to protest or appeal a subsequent leasing or permitting decision, submit copies of past letters of complaint. Remember, put everything in writing. Put your observations of land conditions, your objections to BLM failures to notify you or consult with you, and your criticisms and praise in letters to BLM. Save copies of your letters.

Don't Burn Your Bridges

Start off assuming that BLM/FS personnel want to do a good job of managing the public lands and would like your help. Many of them do. If you do encounter resistance to your participation, insist on your rights. Both FLPMA and NEPA require BLM/FS to involve interested citizens in management of the public lands. When the agency does something right, whether it is providing you with information or making a good substantive decision, don't forget to let the people there know. Support good managers whenever you find them.

Don't be Intimidated

Don't be afraid to tell BLM/FS what is bothering you about the agency's management decisions. You don't need to be a wildlife biologist or a hydrologist or a lawyer to insist that something is wrong. If the area looks bad, say so! Protecting scenery, recreation, and aesthetic values are among BLM/FS's most important legal duties. These are your lands and resources. You have a right to participate in decisions about how they are managed.

Build Public Support

Development of domestic reserves of energy fuels has become a national debate. Prehistoric fossil fuel-based energy policies will continue to create pressure for faster and cheaper production of oil and gas here at home. Proponents of fossil fuel-based energy sources are seeking to make more federal lands available to development, rather than seeking to make America less dependent on fossil fuels, regardless of the source, foreign or domestic. For that reason, it is extremely important to raise public awareness about all the costs of oil and gas development. Lead outings of conservation groups or nature clubs to areas scarred by drill pads and haul roads. Encourage trip participants to write letters of complaint or praise to federal agencies and elected officials. Develop a slide show and give talks to local groups about the environmental consequences of oil and gas development. Talk to newspaper and TV reporters and show them your photos.

Administrative Reviews[53]

11

So, you've done your homework, lobbied officials, raised public awareness, and still BLM or the FS goes ahead and approves an objectionable lease or drill permit. What do you do now?

BLM/FS and their parent agencies (the Department of the Interior/ Department of Agriculture), have a formal complaint procedure that any citizen can use. Although these "administrative remedies" are much less complex than a courtroom trial, you must be careful to follow the rules. It never hurts to ask a conservation group for assistance and legal advice.

Protesting the Resource Management Plan (RMP) or Land and Resource Management Plan (LRMP)

If you believe a land use plan's oil and gas leasing provisions are inadequate, you can protest them.[54] But remember: only issues raised in comments submitted during the planning process can be protested. You can file a protest by just sending BLM a letter within 30 days of the plan's adoption. Send it via Certified Mail to:

BLM Director
U.S. Department of the Interior
18th and C Street N. W.
Washington, D.C. 20240

Your protest letter should include: (1) your name, address, phone number and interest in the plan, e.g., "concerned citizen;" (2) a statement of the issues being raised; (3) a copy of written comments previously submitted or the date on which the issues in the protest were discussed for the record, such as in the scoping meeting; and, (4) a brief statement of why BLM is wrong.

If the BLM rules in your favor, the plan will be sent back to be revised. If the Director rules against you and the final RMP is upheld, you have no other administrative remedy. Your only recourse is to file a lawsuit challenging the plan.

The FS/LRMP appeal provisions are provided at 36 C.F.R. §§ 219.10(d); 211.18.

Protesting Lease Offerings

If you are unhappy about a decision to issue leases or permit drilling on public lands, you can also file a formal protest.

Protests against decisions to issue a lease must be filed before the lease is sold. This means your protest must reach the state director before the oral auction of a competitive lease. Your letter should include a request that sale of the lease be suspended until a decision on the merits of your protest can be made. It is also important to note that BLM's regulations allow only the Assistant Secretary of Interior for Land and Minerals Management to suspend an entire competitive lease sale. Nevertheless, the BLM state director can suspend the offering of a specific parcel in light of a protest that he or she believes to be well grounded.[55]

Protesting Project Approvals or APDs

Protests against decisions to approve specific oil and gas projects, or individual APDs, must be filed with the state director within 20 business days of the notice of the decision.[56] These are called Requests for State Director Review. The state director must respond within 10 business days.[57] Always ask for a suspension of activity on the well site in the interim. If the state director refuses to grant a stay or fails to make a decision on the protest within the required time, you may be able to appeal the APD decision directly to the Interior Board of Land Appeals. An important consideration is that the Request for State Director Review must include all supporting documents and all factual and legal arguments.[58]

Further Appeals: The Department of Interior Board of Land Appeals (IBLA)

If these initial administrative remedies fail, a further appeal may be taken to IBLA, a quasi-judicial body of administrative law judges within the Department of Interior. (Although in oil and gas cases, appeal to IBLA is not necessary and a party may be able to proceed directly to federal court.) As stated in the Foreword to this Guide, appeals to IBLA are often complex, and will almost always be defended by attorneys within the Dept. of Interior's Solicitor's Office. For these reasons, we highly recommend that any appeal to IBLA be done with the utmost care, and with the advice and participation of counsel experienced in public lands law. Remember: an IBLA decision brought by group A in state B can effect oil and gas decisions affecting group C in state D. For this reason, be careful of what, and in what manner, you take a further appeal to IBLA. The regulatory provisions for appealing to IBLA are provided below:

- The notice of appeal must be filed within 30 days of date of service of the adverse State Director decision. 43 C.F.R. § 4.411(a). The appellant then has 30 additional days to file a written brief in support. 43 C.F.R. § 4.412(a).

- A stay of the State Director's approval of a decision maybe brought pursuant 43 C.F.R. § 3165.4(c), utilizing traditional temporary restraining order standards. Note that the traditional automatic stay requirements of 43 C.F.R.§ 4.21(a)(1-2) do not apply.

    - Important: If warranted, a stay should be requested pursuant to 43 C.F.R. § 4.21, as IBLA is then required to decide the stay request within 45 days. 43 C.F.R. § 4.21(b); otherwise, there is no time limit for IBLA to reach a decision.

- **These are only some of the appeal provisions; before any IBLA appeal is pursued, a party must familiarize herself with all the provisions contained within 43 C.F.R. §§ 4.400 – 4.439 and 43 C.F.R. §§ 4.1 – 4.31.**

Lawsuits

If unsuccessful after exhausting administrative remedies, relief can be sought in the federal courts. The particular facts of a controversy will determine whether and when a lawsuit can – and should – be brought. The law is undeveloped and unset-

tled on many points concerning oil and gas exploration on public lands. Please contact an attorney familiar with public lands and oil and gas law to provide legal counsel for any contemplated lawsuits.

G

Glossary of Terms

appeal: formal request for reconsideration of a final BLM decision that is made to the Interior Board of Land Appeals.

application for permit to drill (APD): a drilling permit application submitted for each well by the operator to BLM. No drilling operations or surface disturbance can occur prior to BLM approval of the permit.

area of critical environmental concern (ACECs): defined by Congress to mean public land areas where special management is required to protect and prevent irreparable damage to important historical, cultural or scenic values, fish and wildlife habitat, other natural systems or processes, or to protect life and safety from natural hazards. 43 U.S.C. 1702(a).

BLM: the Bureau of Land Management, the federal agency in charge of managing the public lands and their mineral resources. BLM is in the Department of Interior.

bond: a financial guarantee supplied by the oil company to ensure the reclamation of the lands disturbed by oil and gas development. If required reclamation is not completed, BLM can use the money supplied by the bond to complete the necessary work.

categorical exclusion: a category of actions which do not individually or cumulatively have a significant effect on the human environment. Neither an environmental assessment nor an environmental impact statement is required for actions which have been categorically excluded. Nevertheless, an agency may choose to prepare an environmental assessment for an action covered by a categorical exclusion ("CE") even though it is not required to do so. The agency must prepare an environmental assessment or even an environmental impact statement in extraordinary circumstances in which a normally excluded action may have a significant environmental effect. 40 C.F.R. § 1508.4. BLM has published a list of CEs for its oil and gas program.

cumulative impact: the result of adding the incremental impact of the proposed action with other past, present, and reasonably foreseeable future actions regardless of what agency of person undertakes such other actions. 40 C.F.R. § 1509.7.

diversity: a measure of the variety of species and habitats in an area that takes into account the relative abundance of each species or habitat.

drainage: occurs when a well withdraws oil or gas reserves from an underground pool that is owned or leased by someone else.

endangered species: a plant, animal or fish species whose prospects for survival or reproduction are in immediate danger as determined by the Secretary of the Interior in accordance with the Endangered Species Act.

environmental assessment (EA): a concise public document prepared by a federal agency that serves (a) to determine whether to prepare an EIS or a finding of no significant impact; (b) to aid an agency's compliance with the National Environmental Policy Act when no EIS is necessary; and (c) to facilitate preparation of an EIS when one is necessary. 40 C.F.R. § 1508.9.

environmental impact statement (EIS): a detailed written statement prepared by a federal agency prior to deciding to take a proposed action that may have a significant environmental impact.

Federal Land Policy and Management Act (FLPMA): BLM's organic Act, 43 U.S.C. §§ 1701 et seq., passed October 21, 1976. FLPMA provides BLM with its principal management responsibilities, mandates and policies.

finding of no significant impact (FONSI): a document prepared by a federal agency which briefly presents the reasons why an action will not have a significant effect on the human environment and thus does not require an environmental impact statement. 40 C.F.R. § 1508.13.

Interior Board of Land Appeals (IBLA): the arm of the Department of Interior which renders final decisions on administrative appeals relating to the management of the public lands.

land use plan: a resource management plan (RMP) (or a management framework plan (MFP) which is being followed until replaced by an RMP). RMPs are developed in accordance with regulations issued by the BLM pursuant to the Federal Land Policy and Management Act and establish management direction for resource uses. MFPs were in existence for some public lands prior to the passage of FLPMA. These older plans are being replaced slowly by RMPs. The Forest Service calls them Land and Resource Management Plans (LRMPs), prepared pursuant to the National Forest Management Act (NFMA).

lease: means any contract, profit-share arrangement, join venture, or other agreement issued or approved by the United States that authorizes exploration for, extraction of, or removal of oil or gas.

mitigation: includes avoiding an impact by not taking a certain action; minimizing impacts by limiting the action; rectifying the impact; reducing or eliminating the impact over time by preservation or maintenance operations during the life of an action; or providing substitute resources or environments. 40 C.F.R. § 1508.20.

monitoring: the periodic observation and orderly collection of data to evaluate the effects of management actions and their effectiveness in meeting management objectives. 43 C.F.R. § 4100.0-5.

multiple use: Congress' lengthy definition refers to the management of public lands so that they best meet present and future needs for renewable and non-renewable resources including recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific, and historical values without permanent impairment of the productivity of the lands or environmental quality. 43 U.S.C. § 1702(c).

National Register of Historic Places (NRHP): a register of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture established by the National Historic Preservation Act of 1966 and maintained by the Secretary of Interior.

National Environmental Policy Act (NEPA): the federal law under which EISs or EAs are prepared.

no surface occupancy (NSO): a requirement in a lease or APD that prohibits an operator from physically placing any equipment or material on the surface of a particular tract of land. Oil and gas reserves under parcels with NSO stipulations are usually recovered from nearby parcels by using directional (angled) drilling techniques.

produced water: liquids produced during the drilling operation. Produced water usually is composed of existing ground water that is pumped out of a well along with by-products of the drilling operation such as mud, drilling lubricants, and oil. CBM produced water quantity is orders of magnitude greater than water associated with conventional oil and gas production.

protest: a formal request made to a BLM official to reconsider a proposed or final decision.

reclamation: the restoration of lands disturbed by oil and gas activity to productive use. It normally includes recontouring the land and re-seeding it with desirable vegetation.

research natural area (RNA): a natural area established and maintained for research and education. RNAs may have typical or unusual plant or animal types, associations, or other biotic phenomena, or characteristic or outstanding geologic, soil or aquatic features or processes.

reservation: action by the federal government reclassifying a tract of land to a specified purpose – e.g., wildlife preservation.

riparian area: an area of land adjacent to a creek, stream or other body of water where vegetation is strongly influenced by the presence of water.

scope: the range of actions, alternatives, and impacts to be considered in an EIS. 40 C.F.R. § 1508.25.

scoping: the early and open process used for determining the scope of issues to be addressed during the NEPA process and for identifying the significant issues related to the proposed action. 40 C.F.R. § 1501.7.

sensitive species: plant, fish or animal species not listed as threatened or endangered pursuant to the Endangered Species Act, but which are undergoing status review or are proposed or candidate species for listing.

special management areas: see area of critical environmental concern and research natural area.

surface plan of operations: description of proposed oil and gas activity and reclamation methods.

sustained yield: defined by Congress to mean the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use. 43 U.S.C. § 1702(h).

tiering: refers to the reliance upon previous EISs or EAs such as those prepared for a land use plan or lease sale to support a more site-specific project such as an APD. The environmental analysis for the APD is said to be tiered to the previous EIS.

timing stipulation: requirement placed on a lease or APD that limits physical activities to certain times of the year. These stipulations usually are adopted to protect important wildlife migrations or breeding cycles.

unnecessary or undue degradation: the duty imposed on BLM to protect federal lands from unnecessary or undue impacts. 43 U.S.C. § 1732(b).

water quality: the chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

watershed: lands which are enclosed by a continuous hydrologic drainage divide and located upslope from a specified point on a stream.

watershed values: soil productivity and stability and the storage, yield, quantity and quality of surface and subsurface waters.

wilderness study area (WSA): a roadless area that has been found to be wilderness in character, having few human developments and providing opportunities for solitude and primitive recreation.

Appendix 1

BLM — Sample Freedom of Information Act Request

VIA CERTIFIED MAIL, RETURN RECEIPT REQUESTED

August 19, 1992
Jane Doe, District Manager
Bureau of Land Management
XXX District
YYYYYY, zz 00000

Re: Freedom of Information Act Request

Dear Manager Doe:

It has come to my attention that ABC Petroleum, Inc. is seeking approval of a proposed application to drill for natural gas in the San Juan Resource Area near Durango, Colorado. I live in Durango and use the public lands in the San Juan Resource Area. This request pursuant to the Freedom of Information Act, 5 U.S.C. §§ 551 *et seq.* (FOIA), as implemented by the Department of Interior at 43 C.F.R. §§ 2.11-22, concerns materials relating to the pending APD of ABC Petroleum. As all of the records requested herein are maintained by your local field office, this FOIA request is being sent directly to you in accordance with 43 C.F.R. § 2.14(a)(1).

I. Introduction
(here, state the background and nature of inquiry)

II. Statement of Interest

(here, state your interest, stressing it is non-commercial – here is an example of a statement of interest for an organization:)

In recent years, the Wyoming Outdoor Council (WOC) developed an oil and gas program as part of its continuing efforts in the state of Wyoming to educate and involve the public in the sound management principles of public lands. WOC's oil and gas program has paid close attention to BLM's management of public lands pertaining to oil and gas activities, and has participated in numerous opportunities to provide public comment. In addition, WOC board members and staff have met with the _____ FO staff regarding the management specific oil and gas development issues in this area. As such, WOC has a very keen interest in obtaining public records relating to any future oil and gas development in this area, as part of its oil and gas program work, in addition to ensuring proper management by BLM of the public lands.

III. Scope of Request:

Requested Documents: *(these are just examples – tailor the request to your interests, and to the unique aspects of the area in question):*

(1) the application for permit to drill and any supporting documents submitted by ABC Petroleum, Inc.;
(2) any documents that discuss the potential environmental impacts of the proposed operation, including any environmental assessments or environmental impact statements;
(3) the surface use plan of operations;
(4) any correspondence between ABC Petroleum, Inc. and the Bureau of Land Management regarding the proposed oil and gas operation or other ABC operations on public lands, including any notices of violation of previously approved APDs or reclamation requirements;
(5) any data on wildlife populations and habitat in the area of the proposed operation; and
(6) any water quality data currently available on surface or ground water resources in the area of the proposed operation.

IV. Applicable Definitions

A. Documents

For purposes of this FOIA request, "document" includes, but is not limited to, memoranda, instruction memoranda, instructions bulletins, letters, notes, reports, recommendations, field research reports or notes, studies, minutes of meetings, faxes, electronic transmissions such as e-mail, correspondence, or any tangible written instrument.

B. Types of Documents

For purposes of this FOIA request, regarding any enumerated document category herein, this request specifically includes any and all documents (as defined above in IV.A.) to and between any person or agent of ABC Petroleum, Inc., and any of the following BLM offices: BLM D.C. Office, Wyoming BLM State Office and the Wyoming Buffalo Field Office (FO). This FOIA request includes all documents and communications from BLM petroleum personnel, oil and gas personnel and NEPA compliance staff, geologists, hydrologists, field managers, and other applicable personnel, for all BLM levels of D.C., Wyoming State and the Buffalo FO.

V. Purpose of Request

(state your personal, or organization's interest in the documents – example:)

The Wyoming Outdoor Council (WOC) was established in 1967 as a non-profit membership organization that protects and enhances Wyoming's environment by educating and involving citizens and advocating sound public policies. WOC is the

largest non-affiliated conservation group within the state of Wyoming, with membership at approximately 1,000 individuals and families. To advance the protection of Wyoming's environment and resources, WOC is involved in legislative activities, public outreach and education, public participation and involvement, administrative appeals, and, if necessary, litigation in state and federal courts.

WOC maintains an active education program to inform its members, the public, state and federal agencies, the Wyoming state legislature and Congress about conservation issues, including the environmental impacts associated with oil and gas extraction. WOC disseminates crucial and timely information pertaining to oil and gas extraction issues to the public and to agency officials and legislative bodies through published articles in *Frontline* (WOC's quarterly newsletter), focused action alerts, information posted on our website, www.wyomingoutdoorcouncil.org, and direct distribution of copies of pertinent reports to individuals, legislative members and agency decision-makers.

Disclosure of the information we have requested will significantly contribute to the public's understanding of federal agency activities with respect to the environmental impacts associated with oil and gas extraction, particularly the recent explosion of coalbed methane development. Information gathered from this request may be disseminated to the public through one or more of the above activities. WOC also represents its members in advocating improvements in state and federal statutes, regulations, and procedures concerning the protection of natural ecosystems and biodiversity.

VI. Request for Fee Waiver

(this is the most contested area of FOIA requests – take the time to be very fact specific as to each element, outlined below):

WOC requests that you waive all fees associated with this request for information. We meet the two-pronged test under the fee waiver standard found at 5 U.S.C. § 552(a)(4)(A)(iii) and 43 C.F.R. § 2.21.

A. 43 C.F.R. § 2.21 allows a fee waiver if:

(1) the request is in the public interest because it is likely to contribute significantly to public understanding of the operations of the activities of government (43 C.F.R. § 2.21(a)(1)(i)); and

(2) the request is not primarily in the commercial interest of the requester (43 C.F.R. § 2.21(a)(1)(ii)).

B. WOC recites BLM's fee waiver standards regarding 43 C.F.R. § 2.21(a)(1)(ii) as follows:

(1) Do the records concern the operations or activities of the Government? (43 C.F.R. § 2.21(a)(2)(i)).

(2) If (1) is met, is the disclosure of the records likely to contribute to the public understanding of these operations or activities? (43 C.F.R. § 2.21(a)(2)(ii)).

(3) If (1) and (2) are met, will that contribution be significant? (43 C.F.R. § 2.21(a)(2)(iii)).

C. Applying the Fee Waiver Criteria:

(1) First, there should be no question that the standard in 43 C.F.R. § 2.21(a)(1)(ii) is met. WOC is a non-profit organization with no commercial interest in the requested information.

(2) Regarding the first (and remaining) prong, 43 C.F.R. § 2.21(a)(1)(i), this request undoubtedly meets the criteria.

(a) *[Explain how the request relates to operations of the federal govt – this is usually very easy to do]* The request clearly calls for documents relating to operations or activities of the government. (43 C.F.R. § 2.21(a)(2)(i)).

(b) Second, the applicable CFR provision requires a nexus between the requester and the requested information to determine whether the records will likely contribute to the public understanding. *[state how you meet this prong]* There is not doubt, therefore, that the requested information, read and digested by WOC staff, will contribute to the public understanding of these issues. (43 C.F.R. § 2.21(a)(2)(ii)).

(c) Finally, the contribution to the public will be significant. The applicable regulation clearly states that the "significant" test is met when the information "clearly supports public oversight of Department operations, and the effect of policy and regulations on public health and safety, or otherwise confirms or clarifies data on past or present operations of the Department." 43 C.F.R. § 2.21(a)(2)(iii). The requested information clearly meets all three of these factors. *[be very fact specific here as well]*

D. Finally, access to these government documents, reports, disclosure forms, and similar materials under FOIA is essential to our organization's role in educating our members as well as the public. It was held in Department of State and National Wildlife Fed'n v. United States Dep't of the Interior, 780 F.2d 86 (D.C. Cir. 1986), that Congress has explicitly recognized the need for non-profit organizations, such as ours, to have free access to government documents, unhindered by search and copying charges.

VII. Tabulation Costs

We request that you also waive any fees associated with tabulating this information. It is well-recognized that public oversight of government action that affects the quality of environment has flourished in large part because congressional mandates like NEPA expressly place the burden of combing the administrative record on the agency, as the record is often scattered through the files of numerous federal and state agencies, so that the public and interested government departments can conveniently monitor and evaluate the agency's action. Pennsylvania Protect Our Water and Environmental Resources, Inc. v. Appalachian Regional Commission, 574 F. Supp. 1203, 1219 (M.D. Penn. 1982). The courts recognize that any other approach would hamper the flow of information to the public by making the endeavors of watchdogs more difficult. Public interest watchdog groups such as WOC are reasonably expected to publicize the environmental issues present; requiring coping and tabulation fees would tend to mute those most likely to identify problems and evaluate agency decisions. Id.

VIII. Delivery Media

Pursuant to the Electronic Freedom of Information Act Amendments of 1996, 5 U.S.C. § 552(a)(2) (1996), we request that these materials be supplied on computer diskette formatted for a commercially-available software program. As you know, the Electronic Freedom of Information Act Amendments of 1996 provides that:

> For records created on or after November 1, 1996, within one year after such date, each agency shall make such records available, including by computer telecommunications or . . . by other electronic means.

5 U.S.C. § 552(a)(2) (1996). If, however, the information we have requested is not immediately available in electronic form, we are amenable to receiving the information in paper form.

IX. Conclusion

Should you decide not to waive fees we request that you contact us before incurring any costs greater than $25.00. Furthermore, since FOIA provides that if portions of a document are exempt from release that the remainder must be segregated and disclosed, we request that you furnish all non-exempt portions of the documents requested, and that you identify any deletions by reference to specific exemptions allowed under FOIA. We reserve the right to appeal a decision to withhold any material.

Thank you for your prompt attention to this request. We look forward to your response within twenty (20) days, as required by FOIA, 5 U.S.C. § 552(a)(6)(A)(i) (1996). Please contact me at (307) 332-7031 should you have any questions regarding this matter.

Sincerely,

_____

Motivated Oil and Gas Activist

Appendix 2

Forest Service - Sample FOIA Request

March 16, 2001

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Jack Blackwell
Regional Forester, Region 4
US Forest Service
Federal Building
324 25th St.
Ogden, UT 84401

Re: Freedom of Information Act request for documents;
Bridger-Teton National Forest, Pinedale District

Dear Mr. Blackwell:

This request pursuant to the Freedom of Information Act, 5 U.S.C. §§ 551 et seq. (FOIA), as implemented by the U.S. Department of Agriculture regulations at 7 C.F.R. §§ 1.4; 1.5, and the U.S. Forest Service regulations at 36 C.F.R. §§ 200.6; 200.7, is made by the Wyoming Outdoor Council (WOC) in conjunction with other interested organizations, including:
(1) Biodiversity Associates; and
(2) The Greater Yellowstone Coalition.

Parts I - V.
(See above BLM FOIA request, Appendix 1.)

VI. Request for Fee Waiver

WOC requests that you waive all fees associated with this request for information. We meet the two-pronged test under the fee waiver standard found at 5 U.S.C. § 552(a)(4)(A)(iii).

A. FOIA allows a fee wavier if:

(1) the request is in the public interest because it is likely to contribute significantly to public understanding of the operations of the activities of government; and

(2) the request is not primarily in the commercial interest of the requester.

5 U.S.C. § 552(a)(4)(A)(iii); 7 C.F.R. Pt. 1, Subpt. A, App. A, § 6(a).

B. The USDA has articulated six factors to consider in granting fee waiver requests:

(1) Does the subject of the request concern "operations or activities of the government?" 7 C.F.R. Pt. 1, Subpt. A, App. A, § 6(a)(1)(i).

(2) Is the information requested likely to contribute to an understanding of government operations? 7 C.F.R. Pt. 1, Subpt. A, App. A, § 6(a)(1)(ii).

(3) Will disclosure of the information contribute to "public understanding"? 7 C.F.R. Pt. 1, Subpt. A, App A, § 6(a)(1)(iii).

(4) Will the information "significantly" contribute to the public understanding of government operations or activities? 7 C.F.R. Pt. 1, Subpt. A, App. A, § 6(a)(1)(iv).

(5) Does the requester have a commercial interest in obtaining the information? 7 C.F.R. Pt. 1, Subpt. A, App. A, § 6(a)(1)(v).

(6) If the requester does have a commercial interest, is the magnitude of that commercial interest in comparison to the public interest in the disclosure such that the disclosure is primarily in the commercial interest of the requester. 7 C.F.R. Pt. 1, Subpt. A, App. A, § 6(a)(1)(vi).

C. Applying the Six Fee Waiver Standards in the present case:

Apply the six criteria and be VERY fact specific.

E. Notice of Denial of Fee Waiver.

Should WOC's request for a statutory fee waiver or reduction be denied, please provide, in writing, an explanation for the basis for your decision and list the names and titles or positions of each person responsible for the denial. *See* 7 C.F.R. § 1.7(a).

Parts VII - IX.

(See above BLM FOIA request, Appendix 1.)

Sincerely,

_____

Motivated Oil and Gas Activist

Appendix 3

Sample Scoping Letter: Land Use Plan (RMP or LRMP)

[Note: this is a recent scoping letter to BLM, Wyoming on amending an RMP – all of these concerns apply to RMP development and/or amendment. Note further that this scoping document addresses some unique aspects particular to CBM development.]

January 10, 2001

Paul Beels
Bureau of Land Management
Buffalo Field Office
1425 Fort St.
Buffalo, WY 82834

Re: Scoping Comments on Buffalo RMP Amendment

Dear Mr. Beels:

The Wyoming Outdoor Council (WOC) hereby submits its scoping comments on BLM's intent to amend the Buffalo RMP, as stated in 65 Fed. Reg. 69,954-55 (Nov. 21, 2000). WOC appreciates the opportunity to comment on these important issues and thanks BLM in advance for incorporating our concerns into the RMP as amended.

I. Introduction

The Buffalo Resource Area encompasses over 25,000 square miles of territory that is primarily sage-steppe ecosystem in a semi-arid region. The Buffalo RMP, developed in 1985, opened up over 95% of the resource area to oil and gas leasing – in essence, giving preference to one use, mineral development, at the expense of other multiple uses such as watershed protection, wildlife and aesthetics. The present RMP amendment is a perfect opportunity for BLM to exercise and implement proper stewardship measures to adequately provide for all multiple uses of the public lands – particularly given BLM's assessment that 45,000 coalbed methane wells will be operating in the Powder River Basin by 2010, with 70,000 or more by 2060. Given that CBM development was in no way considered or analyzed in the 1985 RMP, this amendment is not only legally necessary to provide for this as a resource use, but it also provides BLM, citizens and a broad-based scientific team a chance to understand and mitigate the impacts of this runaway development prior to, and not after, the Basin becomes an industrial sacrifice zone.

II. Regulatory Overview

Appendix 3

A-3

The Federal Land Policy and Management Act (FLPMA) provides that in the development and revision of land use plans (RMPs), the Secretary shall:

(1) use and observe the principles of multiple use and sustained yield;

(2) use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic and other sciences;

(3) give priority to the designation and protection of areas of critical environmental concern;

(4) rely, to the extent it is available, on the inventory of the public lands, their resources, and other values;

(5) consider present and potential uses of the public lands;

(6) consider the relative scarcity of the values involved and the availability of alternative means . . . and sites for realization of those values;

(7) weigh long-term benefits to the public against short-term benefits;

(8) provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans; and,

(9) to the extent possible, coordinate with state and local governments and other federal agencies.

43 U.S.C. § 1712(c)(1)-(9).

"Multiple use" involves several principles, including:

(1) the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present *and future* needs of the American people;

(2) making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions;

(3) *the use of some land for less than all of the resources;*

(4) a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and non-renewable resources, including, but not limited to, *recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values;* and

(5) harmonious and coordinated management of the various resources *without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output.*

43 U.S.C. § 1702(c) (emphasis added).

III. Land Use Planning and RMP Amendment Requirements

RMP amendment is initiated when there is a "need to consider monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in a change in scope or resource uses or a change in the terms, conditions and decisions of the approved plan." 43 C.F.R. § 1610.5-5. CBM, and its associated impacts, required RMP amendment almost 11 years ago, when this extractive resource use was first tested in the PRB. Now that the associated impacts, particularly those concerned with by-product water, are beginning to reveal themselves, RMP amendment is long overdue. This is particularly true given the present forecast of tens of thousands of operating CBM wells in the Basin in a short period of time.

In November of 2000, BLM completed revisions to H-1601-1, "Land Use Planning Handbook." Importantly, guidance is given concerning the amendment process. "During the amendment or revision process, the BLM should review all proposed implementation actions through the NEPA process to determine whether approval of a proposed action would harm resource values so as to limit the choice of reasonable alternatives actions relative to the land use plan decisions being reexamined." H-1601-1 at VII-E.

Importantly, therefore, WOC highlights that *all* leasing for oil and gas mineral in the Buffalo Resource Area must stop pending the outcome of the RMP amendment process. BLM may determine, for example, that certain areas are not open to leasing, or not appropriate for certain types of leasing (e.g., CBM development). Therefore, all interim leasing must stop during the amendment process. In addition, all ongoing and newly proposed NEPA projects (one in particular is the Wyodak Drainage EA) must be halted and analyzed to determine whether they may limit the reasonable choice of alternatives in the amended RMP.

IV. BLM Supplemental Guidance on Planning for Fluid Minerals

WOC notes that BLM has listed numerous topics that will receive attention during the RMP amendment process. See 65 Fed. Reg. 69,955 (2000). In addition, BLM will focus on "areas open (or closed) to oil and gas development" and "lease stipulations or mitigation measures necessary for coalbed methane development." WOC agrees that all of these areas deserve attention by BLM.

WOC is pleased that BLM is finally going to amend the RMP and address these important issues; however, H-1624-1, "Planning for Fluid Mineral Resources" contains many more areas that need to be addressed in the amendment planning process. These include: RFD scenarios, identification and description of existing management practices, impacts associated with a continuation of existing management, identification of problems associated with existing management, a formulation of alternatives to existing management, and a development of RFD scenarios and an analysis of impacts for each alternative. Other areas include looking at existing leases for potential development, attaching lease stipulations and identifying conditions of approval for APDs. WOC stresses that all the issues addressed in H-1624-1 need to be fully addressed and analyzed by BLM in the RMP amendment process.

V. Specific Concerns

A. Multiple Use versus One Use

WOC notes that the 1985 RMP opened up the Powder River Basin federal mineral resources to 99% leasing for oil and gas. Obviously, BLM is favoring one use over the other uses, particularly recreation, watersheds, wildlife and fisheries, grazing and aesthetics. With 70,000 CBM wells on the way, the Basin will be severely fragmented by roads, power lines and pipelines. Surface disturbances will be enormous, and will lead to loss of habitat, soil erosion, increased sedimentation in streams and loss of available forage for wildlife. Water impacts will be equally devastating, due to both the volume and quality of the by-product water.[1]

Multiple use entails many concepts, two of which are particularly applicable here: (1) the public land should be used for less than all of the resources; and (2) resources should be managed without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output. 43 U.S.C. § 1702(c). 99% of the public lands and mineral estates open to leasing is simply a violation of these concepts. Not all of the land must be used for this one resource to the detriment of others resource uses. In addition, the unique and devastating impacts associated with CBM development may permanently impair the productivity of the land (e.g., reservoirs, salt accumulation, aquifer depletion). Lastly, the focus must not be on the greatest economic return, which is the current focus of the Buffalo Field Office – the recent proposal for 2,500 drainage wells without an EIS is a perfect example.

No price tag can be put on wildlife and fisheries, open spaces, aesthetic beauty, and the agrarian economies and associated lifestyles of many families who have lived in the Basin for generations. It is time for the Buffalo RMP to fully address and embrace the concept of true multiple use and to limit oil and gas leasing and project in the Resource Area in such a way to allow for a full use of the lands, by all the interested and affected public.

[1] WOC observes that many of the issues associated with the PRB CBM EIS (scoped in July 2000) and the present RMP amendment process overlap. Accordingly, WOC hereby incorporates by reference its scoping comments and the issues raised therein, submitted to BLM on or before July 31, 2000.

B. No New Leasing

BLM has the perfect opportunity to strike a balance in the multiple use ethic and stop oil and gas leasing in the Basin. WOC has noticed that in the past year's worth of competitive oil and gas lease sales, fewer and fewer parcels are for sale in the tri-county area. The Buffalo RMP suggested that 99% of the Basin would be open for oil and gas leasing – but it in no way foresaw up to 70,000 CBM wells, and the unique impacts they would bring. As so much of the Basin is already leased, the only proper measure for BLM to take is to stop all new leasing. In addition, when leases terminate due to non-production, BLM should permanently retire these parcels.

If there is new leasing, WOC suggests that NSO leases are the only ones appropriate to minimize surface disturbance. No new leases should be sold in any area of special cultural or aesthetic importance, or in any area where steep or fragile topography or soil structure would preclude CBM drilling. New leases would also have to be accompanied by stipulations as stated below.

C. Mitigation Proposals

WOC strongly feels that stipulations, COA's and other similar measures built into the RMP, and applied to existing leases and future APDs, so long as they do not violate the express terms of existing leases, are the most important aspect of the RMP amendment process. As stated above, WOC has gone into great detail in its scoping comments for the PRB CBM EIS concerning mitigation proposals, and incorporates those suggestions and concerns herein by reference.

Specifically, stipulations that must apply to all future APDs include:

• reinjection. CBM producers tell investors and the public how inexpensive these wells are to drill, and low maintenance costs. Add natural gas prices at an all time high, and outstanding profit margins for these companies, makes not requiring reinjection absurd. In short, reinjection should be a required stipulation to be applied to any future APD. Of course, the current economic conditions make CBM more profitable, but market conditions should not affect BLM's responsibility to prevent unnecessary and undue degradation. Reinjection can prevent just that.

• desalinization and other water treatments. Treating the water can allow the by-product water to be reinjected into potable aquifers, and, if reinjection is not geologically possible in some areas, can prevent many of the EC/SAR problems we are facing today. Requirements to properly treat any reinjected or discharged by-product water must be a stipulation for any CBM APD.

• water management plans. Managing the discharged water, if not reinjected, is perhaps the single most significant aspect of CBM operations. All APDs must have a stipulation that a water management plan be developed with the approval of all immediate surface owners and downstream surface owners within a reasonable radius. No APD would be able to be approved without a full water management plan approved by BLM and the necessary landowners.

• Landowner protections. All future APDs must be conditioned on the lessee informing the landowner of his rights, especially in split-estate situations. These measures have been spelled out in our PRB CBM EIS scoping comments. On split estates, the right of entry is for reasonable surface disturbance for access to the leased minerals. In the case of CBM, reasonable access most likely does not include post-mineral access issues that involve water disposal. Accordingly, the amended RMP must include stipulations precluding unnecessary surface disturbances, such as those associated with water. Again, this brings us back to the point that reinjection must be mandatory. In the alternative, there must be a stipulation setting an agreed upon price for compensation to surface owners for reservoirs, channel erosion, and other impacts associated with water. Stipulations must also include that water well replacement agreements be signed by all landowners within a 10 mile radius of any well, and that the burden is on the producer to disprove hydrological connection.

VI. Conclusion

The Wyoming Outdoor Council appreciates the opportunity to comment on the Buffalo RMP amendment process. This process is long overdue; nonetheless, this is a perfect opportunity for BLM to place a proper emphasis on multiple use, develop alternatives for all RFD scenarios, stop any new leasing in the Buffalo Resource Area and impose reasonable stipulations on all future APDs to ensure environmental and landowner protection.

Sincerely,

_____

Thomas F. Darin,
Staff Attorney and,
Director of Public Lands and Resources

Appendix 4

Scoping Comments – Proposal for an Oil and Gas Project

[This is an actual set of scoping comments submitted by the Wyoming Outdoor Council on a recent deep (non-CBM) natural gas project proposed by BLM. Please remember to make your comments as specific to your concerns and the region affected as possible.]

June 23, 2000

VIA EMAIL AND CERTIFIED MAIL,
RETURN RECEIPT REQUESTED

John Spehar, Project Manager
Bureau of Land Management
Rawlins Field Office
P.O. Box 2407
1300 North Third Street
Rawlins, Wyoming 82301

Re: Scoping Comments – Desolation Flats Natural Gas Development Project

Dear Mr. Spehar:

Thank you for providing Wyoming Outdoor Council (WOC) the opportunity to comment on the above-referenced proposal. The list of issues identified in the scoping notice is comprehensive and appears to address many, if not most, of the concerns that have been raised by the public in the past regarding the environmental effects of and other issues associated with oil and gas development. We assume the EIS will, as indicated, address all the issues identified in the scoping notice in addition to any others brought forward as a result of the scoping process.

A project of this size – drilling up to 385 deep natural gas wells – will cause a multitude of negative environmental consequences, some of which are unavoidable. In many instances, however, certain kinds of impacts can be reduced or even eliminated by proper planning, thoughtfulness, and cooperation of the operators. Thus we encourage BLM to work with the operators to raise awareness of environmental concerns as well as to encourage and facilitate voluntary measures to reduce the impacts of their operations.

WOC has often objected to BLM's approach to analyzing environmental impacts from oil and gas operations. Over the years the analysis has improved, but we still often find ourselves troubled by the lack of critical baseline data, use of questionable

methodology and analysis techniques, insupportable conclusions, and overly optimistic (at time even disingenuous) impact assessments. WOC encourages the used of impact assessment protocol groups to develop a protocol for assessing air quality, and impacts upon wildlife, recreation, and water quality. Consensus on the methodology to assess impacts to these resources would be a tremendous benefit that would result in a more accurate and thorough environmental analysis that all parties could have confidence in.

We would like to bring to your attention the following concerns and recommendations:

Violation of FLPMA WOC has serious concerns that the number of gas wells analyzed in the underlying Great Divide and Green River RMPs will have been exceeded by the number of wells authorized by this project. As such, due to the conformity of land uses with RMPs requirement in FLPMA, this project may exceed the RFDs in the underlying plans, and WOC requests a full analysis of this by BLM in the DEIS.

Adobe Town Wilderness Study Area. WOC is very concerned about the Adobe Town WSA, an area used by many of WOC's members for recreational purposes as it is a place of untold beauty. The DEIS must propose measures to protect the WSA from any further air or water quality impairments, and, in addition, prevent any further road construction adjacent to the area. This is particularly true as in the recent past, BLM failed to protect areas outside the WSA as part of the study area, which in truth, possess many of the same wilderness characteristics of the study area itself. As such, a thorough and hard look at the impacts of any road construction near the WSA should be analyzed, with a recommended alternative that proposes no knew construction.

Air Quality Impacts. Emissions from oil and gas production and transmission activities are significant sources of atmospheric pollutants including NOx and VOCs such as benzene and toluene, known carcinogens. In southwestern Wyoming, emissions from oil and gas operations are causing or have the potential to cause acidification of sensitive alpine lakes and significant visibility impairment in nationally-significant wilderness areas. Emissions from the Desolation gas development project will also adversely impact air quality.

Specific Recommendations

• Ambient air quality stations should be installed in the project area near major sources of NOx, SO2 and VOCs. With such information, the BLM and Wyoming DEQ could determine whether emissions are meeting national and Wyoming ambient air quality standards. Without this information, all that is available are untested assumptions.

• Additional ambient air quality stations should be installed for hazardous air pollutants such as benzene, toluene, xylene, n-hexane, etc. Dehydrator units and condensate tanks are major sources of these hazardous air pollutants. Employees and the public should be made aware of the risk of exposure to HAPs.

• Permits and best available pollution control should be required on *all* sources of volatile organic compounds (VOC) and hazardous air pollutants (HAP), not merely those that emit in excess of 50 TPY VOC and 25 TPY HAP. The DEQ's existing policy excepting these smaller sources results in significant emissions that could easily be controlled by readily available pollution control technologies. It is possible and feasible to eliminate VOC and HAP emissions from oil and gas production operations.

Natural Resource Protection Alternative(s). WOC would like to see the BLM develop and analyze an alternative or alternatives (that are both reasonable and consistent with lease rights) that provide greater protection for sensitive resources and values affected by impacts from natural gas development activities. Under this alternative BLM would prohibit, for example, development in visually sensitive areas (VRM II); in crucial big game winter range and birthing areas; within 1 mile of active raptor nests and sage grouse leks, breeding areas, and winter range; within wetlands, riparian, and floodplains; on steep slopes and sensitive soils; within 1/2 mile of open water courses; in areas containing sensitive cultural resources or spiritual sites; in potential black-footed ferret habitat; in ACECs and WSAs; and within 1 mile of residences.

Water Quality. If the BLM proposes to authorize any activity that may further impair a existing water quality, the BLM should recommend and the DEQ should approve total maximum daily loads (TMDL) for each pollutant known or suspected to be the cause of the impairment. TMDLs should be established prior to the approval of such activity so that BLM may determine whether its proposal may add to the impairment.

Cumulative Effects. The EIS should clearly identify the cumulative effects analysis area for each resource considered. Importantly, not only must the effects from the 385 proposed wells be analyzed, but also those of existing projects, and the reasonably foreseeable number of wells should exploration yield a productive gas field. For air quality, all existing, proposed, and reasonably foreseeable future emission sources in the Greater Green River Basin should be considered. For wildlife, the analysis should determine whether significance criteria established in previous EISs will be exceeded. The South Baggs gas project should also be analyzed in the cumulative effects analysis.

Importantly, BLM must account for, and analyze the approximately 11,000 new natural gas wells, thousands of miles of roads and pipelines, gas processing facilities, uranium, trona, and coal mines, chemical plants, and a variety of other industrial developments are projected in the Greater Green River Basin in the next 10-15 years. These projects will emit thousands of tons of pollutants into the atmosphere, impairing visibility and damaging sensitive aquatic ecosystems in downwind wilderness areas in the Wind River Mountains.

Downwind Effects: WOC is very concerned about the cumulative effects of this project and the thousands of other oil and gas areas on downwind wilderness areas. BLM has a legal duty to prevent impairment of air quality related values in Congressionally designated wilderness areas, including those in the Wind Rivers that will be impacted by the proposed gas development projects: the Bridger, Fitzpatrick, and Popo Agie wilderness areas. The BLM may not lawfully authorize a project that

will violate standards the Forest Service has adopted to protect visibility and water quality in Wyoming's wilderness areas.

Cultural Resources. The BLM should take immediate steps to initiate consultation with Native American Indians in order to identify at the earliest time significant traditional cultural and spiritual sites in the project area that should be protected from development impacts.

Transportation. Analysis of transportation issues, including analysis of alternative travel corridors and road standards, should be integrated with the EIS. In light of the accelerated rate of new road development (on the order of thousands of miles) BLM should consider developing a "no net gain" policy for roads on public lands. In addition, a reasonable estimate of the transportation needs for the proposed project should be developed to include a probable range of vehicle sizes, travel frequency, timing, and geographical concentrations of the anticipated traffic flow. Lastly, the importance of proper transportation planning cannot be overstated. Such planning serves to reduce and, where possible, avoid resource conflicts and environmental impacts by appropriate location and design of roads; the planning should also determine as part of this process which roads constructed in connection with the project will remain, and which roads will be obliterated, upon the project's completion. (Because of their adverse environmental effects, WOC advocates the reclamation of as many roads as possible following completion of the project).

Earlier Comments Incorporated by Reference. WOC has previously submitted to the BLM Rawlins District written comments on a number of natural gas development projects in the vicinity of the project area including South Baggs, Wamsutter II, Continental Divide, Creston/Blue Gap and Mulligan Draw. Because many of the concerns raised in those letters are applicable to the current proposal, they are incorporated by reference herein in their entirety.

More Specific Areas of Comment:

In the DEIS, WOC would like the following issues analyzed:

Impacts to multiple use:

- Livestock grazing, loss of forage, space.
- Hunting, loss of wildlife directly and indirectly
- Open space, destroyed visual and sensory impacts of wells.
- Loss of tourism when the scenic values are compromised by tanks, power poles, noisy compressor and a network of roads
- Loss of G&F income due to disturbances to wildlife, can't sell as many hunting/fishing permits
- Potential for impacts on historical, cultural, paleontological, National or Regional Historic Trails, or anthropological resources
- Impacts on local air quality brought about by the drilling process itself, any methane gas lost or intentionally vented to the atmosphere and increased vehicular traffic in the area.

Overhead power lines:

- Perches for raptors, impacts on sage grouse, mountain plovers, young antelope and other species living in the area
- Electrocution hazards, wire impacts directly killing birds
- Loss of open spaces values
- Visual impact
- Habitat fragmentation
- Impacts on nesting raptors

Metal outbuildings:

- Perches for raptors, impacts on sage grouse, mountain plovers,
- Visual impact
- Loss of open spaces values
- Habitat fragmentation
- Loss of hunting opportunities due to danger of using firearms in vicinity of methane gas pumps, related buildings and pipelines
- Impacts on nesting raptors

Roads and vehicular traffic:

- Habitat fragmentation, edge effect and possible introduction of exotic plants and animals
- Introduction of cheatgrass to a previously unfragmented area
- Fire danger brought about by cheatgrass
- Loss of native grasses and shrubs due to cheatgrass invasion
- Possible harm to native plants, aquatic life and other native animals if cheatgrass is dealt with using herbicides
- Each linear mile of road destroys approximately 4 acres of habitat
- Noise pollution
- Soil pollution from vehicular traffic
- Compaction of soil around well sites and buildings
- Impacts on nesting raptors

Noise from compressors:

- Impacts to sage grouse reproduction
- Impacts to passerines' reproduction and/or territorial calling
- Other effects on wildlife like avoidance of noisy areas by antelope
- Loss of open spaces values
- Habitat fragmentation
- Impacts on nesting raptors

Effects on T&E and Species of Special Concern as follows:

- Birds

Bald eagle
Sage grouse
Mountain plover
Whooping crane
Least tern
Piping plover
Eskimo curlew
Ferruginous hawk

- Mammals
  Swift fox

- Invertebrates
  American burying beetle

- Fish (downstream effects)
  Pallid sturgeon
  Sturgeon chub

- T&E plants within the area

Requirements for no activity during wildlife breeding must include:

- Shutting down compressors so they are silent from February to April for sage grouse lekking
- Bring down power lines to protect young of all species from depredation by raptors sitting on the poles or wires
- Stop all vehicular traffic to buildings and wells to eliminate disturbance to sage grouse, elk, antelope and deer breeding and brood rearing from February to first weeks of July
- Impacts on nesting raptors, must provide artificial perches if gas wells effect natural nesting sites

Reclamation:

- Baseline vegetation, vertebrate and invertebrate surveys before disturbance
- Time frame of reclamation
- Require reseeding with native mixtures, not crested wheatgrass or some other inexpensive monoculture or sod-forming grass seed.
- Require monitoring until vegetation is back to baseline (i.e. no cheatgrass)
- All fencing take down includes removal of wires, fence posts and filling in fence post holes with reseeding if area beside fence was trailed and vegetation destroyed in areas adjacent to fence.
- All overhead power line take down includes removal of wires, power poles and filling in power pole holes with reseeding if area beneath wires had a road.
- All metal outbuilding take down includes removal of building, any posts and filling in post holes with reseeding following returning land to original topography to return it to as natural a site as possible.

Monitoring:

- Baseline data on air, water, vegetation, and wildlife surveys must be collected
- Short-term monitoring
- Long-term monitoring
- Methods used for monitoring
- Standards to be maintained
- What happens when standards are violated?

We appreciate the opportunity to comment. Please advise us of any additional public comment and/or review opportunities.

Sincerely,

_____
Thomas F. Darin,
Staff Attorney,
and Director of Public Lands and Resources.

Appendix 5

APD Procedural and Substantive Checklist (with citations)

Before drilling commences and an APD for a particular well is approved, protect your interests by ensuring that the following requirements have been met:

√ **Has BLM posted notice of the APD in the Field Office, at least 30 days prior to approval? 30 U.S.C. § 226(f); 43 C.F.R. § 3162.3-1(g).**

- If in a notebook, the APDs must be displayed in a conspicuous area and clearly labeled, "Posted APDs/NOSs." A sign near the reception area should clearly denote the location of the notebook, which should in a place such that the public can access it without assistance from personnel in the office.

√ **Has BLM, in addition to the posting, followed public notice requirements as set forth in other laws, i.e., NEPA? 30 U.S.C. § 226(f). The NEPA notice and comment procedures are detailed below.**

√ **Has BLM, before the APD has been approved, required that a completed a surface use plan of operations were submitted to its office, and, prior to APD issuance, has BLM required the posting of a bond, sufficient to restore lands and surface waters? 30 U.S.C. § 226(g).**

√ **Are the following components of a complete APD present?**

- a drilling plan (43 C.F.R. § 3162.3-1(d)(1), (e); Onshore Order No. 1 at III.G);
- a surface use plan of operations (43 C.F.R. § 3162.3-1(d)(2), (f); Onshore Order No. 1 at III.G; specific requirements at Onshore Order No. 1 at III.G.4. and G.4.(b)(10));
    - For CBM wells, the water management plan must be part of surface use plan, submitted with APD.
    - In other words, the APD *cannot* be approved unless there is a water management plan in place.
- evidence of bond coverage (43 C.F.R. § 3162.3-1(d)(3); Onshore Order No. 1 at III.G)
- in split-estate cases, a complete APD must certify that a surface agreement has been reached with the owner or that the operator will comply with bonding requirements.

√ **Have surveying and staking procedures been followed? Either of these may occur without notice to BLM, although prior notice is strongly encouraged. Onshore Order No. 1 at III.A.**

- Notice of Staking (NOS) is optional. However, if done, it must occur prior to the filing of a complete APD. Onshore Order No. 1 at III.B.1. In addition, even if filed, an APD is required. Onshore Order No. 1 at III.B.2.

- If private surface, operator must make access arrangements with surface owner prior to entry upon lands. Onshore Order No. 1 at III.A.1.

- If a NOS is filed, completed APD must be filed within 45 days of onsite inspection. Onshore Order No. 1 at III.G.

√ **Have post-APD filing procedures been followed?**

- An onsite predrill inspection shall be scheduled by BLM within 15 days of receiving the operator's first filed document, either the NOS or the APD. BLM shall invite the surface owner to the inspection. Onshore Order No. 1.

    - at the time of the onsite, the NOS shall have occurred.
    - surface use and reclamation stipulations shall be developed at the time of the onsite, and provided to the operator within 5 days. If the NOS procedure is followed, conditions are part of the complete APD; if a NOS has not occurred, conditions are part of the APD approval. Onshore Order No. 1 at III.C.

- When the inspection is made, BLM shall utilize the information to prepare an EA, which is then disseminated to the public for review and comment. Onshore Order No. 1 at III.G.5.a.; 43 C.F.R. §§ 3162.3-1(a), 3162.5-1(a).

- APD approval requires environmental assessments (EAs) and BLM shall, "involve environmental agencies, applicants, and the public, to the extent practicable," in preparation of EAs. 40 C.F.R. § 1501.4(b); DOI Manual 516 DM 2-4 at 3.3; CEQ 40 FAQs. Q/A 38.

    - "The [BLM] manager must notify the public . . . of the review period. . . . Generally, notice of the review should be announced in regional and local newspapers or other media." BLM NEPA Handbook at IV.B.4.a.

    - NEPA requires that BLM engage the public to the fullest extent practicable prior to the issuance of an EA for the APD. See generally 40 C.F.R. § 1500.1(b); 40 C.F.R. § 1500.2(d); DOI Manual 516 DM 2-4 at 1.2.F.; 1.6.

    - If the EA results in a Finding of No Significant Impact (FONSI), the FONSI must be made available to the public pursuant to

section 1506.6. 40 C.F.R. § 1501.4(e)(1).

- Importantly, 40 C.F.R. § 1506.6 contains many public participation requirements, with which the activist must make herself familiar.

• Surface Use Agreements and Bond Requirements – ***Only Apply to Split-Estates***

- When privately owned surface, operator is responsible for reaching a surface use agreement with owner, or providing a sufficient bond, prior to APD approval. Onshore Order No. 1.

- Prior to occupying the surface, the operator must secure written consent of the landowner, sign a written agreement for surface damage, or post a sufficient bond. 43 U.S.C. 299(a).

- If consent is not granted or a surface agreement not reached, the operator must post a sufficient bond with BLM, *and*, proof, via certified mail, that the landowner has received notice of the bond. Landowner has 30 days to object to the bond amount, or it may be approved (as part of APD approval). If landowner files a timely objection (within 30 days of notice), BLM office shall consider the bond and objections. If, notwithstanding the objections, he approves the bond, the BLM officer, in writing, certified mail, notify the landowner of his right of to appeal that decision within 30 days. If no timely appeal is filed, the BLM officer may then approve the bond as part of the process of approving the APD. 43 C.F.R. § 3814.1(c), (d); BLM I-M WY-99-57.

- An operator may choose either bond amount as set forth in 43 C.F.R. §§ 3814 or 3104. Importantly, however, the procedures as outlined in section 3814 must be followed, regardless of which section is utilized for the bond amount. BLM Instruction Memorandum (I-M) WY-99-57.

- Even if a surface use agreement is reached, a bond per section 3104 is mandatory. BLM I-M WY-99-57; bonding amounts are set forth in 43 C.F.R. 3104.

- The BLM officer should increase the bond amount above the minimum to cover adverse impacts, including, but not limited to: (a) damage to crops; (b) damage to tangible improvements; (c) loss of grazing land; and adverse water impacts.

√ **Has BLM, at the conclusion of the 30 day period after the complete APD is posted, reviewed, and the EA disseminated after the onsite inspection, either:**

(a) approved the APD; (b) returned the APD unapproved; or (c) advised the operator why the final action is being delayed, within 5 days of the close of this time period? 43 C.F.R. § 3162.3-1(h)(1)-(3).

- Importantly, the last option allows BLM the time properly follow NEPA, disseminate the EA and accept public comment, and explain to the operator the reason for this delay. There is NO requirement, although BLM believes this to be true, that it has a tight 30-day time frame to approve the APD. This is not true, as there are three options, given above.

- No drilling operations or surface disturbance preliminary operations, shall be commenced prior to the approval of the permit. 43 C.F.R. § 3162.3-1(c).

√ **Has the operator lived up to its responsibility throughout all drilling activities?**

Accountability: "Operators have the responsibility to see that their exploration, development, production and construction operations are conducted in a manner which . . . (5) affords adequate safeguards for the environment; (6) results in the proper reclamation of disturbed lands; (7) conforms with current available technology and practice; (8) assures underground sources of fresh water will not be endangered by any fluid injection operation [e.g., fracing]; and (9) otherwise assures the protection of the public health and safety." (Order No. 1 at I (5)-(9)).

Appendix 6

Key Statutes

The Mineral Leasing Act
The Mineral Leasing Act is the primary federal statute governing the availability of public lands for private oil and gas development.

The Federal Onshore Oil and Gas Leasing Reform Act
This series of amendments to the Mineral Leasing Act was intended to increase profits to the federal treasury from the sale of oil and gas leases by requiring competitive lease sales in most instances.

National Historic Preservation Act
The National Historic Preservation Act (NHPA), passed in 1966, is aimed at protecting areas of historic importance, including archaeological and paleontological sites. When federal agencies are considering actions, including mining, NHPA requires that they go through various consultation processes in order to identify and mitigate potential adverse impacts on historic sites.

National Environmental Policy Act
The National Environmental Policy Act (NEPA), which was passed in 1970, provides one of the most important ways for the public to participate in federal agency's decision-making process. NEPA requires agencies to identify and describe what the impacts to the environment will be from any proposed actions or its alternatives, and to disclose those impacts to the public for review and comment. NEPA requires that federal agencies must prepare either an environmental impact statement (EIS) or an environmental assessment (EA) before they make any final decisions about proposed actions, including grazing management actions. NEPA, however, does not require that agencies choose the alternative which will cause the least amount of damage to the environment.

Endangered Species Act
The Endangered Species Act (ESA) was passed in 1973 to protect plant, fish and wildlife species whose populations have been so dam-aged that they are threatened with extinction. Under the ESA, the U.S. Fish and Wildlife Service is responsible for classifying species as endangered or threatened, depending on the condition of their populations and habitat. The ESA requires agencies to consider the impacts of any proposed actions on listed species and their habitats; actions which will harm either a species or its habitat cannot be taken. In addition, ESA requires agencies to actively conserve listed species so that protection is no longer necessary.

Federal Land Policy and Management Act
The Federal Land Policy Act and Management Act (FLPMA), passed in 1976, is BLM's

"organic act." FLPMA directs that the public lands be managed in accordance with comprehensive land use plans which reflect the principles of multiple use and sustained yield. Multiple use means that fish and wildlife, ecological preservation, recreation, watershed, and historical values all be given equal consideration in developing land use plans, along with economic resources. The concept of sustained yield requires the BLM to have a long-term perspective in its management actions and to insure the land's productive capacity is maintained. FLPMA also states that the public shall be allowed "to participate in the preparation and execution of land use plans and programs for, and the management of, the public lands."

Clean Water Act Amendments
In 1987, Congress amended the Clean Water Act of 1977 to make the elimination of non-point source pollution a national priority. Non-point source pollution is pollution originating from sources other than an obvious outlet such as a pipe. The 1987 amendments require that, where oil and gas development is a cause of non-point source pollution, it must be managed to achieve state and national water quality objectives.

Clean Air Act Amendments
In 1990, Congress amended the Clean Air to improve regulation of the emission of air toxins. It also adopted a provision that requires all federal agencies to ensure that federal projects will not result in violations of state and federal air quality requirements. This includes many areas on federal lands that have been designated for non-degradation of air quality.
These key laws, which apply to oil and gas development on the public lands, are some of the many legal tools available to citizens interested in participating in BLM management decisions. We encourage you to learn more about these laws, as well as others not mentioned in the handbook.

National Forest Management Act
The National Forest Management Act (NFMA) was passed in 1976 and reorganized, expanded and otherwise amended the Forest and Rangeland Renewable Resources Planning Act of 1974, which called for the management of renewable resources on national forest lands. The National Forest Management Act requires the Secretary of Agriculture to assess forest lands, develop a management program based on multiple-use, sustained-yield principles, and implement a resource management plan (LRMP) for each unit of the National Forest System. It is the primary statute governing the administration of national forests.

Appendix 7

Key Regulations

In addition to the statutes mentioned in Appendix 6, the administration of oil and gas is determined by an agency's own regulations. In general, regulations are more detailed than statutes. They spell out how agencies are to interpret and carry out the provisions of statutes and have the full force and effect of laws. BLM and the Forest Service (FS), like other federal agencies, are required to abide by their regulations. In some cases, they must also abide by the regulations of other federal agencies. BLM/FS have adopted regulations for the administration of oil and gas, the preparation of land use plans, and for administrative challenges of oil and gas decisions. For BLM, all of these regulations are found in Title 43 of the Code of Federal Regulations or "CFR." The regulations of the FS are contained in Title 36 of the CFR, with the specific regulations for oil and gas resources found at 36 C.F.R. §§ 228.100 – 228.116; and 36 C.F.R. Subpart E, Appendix A.

Other key regulations which guide oil and gas decisionmaking process for both BLM and the FS include the regulations implementing NEPA, which come from the Council on Environmental Quality (CEQ). These are found in Title 40 of the CFR. In addition, BLM/FS must comply with the regulations drawn up by the United States Fish and Wildlife Service to implement the Endangered Species Act.

You should obtain copies of the oil and gas and NEPA regulations from BLM/FS and become familiar with their contents. Non-compliance with regulations as well as statutory requirements is one of the bases of successful protest and appeals of agency decisions.

The Internet is an invaluable tool for the activist. This source of information has made access much easier - at the time of publication, the BLM oil and gas regulations and onshore orders that deal with the particulars of leasing and operations, are online at http://www.mt.blm.gov/oilgas/operation/index.html. The FS regulations and Forest Service Manual concerning oil and gas issues are online at http://www.fs.fed.us/geology/mgm_leasable.html. If these sites no longer contain the information, these regulations can be found fairly easily with a search engine.

Appendix 8

Addresses of BLM Offices in 11 Western States

ARIZONA

Arizona State Office
222 North Central Avenue
Phoenix, AZ 85004-2203
Ph. (602) 417-9200
Fax (602) 417-9556
http://www.az.blm.gov/azso.htm

Phoenix Field Office
21605 N. 7th Avenue
Phoenix, AZ 85027-2099
Ph. (623) 580-5500
Fax (623) 580-5580
http://azwww.az.blm.gov/pfo/index.html

Kingman Field Office
2475 Beverly Avenue
Kingman, AZ 86401-3629
Ph. (520) 692-4400
Fax (520) 692-4414
http://azwww.az.blm.gov/kfo/index.htm

Tucson Field Office
12661 East Broadway
Tucson, AZ 85748-7208
Ph. (520) 722-4289
Fax (520) 751-0948
http://azwww.az.blm.gov/tfo/index.htm

Yuma Field Office
2555 East Gila Ridge Road
Yuma, AZ 85365-2240
Ph. (520) 317-3200
Fax (520) 317-3250
http://azwww.az.blm.gov/yfo/index.htm

Lake Havasu Field Office
2610 Sweetwater Avenue
Lake Havasu City, AZ 86406-9071
Ph. (520) 505-1200
Fax (520) 505-1208
http://azwww.az.blm.gov/lhfo/index.htm

Arizona Strip Field Office
345 East Riverside Drive
St. George, UT 84790-9000
Ph. (435) 688-3200
Fax (435) 688-3258
http://azwww.az.blm.gov/asfo/index.htm

Safford Field Office
711 14th Avenue
Safford, AZ 85546-3321
Ph. (928) 348-4400
Fax (928) 348-4450
http://azwww.az.blm.gov/sfo/index.htm

San Pedro Project Office
1763 Paseo San Luis
Sierra Vista, AZ 85635-2240
Ph. (520) 458-3559
Fax (520) 458-3559 (same phone line)
http://azwww.az.blm.gov/tfo/index.htm

CALIFORNIA

California State Office
2800 Cottage Way Suite W1834
Sacramento, CA 95825-1886
(916) 978-4400
http://www.ca.blm.gov/caso/index.html

Bakersfield Field Office
3801 Pegasus Drive
Bakersfield, CA 93308
(661) 391-6000
http://www.ca.blm.gov/bakersfield/

Bishop Field Office
785 N. Main Street, Suite E
Bishop, CA 93514-2471
(760) 872-4881
http://www.ca.blm.gov/bishop/

Folsom Field Office
63 Natoma Street
Folsom, CA 95630
(916) 985-4474
http://www.ca.blm.gov/folsom/

Hollister Field Office
20 Hamilton Court
Hollister, CA 95023
(831) 630-5000
http://www.ca.blm.gov/hollister/

Alturas Field Office
708 W. 12th Street
Alturas, CA 96101
(530) 233-4666
http://www.ca.blm.gov/alturas

Eagle Lake Field Office
2950 Riverside Drive
Susanville, CA 96130
(530) 257-0456
http://www.ca.blm.gov/eaglelake/

Surprise Field Office
602 Cressler Street
Cedarville, CA 96104
(530) 279-6101
http://www.ca.blm.gov/surprise/

Ukiah Field Office
2550 N. State Street
Ukiah, CA 95482
(707) 468-4000
http://www.ca.blm.gov/ukiah/

Arcata Field Office
1695 Heindon Road
Arcata, CA 95521-4573
(707) 825-2300
http://www.ca.blm.gov/arcata/

Redding Field Office
355 Hemsted Drive
Redding, CA 96002
(530) 224-2100
http://www.ca.blm.gov/redding/

California Desert District Office
6221 Box Springs Blvd.
Riverside, CA 92507
(909) 697-5200
http://www.ca.blm.gov/cdd/

Barstow Field Office
2601 Barstow Road
Barstow, CA 92311
(760) 252-6000
http://www.ca.blm.gov/barstow/

El Centro Field Office
1661 S. 4th Street
El Centro, CA 92243
(760) 337-4400
http://www.ca.blm.gov/elcentro

Palm Springs/South Coast Field Office
690 W. Garnet Avenue
N. Palm Springs, CA 92258
(760) 251-4800
http://www.ca.blm.gov/palmsprings/

Needles Field Office
101 W. Spikes Road
Needles, CA 92363
(760) 326-7000
http://www.ca.blm.gov/needles/

Ridgecrest Field Office
300 S. Richmond Road
Ridgecrest, CA 93555
(760) 384-5400
http://www.ca.blm.gov/ridgecrest/

COLORADO

Colorado State Office
2850 Youngfield Street
Lakewood, Colorado 80215
303.239.3600
Fax 303.239.3933
http://www.co.blm.gov/index.htm

Grand Junction Field Office
2815 H Road
Grand Junction, Colorado 81506
970-244-3000
Fax 970-244-3083
http://www.co.blm.gov/gjra/gjra.html

Glenwood Springs Field Office
50629 Hwys 6 & 24 (ZIP 81601)
P.O. Box 1009
Glenwood Springs, CO 81602
970-947-2800
Fax 970-947-2829
http://www.co.blm.gov/gsra/gshome.htm

Gunnison Field Office
216 N. Colorado
Gunnison, Colorado 81230
970-641-0471
Fax 970-641-1928
http://www.co.blm.gov/gra/index.html

San Juan Field Office
USFS/BLM
15 Burnett Court
Durango, Colorado 81301
970-247-4874
Fax 970-385-1375
http://www.co.blm.gov/sjra/index.html

Uncompahgre Field Office
2505 S. Townsend Avenue
Montrose, Colorado 81401
970-240-5300
Fax 970-240-5367
http://www.co.blm.gov/ubra/index.html

White River Field Office
73544 Highway 64
Meeker, Colorado 81641
970-878-3601
Fax 970-878-5717
http://www.co.blm.gov/wrra/wrraindex.htm

Royal Gorge Field Office
3170 East Main Street
CaÒon City, Colorado 81212
719-269-8500
Fax 719-269-8599
http://www.co.blm.gov/ccdo/canon.htm

Kremmling Field Office
2103 E. Park Avenue
P.O. Box 68
Kremmling, Colorado 80459
970-724-3437
Fax 970-724-9590
http://www.co.blm.gov/kra/kraindex.htm

Little Snake Field Office
455 Emerson St.
Craig, Colorado 81625
970-826-5000
Fax 970-826-5002
http://www.co.blm.gov/lsra/lsraindex.htm

Anasazi Heritage Center
27501 Highway 184
Dolores, Colorado 81323
970-882-4811
Fax 970-882-7035
http://www.co.blm.gov/ahc/hmepge.htm

Front Range Center
BLM/USFS
3170 East Main Street
Canon City, Colorado 81212
719-29-8500
Fax 719-269-8599
http://www.co.blm.gov/ccdo/canon.htm

Saguache Field Office
BLM/USFS
46525 Highway 114
PO Box 67
Saguache, Colorado 81149
719-655-2547
Fax 719-665-2502

La Jara Field Office
BLM/USFS
15571 County Road T5
La Jara, Colorado 81140
719-274-8971
Fax 719-274-6301

Arkansas Headwaters Recreation Area - State Parks/BLM
307 West Sackett
PO Box 126
Salida, Colorado 81201
719-539-7289
Fax 719-539-3771

Western Slope Center - Main Office
2815 H Road
Grand Junction, Colorado 81506
970-244-3000
Fax 970-244-3083

IDAHO

Idaho State Office
1387 S. Vinnell Way
Boise, Idaho 83709
(208) 373-4000
fax (208) 373-3899
http://www.id.blm.gov/

Challis Office
HC 63, Box 1670
Challis, Idaho 83226
(208) 879-4181
fax (208) 879-4196

Four Rivers Office
3948 Development Avenue
Boise, Idaho 83705
(208) 384-3300
fax (208) 384-3493

Jarbidge Office
2620 Kimberly Road
Twin Falls, Idaho 83301
(208)736-2350
fax (208) 736-2375

Malad Office
138 S. Main
Malad City, Idaho 83252
(208) 766-4766
fax (208) 766-4087

Owyhee Office
3948 Development Avenue
Boise, Idaho 83705
(208) 384-3300
fax (208) 384-3493

Burley Office
15 East 200 South
Burley, Idaho 83318
(208) 677-6641
fax (208) 677-6699

Idaho Falls Office
1405 Hollipark Dr.
Idaho Falls, Idaho 83401
(208) 524-7500
fax (208) 524-7505

Pocatello Office
1111 N. 8th Avenue
Pocatello, Idaho 83201
(208) 478-6340
(208) 478-6376 fax

Salmon Office
50 Highway 93 South
Salmon, Idaho 83467
(208)756-5400
fax (208) 756-5436

Shoshone Office
400 West F Street
PO Box 2-B
Shoshone, Idaho 83352
(208) 886-2206
fax (208) 886-7317

Coeur d'Alene Office
1808 N. Third Street
Coeur d'Alene, Idaho 83814
(208) 769-5030
fax (208) 769-5050

Cottonwood Office
House 1, Butte Drive Route 3, Box 181
Cottonwood, Idaho 83522
(208) 962-3245
fax (208) 962-3275

MONTANA

Montana State Office
5001 Southgate Drive
Billings, Montana 59101
Mailing Address
P.O. Box 36800
Billings, Montana 59107-6800
(406) 896-5004
Fax (406) 896-5298
http://www.mt.blm.gov/index.html

Appendix 8

Billings Field Office
5001 Southgate Drive
Billings, MT 59101
Tel 406-896-5013
Fax 406-896-5281
http://www.mt.blm.gov/bifo/

Butte Field Office
106 N. Parkmont
Butte, MT 59701
Tel 406-494-5059
Fax 406-494-3474
ENNIS Fax 406-682-5082
http://www.mt.blm.gov/bifo/

Dillon Field Office
1005 Selway Dr.
Dillon, MT 59725-9431
Tel 406-683-2337
Fax 406-683-2970
http://www.mt.blm.gov/dfo/

Glasgow Field Station
RR 1-4775
Glasgow, MT 59230-9796
Tel 406-228-3750
Fax 406-228-4121

Havre Field Station
1704 Second Street West
Drawer 911
Havre, MT 59501-0911
Tel 406-265-5891
Fax 406-265-3634

Lewistown Field Office
Airport Road - Zip: ?
P.O. Box 1160 - Zip: 59457-1160
Lewistown, MT
Tel 406-538-7461
Fax 406-538-1904
Fax 406-538-1941
http://www.mt.blm.gov/ldo/

Malta Field Office
501 S. 2nd Street E.
Malta, MT 59538 OR
HC 65 Box 5000
Malta, MT 59538-0047
Tel 406-654-1240
Fax 406-654-2671
http://www.mt.blm.gov/mafo/

Miles City Field Office
111 Garryowen Road
Miles City, MT 59301-0940
Tel 406-233-2800
Fax 406-233-2921 (main)
Fax 406-232-7004 (minerals)
http://www.mt.blm.gov/mcfo/

Missoula Field Office
3255 Ft. Missoula Road
Missoula, MT 59804-7293
Tel 406-329-3914
Fax 406-329-3721
http://www.mt.blm.gov/mifo/

NEVADA

Nevada State Office
1340 Financial Blvd.
Reno, NV 89502
phone: (775) 861-6400

Battle Mountain Field Office
50 Bastian Road
Battle Mountain, Nevada 89820-1420
Tel: 775-635-4000
Fax: 775-635-4034
http://www.nv.blm.gov/bmountain/

Callente Field Station
U.S. Highway 93, PO Box 237
Caliente, Nevada 89008-0237
Tel: 775-726-8100
Fax: 775-726-8111

Carson City Field Office
5665 Morgan Mill Road
Carson City, Nevada 89701
Tel: 775-885-6000
Fax: 775-885-6147
http://www.nv.blm.gov/carson/Default.htm

Elko Field Office
3900 East Idaho Street
Elko, Nevada 89801
Tel: 775-753-0200
Fax: 775-753-0255
http://www.nv.blm.gov/Elko/Default.htm

Ely Field Office
775North Industrial Way
HC33 Box 33500
Ely, Nevada 89301-9408
Tel: 775-289-1800
Fax: 775-289-1910
http://www.nv.blm.gov/Ely/Default.htm

Carson City Field Office
5665 Morgan Mill Road
Carson City, Nevada 89701
Tel: 775-885-6000
Fax: 775-885-6147
http://www.nv.blm.gov/carson/Default.htm

Elko Field Office
3900 East Idaho Street
Elko, Nevada 89801
Tel: 775-753-0200
Fax: 775-753-0255
http://www.nv.blm.gov/Elko/Default.htm

Ely Field Office
775North Industrial Way
HC33 Box 33500
Ely, Nevada 89301-9408
Tel: 775-289-1800
Fax: 775-289-1910
http://www.nv.blm.gov/Ely/Default.htm

National Wild Horse and Burro Center at Palomino Valley
PO Box 3270
Sparks, Nevada 89432-3272
Tel: 775-475-2222
Fax: 775-475-2053

Tonopah Field Station
1553 South Main St.
PO Box 911
Tonopah, Nevada 89049-0911
Tel: 775-482-7800
Fax: 775-482-7810

Winnemucca Field Office
5100 East Winnemucca Boulevard
Winnemucca, Nevada 89445
Tel: 775-623-1500
Fax: 775-623-1503

NEW MEXICO

New Mexico State Office
P.O. Box 27115
Santa Fe, NM 87502-0115
(505) 438-7400
(505) 438-7435 Fax

Albuquerque Field Office
435 Montano Road, NE
Albuquerque, NM 87107-4935
(505) 761-8700
(505) 761-8911 Fax
http://www.nm.blm.gov/www/aufo/aufo_home.html

Carlsbad Field Office
620 E. Greene St.
Carlsbad, NM 88220-6292
(505) 887-6544
(505) 885-9264 Fax
http://www.nm.blm.gov/www/cfo/cfo_home.html

Farmington Field Office
1235 La Plata Highway, Suite A
Farmington, NM 87401
(505) 599-8900
(505) 599-8998 Fax
http://www.nm.blm.gov/www/ffo/ffo_home.html

Las Cruces Field Office
1800 Marquess Street
Las Cruces, NM 88005-3370
(505) 525-4300
(505) 525-4412 Fax
http://www.nm.blm.gov/www/lcfo/lcfo_home.html

Roswell Field Office
2909 W. Second Street
Roswell, NM 88201-2019
(505) 627-0272
(505) 627-0276 Fax
http://www.nm.blm.gov/www/rfo/rfo_home.html

Socorro Field Office
198 Neel Ave NW
Socorro, NM 87801-4648
(505) 835-0412
(505) 835-0223 Fax
http://www.nm.blm.gov/www/sfo/sfo_home.html

Taos Field Office
226 Cruz Alta Road
Taos, NM 87571-5983
(505) 758-8851
(505) 758-1620 Fax
http://www.nm.blm.gov/www/tafo/tafo_home.html

OREGON

Oregon State Office
1515 S.W. 5th Ave., Portland, Oregon 97201
P.O. Box 2965, Portland, Oregon 97208
503-952-6002
Fax 503-952-6308
http://www.or.blm.gov/

Baker Resource Area
3165 10th St.
Baker City, OR 97918
Tel: (541)523-1256
Fax: (541)523-1965

Burns District
(including Three Rivers and Andrews Areas)
HC 74-12533, Hwy 20 West
Hines, Oregon 97738
Tel: (541) 573-4400
Fax: (541) 573-4411

Coos Bay District
(Including Umpqua and Myrtlewood Resource Areas)
1300 Airport Lane
North Bend, OR 97459-2000
Tel: (541) 756-0100
Fax: (541) 756-9303

Eugene District
2890 Chad Drive
Eugene, OR 97440-2226
Tel: (541) 683-6600
Fax: (541) 683-6981

Klamath Falls Resource Area
2795 Anderson Ave., Bldg #25
Klamath Falls, OR 97603
Tel: (541)883-6916
Fax: (541)884-2097

Lakeview District
HC 10 Box 337
1300 S. G St.
Lakeview, OR 97630
Tel: (541) 947-2177
Fax: (541) 947-2143

Medford District
3040 Biddle Road
Medford, OR 97504
Tel: (541) 618-2200
Fax: (541) 618-2400

Prineville District
P. O. Box 550 - 3050 NE Third
Prineville, OR 97754
Tel: (541) 416-6700
Fax: (541) 416-6798

Roseburg District
777 NW Garden Valley Blvd.
Roseburg, OR 97470
Tel: (541) 440-4930

Salem District
1717 Fabry Road SE
Salem, OR 97306
Tel: (503) 375-5646
Fax: (503) 375-5622

Tillamook Resource Area
4610 Third Street
Tillamook, OR 97141
Tel: (503) 815-1100
Fax: (503) 815-1107

Vale District
100 Oregon Street
Vale, OR 97918
Tel: (541) 473-3144
Fax: (541) 473-6213

UTAH

Utah State Office
PO Box 45155
Salt Lake City, Utah 84145-0155
Phone: (801) 539-4001
Fax: (801) 539-4013
http://www.ut.blm.gov/

Cedar City Field Office
175 East D.L. Sargent Drive
Cedar City, UT 84720
(435) 586-2401
http://www.ut.blm.gov/cedar_city/index.html

Fillmore Field Office
35 East 500 North
Fillmore, Utah 84631
(435) 743-3100
http://www.ut.blm.gov/fillmore/index.html

Grand Staircase- Escalante National Monument
180 West 300 North
Kanab, Utah 84741
(435) 644-4300
http://www.ut.blm.gov/gsenm/index.html

Kanab Field Office
3 18 North First East
Kanab, UT 84741
(435) 644-4600
http://www.ut.blm.gov/kanab/index.html

Moab Field Office
82 East Dogwood
Moab, UT 84532
(435) 259-2100
http://www.ut.blm.gov/moab/index.html

Monticello Field Office
435 North Main, P.O. Box 7
Monticello, Utah 84535
(435) 587-1500
http://www.ut.blm.gov/monticello/index.html

Price Field Office
125 South 600 West
Price, UT 84501
(435) 636-3600
http://www.ut.blm.gov/price/index.html

Richfield Field Office
150 East 900 North
Richfield, Utah 84701
(435) 896-1500
http://www.ut.blm.gov/richfield/index.html

St. George Field Office
345 East Riverside Drive
St. George, Utah 84720
(435) 688-3200
http://www.ut.blm.gov/st_george/index.html

Salt Lake Field Office
(includes Bear River & Pony Express Resource Areas)
2370 South 2300 West
Salt Lake City, Utah 84119
(801) 977-4300
http://www.ut.blm.gov/salt_lake/index.html

Vernal District
(includes Diamond Mountain and Book Cliffs Resource Areas)
170 South 500 East
Vernal, UT 84078
(435) 781-4400
http://www.ut.blm.gov/vernal/index.html

WASHINGTON

[state office - See Oregon]

Spokane District
1103 N. Fancher
Spokane, WA 99212-1275
Phone: (509) 536-1200
Fax: (509) 536-1275
http://www.or.blm.gov/Spokane/

Wenatchee Resource Area
915 N. Walla Walla
Wenatchee, WA 98801
Tel: (509) 665-2100
Fax: (509) 665-2121

WYOMING

Wyoming State Office
5353 Yellowstone Rd
P.O. Box 1828
Cheyenne, WY 82003-1828
307-775-6256
Fax: 307-775-6129

Buffalo Field Office
1425 Fort Street
Buffalo, WY 82834-2436
(307) 684-1100
Fax: (307) 684-1122
http://www.wy.blm.gov/Directory/fo_map/buff_fo.html

Casper Field Office
2987 Prospector Drive
Casper, WY 82604-2968
(307) 261-7600
Fax: (307) 261-7587
http://www.wy.blm.gov/Directory/fo_map/casper_fo.html

Cody Field Office
1002 Blackburn
P.O. Box 518
Cody, WY 82414-8464
(307) 578-5900
Fax: (307) 578-5939
http://www.wy.blm.gov/Directory/fo_map/cody_fo.html

Kemmerer Field Office
312 Highway 189 N.
Kemmerer, WY 83101-9711
E-mail:
kemmerer_wymail@blm.gov
(307) 828-4500
Fax: (307) 828-4539
http://www.wy.blm.gov/Directory/fo_map/kem_fo.html

Lander Field Office
1335 Main
P.O. Box 589
Lander, WY 82520-0589
(307) 332-8400
Fax: (307) 332-8447
http://www.wy.blm.gov/Directory/fo_map/lander_fo.html

Newcastle Field Office
1101 Washington Blvd.
Newcastle, WY 82701-2972
(307) 746-6600
Fax: (307) 746-6639

Pinedale Field Office
432 E. Mill Street
P.O. Box 768
Pinedale, WY 82941-0768
(307) 367-5300
Fax: (307) 367-5329
http://www.wy.blm.gov/Directory/fo_map/pine_FO.html

Rawlins Field Office
1300 N. Third
P.O. Box 2407
Rawlins, WY 82301-2407
(307) 328-4200 or (307) 328-4256
Fax: (307) 328-4224
http://www.wy.blm.gov/Directory/fo_map/rawlins_fo.html

Rock Springs Field Office
280 Highway 191 N.
Rock Springs, WY 82901-3448
(307) 352-0256
Fax: (307) 352-0329
http://www.wy.blm.gov/Directory/fo_map/rs_fo.html

Worland Field Office
(includes Grass Creek & Wasbakie Resource Areas)
101 South 23rd
P.O. Box 119
Worland, WY 82401-0119
(307) 347-5100
Fax: (307) 347-6195
http://www.wy.blm.gov/Directory/fo_map/worl_fo.html

Appendix 9

DOI Regional Solicitors' Offices http://www.doi.gov/sol/soladdr.html

Arizona

Office of the Field Solicitor
U.S. Dept. of the Interior
One Renaissance Square
Two North Central, Suite 1130
Phoenix, AZ 85004
(602) 379-4756

California

Office of the Regional Solicitor
Pacific Southwest Region
US. Dept. of the Interior
2800 Cottage Way, Rm. E-2753
Sacramento, CA 95825-1890
(916) 979-2140

Colorado

Office of the Regional Solicitor
Rocky Mountain Region
U.S. Dept. of the Interior
755 Parfet Street, Room 151
Lakewood, CO 80215
(303) 231-5353

Idaho

Office of the Field Solicitor
U.S. Dept. of the Interior
Federal Building
550 West Fort Street, Room 365
Boise, Idaho 83724
(208) 334-1911

Montana

Office of the Field Solicitor
U.S. Dept. of the Interior
316 North 26th Street, Rm. 3004
Billings, MT 59101
(406) 247-7583

Nevada

Office of the Regional Solicitor
Pacific Southwest Region
U.S. Dept. of the Interior
2800 Cottage Way, Rm. E-2753
Sacramento, CA 95825 - 1890
(916) 979-2140

New Mexico

Office of the Field Solicitor
U.S. Dept. of the Interior
P.O. Box 1042
Santa Fe, NM 87504-1042
(505) 988-6200

Oregon

Office of the Regional Solicitor
Pacific Northwest Region
U.S. Dept. of the Interior
500 N.E. Multnomah St., Suite 607
Portland, OR 97232
(503) 231-2126

Utah

Office of the Regional Solicitor
U.S. Dept. of the Interior
6201 Federal Building
125 South State Street
Salt Lake City, UT 84138-1180
(801) 524-5677

Wyoming

Office of the Regional Solicitor
U.S. Dept. of the Interior
755 Parfet Street, Room 151
Lakewood, CO 80215
(303) 231-5353

Appendix 10

Wildlife and Water Quality Agencies

ARIZONA

Arizona Dept. of Game & Fish
2221 West Greenway Road
Phoenix, AZ 85023
(602) 942-3000
http://www.gf.state.az.us/

Dept. of Environmental Quality
3033 N. Central Ave.
Phoenix, AZ 85012
(602) 207-2300
http://www.adeq.state.az.us/

U.S. Fish and Wildlife Service
Ecological Services Field Office
2321 West Royal Palm Road, Suite 103
Phoenix, AZ 85021-4915
602-242-0210
Fax: 602-242-2513
http://arizonaes.fws.gov/

CALIFORNIA

Office of Environmental Health Hazard Assessment
Division of Water Quality
Post Office Box 4010
1001 I Street
Sacramento, CA 95814
(916) 324-7572
http://www.oehha.ca.gov/home.html

Department of Fish & Game
1416 9th Street
Sacramento, CA 958 14
Phone: (916) 653-7664
Fax: (916) 653-1856
http://www.dfg.ca.gov/dfghome.html

U.S. Fish and Wildlife Service
Sacramento Office
2800 Cottage Way, Rm. W-2605
Sacramento, CA 95825
Phone (916) 414-6600
Fax (916) 414-6710
http://sacramento.fws.gov/

COLORADO

Division of Wildlife
6060 Broadway
Denver, CO 80216
303-297-1192
http://wildlife.state.co.us/index.asp

Water Quality Control Division
State of Colorado Department of Health
4300 Cherry Creek Drive South
Denver, CO 80222-1530 USA
303-692-3500
http://www.cdphe.state.co.us/wq/dwc001/index.html

U.S. Fish and Wildlife Service
Regional Office
Denver Federal Center
P.O. Box 25486
Denver, Colorado 80225-0286
Location Address:
Lake Plaza North
134 Union Boulevard
Lakewood, Colorado 80228-1807
Tel: 303-236-7920
Fax: 303-236-8295
http://mountain-prairie.fws.gov/

IDAHO

Division of Environmental Quality
1410 North Hilton
Boise, ID 83706
(208) 373-0502
Fax: (208) 373-0417
http://www2.state.id.us/deq/

Department of Fish and Game
P.O. Box 25
Boise, ID 83707
(208) 334-3700
http://www2.state.id.us/fishgame/us/us.htm

U.S. Fish and Wildlife Service
Fish and Wildlife Office
1387 South Vinnell Way, Suite 368
Boise, ID 83709-1657
Telephone: 208-378-5243
Fax: 208-378-5262

Appendix 10

MONTANA

Department of Environmental Quality
Water Protection Bureau
Metcalf Building
1520 E. Sixth Avenue
P.O. Box 200901
Helena, MT 59620
406-444-3080
http://www.deq.state.mt.us/index.asp

Dept. of Fish, Wildlife & Parks
1420 East 6th Avenue
Helena, MT 59620
(406) 444-2535
http://www.fwp.state.mt.us/default.asp

US. Fish and Wildlife Service
Ecological Services
2900 4th Avenue North, Suite 301
Billings, MT 59101
(406) 247-7366

NEVADA

Nevada Division of Wildlife
Reno Headquarters
1110 Valley Road
Reno, NV 89512
Phone (775)688-1500
Fax (775)688-1595
http://nevadadivisionofwildlife.org/

Nevada Div. of Environmental Protection
333 W. Nye Lane, Room 138
Carson City, Nevada 89706-0851
(775) 687- 4670
Fax (775) 687-5856
http://ndep.state.nv.us/

U.S. Fish and Wildlife Service
Reno Field Station
1340 Financial Blvd, Suite 234
Reno, NV 89502
775-861-6300
Fax: 775-861-6301

NEW MEXICO

New Mexico Game and Fish
PO Box 25112
Santa Fe, NM 87504
(505) 827-7911
http://www.gmfsh.state.nm.us/

Environment Department
Surface Water Quality Bureau
Harold Runnels Building, N2050
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-0187
Fax: (505) 827-0160
http://www.nmenv.state.nm.us/swqb/swqb.html

U.S. Fish and Wildlife Service
Regional Office, Region 2
500 Gold Ave., S.W.
PO Box 1306
Albuquerque, NM 87103-1306
(505) 248-6925
Fax (505) 248-6845
http://southwest.fws.gov/

US. Fish and Wildlife Service
New Mexico Ecological Services Field Office
2105 Osuna NE
Albuquerque, NM 87113-1001
505-346-2525
http://ifw2es.fws.gov/newmexico/

OREGON

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
Fax: (503) 229-5850
http://www.deq.state.or.us/

Department of Fish & Wildlife
2501 SW First Avenue
PO Box 59
Portland, OR 97201
503-872-5268
http://www.dfw.state.or.us/

U.S. Fish and Wildlife Service
Regional Office, Region 1
Eastside Federal Telplex
911 NE 11th Avenue
Portland, Oregon 97232-4181
Telephone: 503-231-6151
Fax: 503-231-2240
http://pacific.fws.gov/ec/

UTAH

Dept. of Environmental Quality
Division of Water Quality
PO Box 144870
Salt Lake City, UT 84114-4870
(801) 538-6146
Fax (801) 538-6016
http://www.eq.state.ut.us/eqwq/dwq_home.ssi

Division of Wildlife Resources
1596 West North Temple, Suite 2110
PO Box 146301
Sale Lake City, UTAH 84114-6301
(801) 538-4700
http://www.nr.state.ut.us/dwr/dwr.htm

U.S. Fish and Wildlife Service
Ecological Services Field Office
145 East 1300 South, Suite 404
Salt Lake City, Utah 84115-6110
801-524-5009
Fax: 801-524-5021

U.S. Fish and Wildlife Service
Ecological Services Field Office
4000 Airport Parkway
Cheyenne, Wyoming 82001-1599
(307) 777-2374
Fax: 307-772-2358

WASHINGTON

Department of Ecology
Water Quality Program
Nonpoint Source Program
Box 47600
Olympia, WA 98504-7600
(360) 407-6000
http://www.ecy.wa.gov/programs/wq/wqhome.html

Department of Fish and Wildlife
600 Capital Way North
Olympia, WA 98501-1091
(360) 902-2200
(360) 902-2230 Fax
http://www.wa.gov/wdfw/

WYOMING

Wyoming Dept. of Environmental Quality
Water Quality Division
122 West 25th Street
Herschler Building
Cheyenne, WY 82002
(307) 777-7758
(307)777-7682 Fax
http://deq.state.wy.us/

Wyoming Game & Fish Dept.
5400 Bishop Blvd.
Cheyenne, WY 82006
(307) 777-4600
http://gf.state.wy.us/

Appendix 11

State Oil and Gas Agencies

ARIZONA

Arizona Geological Survey
416 West Congress, Suite 100
Tucson, Arizona 85701
(520) 770-3500
Fax: (520) 770-3505
http://www.azgs.state.az.us/

CALIFORNIA

Div. of Oil, Gas and Geothermal Resources
801 K Street, MS 20-20
Sacramento, CA 95814-3530
(916) 445-9686
http://www.consrv.ca.gov/dog/index.htm

COLORADO

Oil and Gas Conservation Commission
Department of Natural Resources
1120 Lincoln Street, Suite 801
Denver, CO 80203
(303) 894-2100
(303) 894-2109 (Fax)
http://oil-gas.state.co.us/

IDAHO

Bureau of Minerals
Department of Lands
954 W Jefferson Street
PO Box 83720
Boise, ID 83720-0050
(208) 334-0200
(208) 334-3698 (Fax)
http://www2.state.id.us/lands/Bureau/MineralsBC.htm

MONTANA

Board of Oil and Gas Conservation, Dept. of Natural Resources
2535 St. Johns Avenue
Billings, MT 59102
(406) 656-0040
Fax: (406) 657-1604
http://bogc.dnrc.state.mt.us

NEVADA

Division of Minerals
400 W. King St., Ste. 106
Carson City, NV 89703
(775) 684-7040 (phone)
(775) 684-7052 (fax)
http://minerals.state.nv.us/

NEW MEXICO

Energy, Minerals, and Natural Resources Department
1220 South St. Francis Drive
PO Box 6429
Santa Fe, New Mexico 87505
(505) 476-3200
(505) 476-3220 Fax
http://www.emnrd.state.nm.us/

OREGON

Department of Geology and Mineral Industries
800 N.E. Oregon Street, Suite 965
Portland, OR 97232
503-731-4100
fax 503-731-4066
http://www.oregongeology.com/

UTAH

Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
http://www.dogm.nr.state.ut.us/

WASHINGTON

Division of Lands and Resources
Department of Natural Resources
1111 Washington ST SE, MS: 47016
Olympia, WA 98504-7016
Phone (360) 902-1340
Fax: (360) 902-1783
http://www.wa.gov/dnr/htdocs/fr/sales/

WYOMING

Oil and Gas Conservation Commission
777 West First Street
PO Box 2640
Casper, WY 82602
(307) 234-7147
(307) 234-5306 Fax
http://wogcc.state.wy.us/

Appendix 12

State Historic Preservation Societies

ARIZONA

State Historic Preservation Office
1300 W. Washington
Phoenix, AZ 85007
(602) 542-4174
http://www.pr.state.az.us/partnerships/shpo/shpo.html

CALIFORNIA

Office of Historic Preservation
Department of Parks and Recreation
P.O. Box 942896
Sacramento, CA 94296-0001
(916) 653-6624
Fax (916) 653-9824
http://ohp.parks.ca.gov/

COLORADO

Historical Society of Colorado
Office of Archaeology and Historic Preservation
1300 Broadway
Denver, CO 80203
(303) 866-3395
Fax: (303) 866-2711
http://coloradohistory-oahp.org/

IDAHO

Idaho State Historical Society
Kenneth Swanson
210 Main St.
Boise, ID 83702
(308) 334-3861/3847
(308) 334-2775 Fax
http://www2.state.id.us/ishs/SHPO.html

MONTANA

Montana State Historic Preservation Office
1410 8th Avenue
PO Box 201202
Phone: (406) 444-7715
Fax: (406) 444-2694

NEVADA

Historic Preservation Office
100 N. Stewart Street
Carson City, NV 89710
(775) 684-2448
http://dmla.clan.lib.nv.us/docs/shpo/

NEW MEXICO

Historic Preservation Division of the Office of Cultural Affairs
Room 320, La Villa Rivera
228 East Palace Ave.
Santa Fe, NM 87501
(505) 827-6320
(505) 827-6338 Fax
http://www.museums.state.nm.us/hpd/about/contact/index.html

OREGON

State Parks and Recreation Department
State Historic Preservation Office
1115 Commercial St. NE
Salem, OR 97310
(503) 378-5019
http://arcweb.sos.state.or.us/shpo/shpoabout.html

UTAH

Utah State Historical Society
300 S. Rio Grande St.
Salt Lake City, UT 84101
(801) 533-3500
http://history.utah.org

WASHINGTON

Office of Archeology and Historic Preservation
420 Golf Club Road SE, Suite 201, Lacey
PO Box 48343
Olympia, WA 98504-8343
Phone: (360) 407-0752
Fax: (360) 407-6217
http://www.ocd.wa.gov/info/lgd/oahp/

WYOMING

Wyoming State Historic Preservation Office
Barrett Building
2301 Central Ave., 3rd Floor
Cheyenne, WY 82002
(307) 777-7697
(307) 777- 6421 Fax
http://spacr.state.wy.us/cr/shpo/

End Notes

[1] See Bureau of Land Management, 2000 Public Land Statistics, at Tables 3-13 to 3-15, available at http://www.blm.gov/natacq/pls00/ (totalling approximately 36 million acres of leased BLM lands); U.S. Dept. of Interior, Mineral Management Service, Onshore Minerals Program Overview, available at http://www.mrm.mms.gov/Intro/onshore.htm (reporting 41 million acres under lease, including 2.5 million acres of tribal leases).

[2] U.S. Dept. of Interior, Mineral Management Service, State Mineral Summaries: FY 2000, at 87, available at http://www.mrm.mms.gov/Stats/pdfdocs/sms2000.pdf.

[3] Public Rewards from Public Lands 2000 (BLM 2000).

[4] See National Petroleum Council, Natural Gas: Meeting the Challenges of the Nation's Growing Natural Gas Demand, CD ROM Presentation, Notes at 7 (Dec. 1999) [hereinafter "NPC Report"].

[5] The National Petroleum Council reports that 91% of the natural gas reserves under federal public lands in the Rocky Mountain region are accessible. See NPC Report, supra note 3 at Vol. I: Summary Report at 42; Vol. II: Task Group Reports at S-25.

[6] National Parks are generally excepted from oil and gas leasing availability. *See generally* 43 C.F.R. §§ 3100.0-3(a)(2)(i); (b)(2)(i). Five areas within the national park system are excluded from this exception, meaning under limited circumstances, they are open to oil and gas leasing. 43 C.F.R. § 3100.0-3(g)(4) (the five include the following National Recreation Areas: Lake Mead; two portions of Whiskeytown-Shasta-Trinity; Ross Lake and Lake Chelan; and, Glen Canyon). The big wildcard is whether all national parks are potentially open to oil and gas development through the concept of drainage. See 43 C.F.R. § 3100.0-3(d). Drainage is a situation where federal resources are depleted by nearby state or private oil and gas development. In essence, federal oil and gas reserves are "drained" by these wells, and the U.S. Treasury loses its royalty. In 2001, BLM revised its drainage regulations, contained in 43 C.F.R. §§ 3100.2; 3162.2. See 66 Fed. Reg. 1883-94 (Jan. 10, 2001). Section 3100.0-3(d) opens up all lands "where oil or gas is being drained" that are "otherwise unavailable for leasing" for BLM to lease to prevent drainage. This section may allow our national parks to be subject to oil and gas leasing in drainage situations, although there is no clear law on this point. To be sure, the Authors believe that the controlling language in the regulation is that but for five limited exceptions, oil and gas development in the national park system is prohibited.

[7] *See* 43 CFR 3100.0-3(d) ("Where oil or gas is being drained from lands otherwise unavailable for leasing, there is implied authority in the agency having jurisdiction of those lands to grant authority to the Bureau of Land Management to lease such lands."). See also 43 U.S.C. § 1457; Attorney General's Opinion of April 2, 1941 (Vol. 40 Op. Atty. Gen. 41).

[8] In Alaska, parties wishing to conduct geophysical exploration must submit an application for a permit. BLM has 90 days in which to approve or disapprove the

application, unless completion of environ-mental studies will delay action on the permit. 43 C.F.R. § 3152.

9 BLM has recognized this concern in at least two environmental studies, including the Southern Ute Indian Tribe draft EIS (Colorado BLM 2000) and Glenwood Springs final EIS (Colorado BLM 1999).

10 Jeff Nesmith and Ralph K.M. Haurwitz, Spills and Explosions Reveal Lax Regulation of Powerful Industry: Paying for Leaks and Fires Across the Country is Cheaper for Companies than Investing in Prevention, Watchdogs Say, AMERICAN-STATESMAN, July 22, 2001.

11 63 Fed. Reg. 66841, (Dec. 3, 1998).

12 16 U.S.C. § 668dd(d)(1) (1988).

13 See 43 C.F.R. § 3100.0-3(d). The concept of drainage is explained supra, note 6.

14 16 U.S.C. § 1133(d)(3) (1988).

15 30 U.S.C. § 226-3 (1988).

16 43 C.F.R. § 3120.1-2(a).

17 30 U.S.C. § 226(g).

18 30 U.S.C. § 226(h).

19 36 C.F.R. § 228.102(c).

20 36 C.F.R. § 228.102(e).

21 36 C.F.R. § 228.102(e)(1)-(3).

22 43 C.F.R. § 3101.7-1(c), (a).

23 For an detailed overview of this process, see Wyoming Outdoor Council v. U.S. Forest Service, 165 F.3d 43, 45-47 (D.C. Cir. 1999).

24 43 C.F.R. § 1610.4.

25 43 C.F.R. § 1610.5-3 (requiring conformity); 43 C.F.R. § 1610.5-5 (requiring RMP amendment when a proposed land use does not conform to the underlying RMP).

26 43 C.F.R. § 1610.4.

27 43 C.F.R § 1610.2 (BLM); 36 C.F.R. § 219.6 (FS).

28 The Oil and Gas Accountability project has a listing of lease sales on its website: www.ogap.org (resource links).

29 See, e.g., Sierra Club v. Peterson, 717 F.2d 1409 (D.C. Cir. 1983); Conner v. Burford, 848 F.2d 1441 (9th Cir. 1988).

30 Park County Resource Council v. U.S. Dept. of Agriculture, 817 F.2d 609 (10th Cir. 1987).

31 Bob Marshall Alliance v. Hodel, 852 F.2d 1223 (9th Cir. 1988)

32 For National Forest lands, the Forest Service must approve the surface use plan of operations.

33 43 C.F.R. § 3162.3-l(h).

34 36 C.F.R. § 228.107(a).

35 43 C.F.R. § 3104.1(a).

[36] 43 C.F.R. §§ 3104.2; 3104.3(a),(b).

[37] 43 C.F.R. § 3104.5(a),(b).

[38] 43 C.F.R. § 3162-3.1(d)(3).

[39] 33 U.S.C. § 1323 (1988).

[40] 16 U.S.C. § 470-470w-6 (1988).

[41] 36 C.F.R. § 800.4(a)(l).

[42] 36 C.F.R. § 800.4(b).

[43] 36 C.F.R. § 800.5.

[44] 25 U.S.C. § 3001 (Supp. 1993).

[45] 42 U.S.C. § 1996 (1988).

[46] 42 U.S.C. §§ 7401-7642 (1988).

[47] 43 U.S.C. § 299(a).

[48] 43 U.S.C. § 299(a).

[49] 43 C.F.R. § 3814.1(c), (d).

[50] 43 C.F.R. §§ 3104.2; 3104.3.

[51] 43 C.F.R. § 3104.5(b).

[52] An excellent resource for FOIA requests is http://www.foiadvocates.com/index.html.

[53] Portions of this chapter have been adapted from How Not to be Cowed (NRDC/SUWA, 1991).

[54] 43 C.F.R. § 1610.5-2.

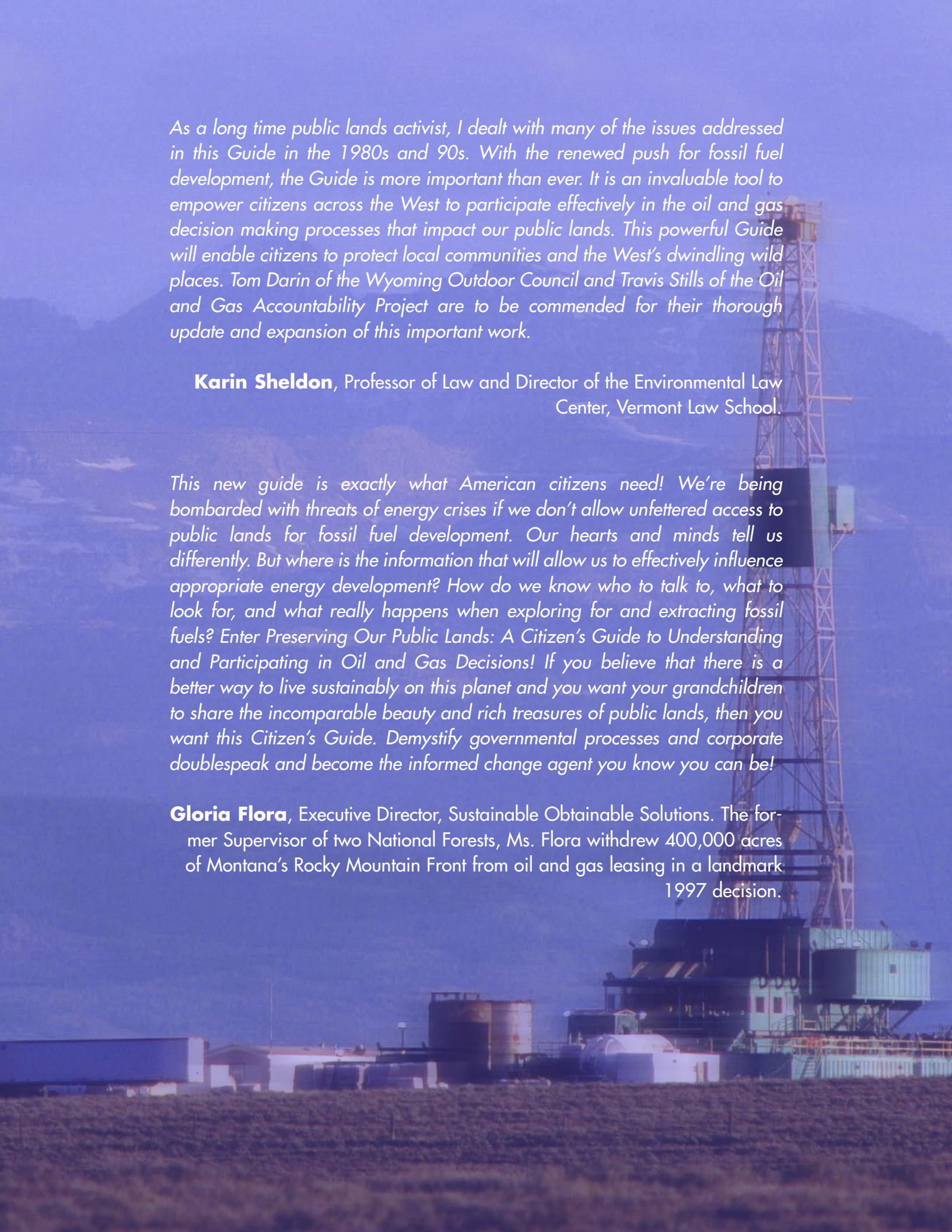
[55] The lease protest (BLM) can be filed under either of two provisions: 43 C.F.R. § 3120.1-3; 43 C.F.R. § 4.450-2.

[56] 43 C.F.R. § 3165.3.

[57] 43 C.F.R. § 3165.3(b), (d).

[58] 43 C.F.R. § 3165.3(b).

Notes



As a long time public lands activist, I dealt with many of the issues addressed in this Guide in the 1980s and 90s. With the renewed push for fossil fuel development, the Guide is more important than ever. It is an invaluable tool to empower citizens across the West to participate effectively in the oil and gas decision making processes that impact our public lands. This powerful Guide will enable citizens to protect local communities and the West's dwindling wild places. Tom Darin of the Wyoming Outdoor Council and Travis Stills of the Oil and Gas Accountability Project are to be commended for their thorough update and expansion of this important work.

Karin Sheldon, Professor of Law and Director of the Environmental Law Center, Vermont Law School.

This new guide is exactly what American citizens need! We're being bombarded with threats of energy crises if we don't allow unfettered access to public lands for fossil fuel development. Our hearts and minds tell us differently. But where is the information that will allow us to effectively influence appropriate energy development? How do we know who to talk to, what to look for, and what really happens when exploring for and extracting fossil fuels? Enter Preserving Our Public Lands: A Citizen's Guide to Understanding and Participating in Oil and Gas Decisions! If you believe that there is a better way to live sustainably on this planet and you want your grandchildren to share the incomparable beauty and rich treasures of public lands, then you want this Citizen's Guide. Demystify governmental processes and corporate doublespeak and become the informed change agent you know you can be!

Gloria Flora, Executive Director, Sustainable Obtainable Solutions. The former Supervisor of two National Forests, Ms. Flora withdrew 400,000 acres of Montana's Rocky Mountain Front from oil and gas leasing in a landmark 1997 decision.