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And Introduction

Oil and Gas at Your Door?

A Landowner's Guide to Oil and Gas Development
Second Edition



OIL & GAS ACCOUNTABILITY PROJECT

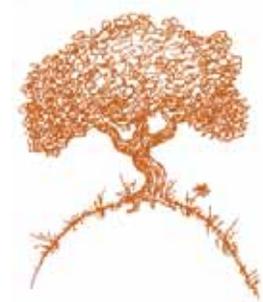
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Oil and Gas at Your Door?

A Landowner's Guide to Oil and Gas Development

Second Edition



OIL & GAS ACCOUNTABILITY PROJECT

About the Oil & Gas Accountability Project (OGAP)

OGAP was founded in 1999 to build the collective power of people who find themselves face to face with huge energy corporations that can drill for oil and gas a stone's throw from a home or in a pristine expanse of public lands. OGAP brings together more than 120 organizations across the United States and Canada to advocate for greater corporate and governmental accountability, responsibility and respect for people and places in the course of oil and gas development. OGAP is the only organization in the United States with the sole mission of protecting tribal and rural communities and the environment from the devastating impacts of oil and gas development. OGAP's multi-tiered approach involves people who are directly affected by the impacts of oil and gas development in working for strong reforms. Our campaigns include media, public education and community organizing components.

OGAP coordinates four program areas:

- **Citizen and Community Support**
- **Governmental Reform**
- **Promoting Best Practices**
- **Public Health and Toxics**

OGAP is working to change the laws and policies — from the local level on up — that allow the oil and gas industry to develop oil and gas resources without regard to people's health, the environment or communities. Our overall goal is to only allow corporations to drill and process natural gas if they can do so without threatening people and contaminating the air, water and soil. OGAP works with the citizens of rural communities and Indian tribes who face the impacts of oil and gas development every day in working for lasting change.

OGAP has prepared this guide to assist those facing oil and gas development on their land and in their communities.

For more information on OGAP, please visit our website at www.ogap.org, or contact:

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“Working with communities to prevent and reduce the social, economic and environmental problems caused by oil and gas development.”

Acknowledgements and Disclaimer

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The contents of this guide are the responsibility of the Oil & Gas Accountability Project and do not necessarily reflect the views and opinions of those acknowledged above. We have made every effort to ensure the accuracy of the information contained in this document at the time of writing. However, the authors advise that they cannot guarantee that the information provided is complete or accurate and that any person relying on this publication does so at his or her own risk.

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Introduction

Oil and gas development is something that most citizens do not encounter on a daily basis. Depending on where you live, however, it may be a current or potential concern.

Oil and gas development continues to occur at a rapid pace across the United States, and in some areas, like the Powder River Basin of Montana and Wyoming, development has exploded in the past few years. Not surprisingly, in many regions of the country this form of industrial development has increasingly come into conflict with other land uses, e.g., ranching, farming, recreational activities, and enjoyment of private property.

As a landowner living in an area of current or potential oil and gas development, you may be approached by a representative of an oil and gas company wanting to drill for oil and gas on your property. This can be a troubling experience if you do not own the rights to the minerals beneath your land. It can be intimidating to have companies knock on your door and tell you that they are going to come onto your land and drill for oil or gas, and that there is nothing you can do to stop them. Or, if you are a landowner living adjacent to or downstream from a property where drilling is going to occur, you may feel powerless to influence the behavior of the oil and gas companies. Even if you own the mineral rights you may feel pressured by company representatives who bring with them promises of royalties, but want you to sign an agreement on the spot.

Admittedly, the legal and technical issues around oil and gas development can be overwhelming for people who have not had prior contact with the industry. The purpose of this guide is to provide information that will help you to better understand and deal with the oil and gas industry.

WHAT'S INSIDE?

Chapter I of this guide contains a description of the oil and gas development process, and information on issues related to development that may be of concern and importance to landowners. Chapter II contains legal and government regulatory information that may help landowners to prevent serious impacts from oil and gas development on their lands and lives. Chapter III provides additional tips on how to deal with the oil and gas industry, e.g., through negotiation of surface use agreements. Chapter IV contains stories from landowners who have already experienced development on or near their property. Finally, Chapter V contains lists of additional resources that may help to further prepare landowners for oil and gas development.

Because this is a guide for landowners, the content focuses primarily on on-shore oil and gas development, as opposed to offshore drilling operations. And it highlights issues with private as opposed to public lands. For more information on oil and gas issues and impacts on public lands, readers are referred to the guide, *Preserving Our Public Lands*. (See Chapter V for details.)



SHOULD YOU BE CONCERNED ABOUT OIL AND GAS DEVELOPMENT?

If you own some land, but aren't presently dealing with oil and gas development, you may be wondering whether or not you need to read this guidebook. The following questions may shed some light on this issue.

What is the future of oil and gas production in the U.S.? In the United States, approximately four million wells have been drilled in the search for oil and gas, which started in this country in the early 1800s.¹

Between 1992 and 2002, the number of producing domestic natural gas wells increased from approximately 202,000 to 262,000. Meanwhile, the number of domestic oil wells declined from 396,000 wells in 1992 to 319,000 wells in 2002.²

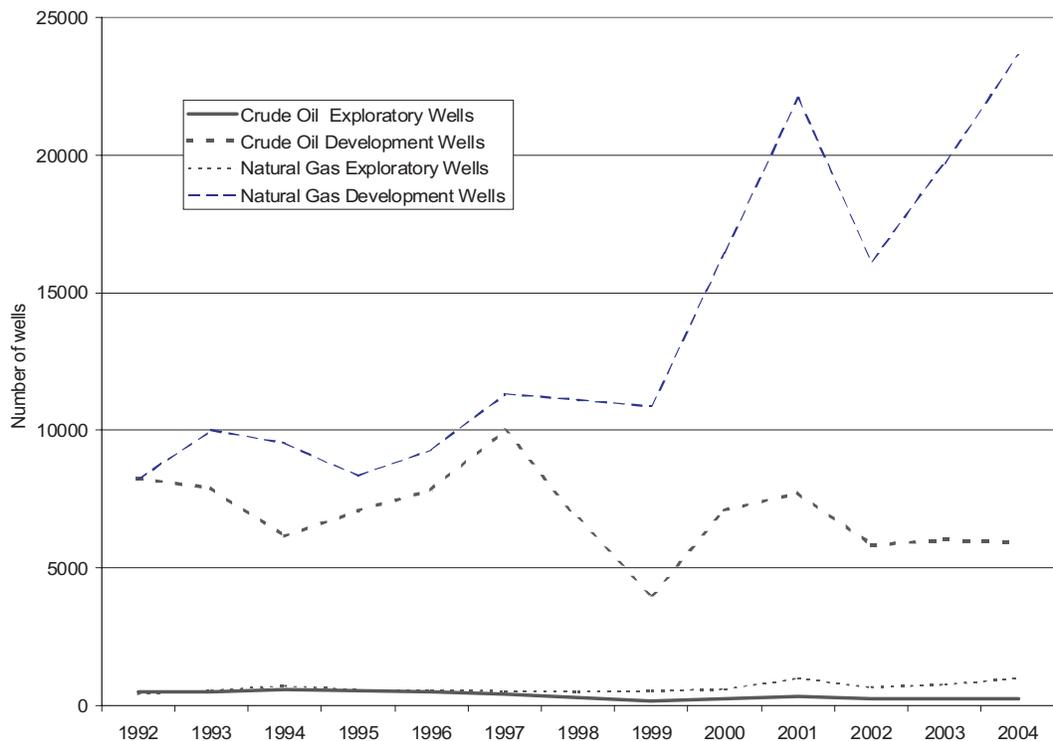


FIGURE i-1. NEW CRUDE OIL AND NATURAL GAS WELLS DRILLED IN THE U.S. BY YEAR.

Source: Energy Information Administration. U.S. Department Of Energy.³

Figure i-1 shows the number of oil and gas wells drilled per year in the U.S. since 1992. It is clear that the drilling of natural gas wells has skyrocketed since about 1999.

All signs point to the fact that drilling—at least for natural gas—is not going to slow down in the near future. The U.S. Department of Energy predicts that domestic natural gas production in the country is going to increase from 19.1 trillion cubic feet (2003) to 21.8 trillion cubic feet (2025).⁴ Crude oil production is predicted to experience slower growth, and any increase is expected to come from offshore oil reserves.

The current administration contends that increasing our domestic energy supply is necessary to protect our national security.⁵ In a 2001 speech on U.S. Energy Strategy, Vice President Cheney stated that:

For the oil we need, unless we choose to accept our growing dependence on foreign suppliers—and all that goes with that—we must increase domestic production from known sources. . . For the natural gas we need, we must lay more pipelines—at least 38,000 miles more—as well as many thousands of miles of added distribution lines to bring natural gas into our homes and workplaces.⁶

The United States will eventually deplete its oil and gas resources, but this is unlikely to occur in our lifetime. As development continues, more and more conflicts between oil and gas developers and landowners are sure to arise because of impacts to land, water and public health and safety, all of which are threatened by increased oil and gas extraction.

Do we “need” so much oil and gas? The United States is the number one consumer of oil—Americans use 23.5 million barrels per day.⁷ There is the perceived need to increase oil production because the U.S. Department of Energy has forecast that our consumption will increase by 1.8% (423,000 barrels per day) every year until 2050.⁸ Current government policy, however, is focused on increasing production rather than decreasing consumption. If a shift occurred in federal government priorities, the “need” to develop more wells, faster, would diminish.

For example, because nearly 70% of this country’s oil consumption is currently used for transportation, the United States could reduce consumption if it focused on reducing oil use in the transportation sector. According to a report by the National Environmental Trust,⁹ the U.S. government easily could implement a program to decrease U.S. oil demand by:

- Encouraging Americans to keep their engines tuned up and their tires properly inflated. This would cut U.S. oil consumption by a million barrels per day!
- Increasing federal fuel economy standards for cars and trucks to 40 miles per gallon by 2010. This would eliminate the projected growth in U.S. oil imports by that date. This is a reasonable recommendation, as U.S. auto companies have already committed to meeting this standard for cars exported to Europe by 2010. They simply need to implement the same standard here in the U.S.



With engines tuned and tires properly inflated, oil consumption would be decreased by 1,000,000 barrels per day

— National Environmental Trust

As for natural gas, the United States is the country with the second largest consumption rate in the world.¹⁰ In June 1999, an article in *Oil & Gas Journal* reported that in Texas, a state that produces 1/3 of the nation’s gas, 6,400 new wells must be drilled each year to keep its production stable. But Americans’ demand for natural gas is not stable.¹¹ According to the U.S. Department of Energy, U.S. consumption is forecast to increase by 2.2% every year.¹² So, even if we continue to increase our drilling of natural gas wells, we are not going to meet our “needs.”

What is really needed is an energy policy that provides incentives for reducing our demand for oil and natural gas, and promotes the development of less polluting, renewable energy sources.

Where will the oil and gas come from? Since it is likely that oil and gas development will continue to be promoted in the United States, information on the known locations of oil and gas reserves will help landowners know whether or not they are living in areas where oil or gas exploration and drilling may either begin to occur or intensify.

Known deposits of oil occur in more than 30 states, with the majority of current onshore oil production concentrated in Texas, Oklahoma, Louisiana, Wyoming, California, Kansas and New Mexico.¹³ The majority of **proved reserves** of oil, however, have a slightly different geographic distribution. (The U.S. Department of Energy defines **proved reserves** as the volumes of oil or gas that geological and engineering data have demonstrated with reasonable certainty to be recoverable in the future, under existing economic and operating conditions.)¹⁴ As seen in Figure i-2, Texas, Alaska, California, Louisiana, New Mexico and Oklahoma are the states with the largest on-shore proved reserves of oil.

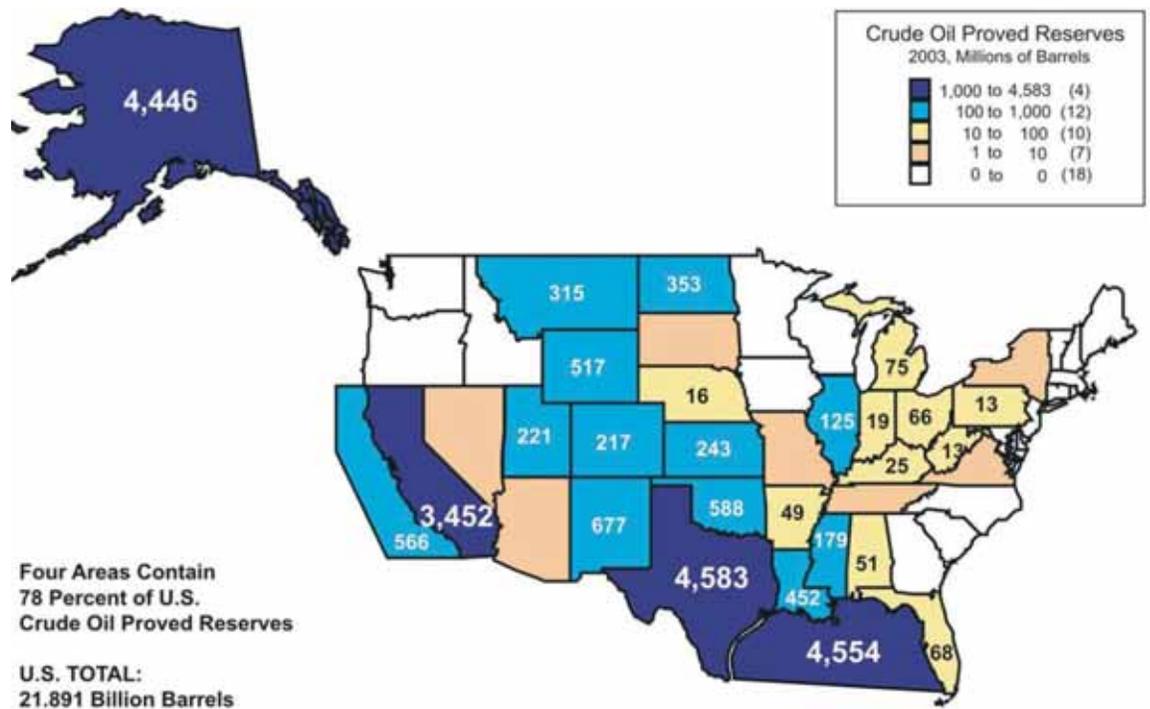


FIGURE i-2. 2003 U.S. CRUDE OIL PROVED RESERVES.

Source: Energy Information Administration, U.S. Department of Energy.¹⁵

The geographic distribution of natural gas is similar to that of oil, as natural gas often occurs in association with oil deposits. In terms of current production, three States (Texas, Louisiana, and Oklahoma) produce more than half of the natural gas in this country. New Mexico, Wyoming, Colorado and Kansas are also major gas-producing states.¹⁶

Large deposits of natural gas exist in half of the 50 states, but the deposits in Alaska, Texas, Louisiana, New Mexico and Oklahoma make up approximately half of the known U.S. dry natural gas proved reserves. See Figure i-3. **Dry natural gas** is almost entirely methane, with few impurities or other hydrocarbons.

With the recent boom in extraction of natural gas from coal beds (i.e., coalbed methane development), landowners should also be aware of the areas where coalbed methane development may potentially occur. See Figures i-4 and i-5.

In most regions of the country where oil and gas reserves exist, the federal government has plans to ramp up oil and gas production. For example, in New Mexico's San Juan Basin there are currently 18,000 producing wells, but the federal Bureau of Land Management (BLM) is proposing an additional 12,500 new wells to be drilled in one portion of the basin alone.¹⁷ In Wyoming and Montana, the BLM is proposing that 77,000 new wells be drilled in the Powder River Basin.¹⁸

If you live in these regions, or other regions of proved reserves, you may have a visit from an oil or gas company representative in your future.

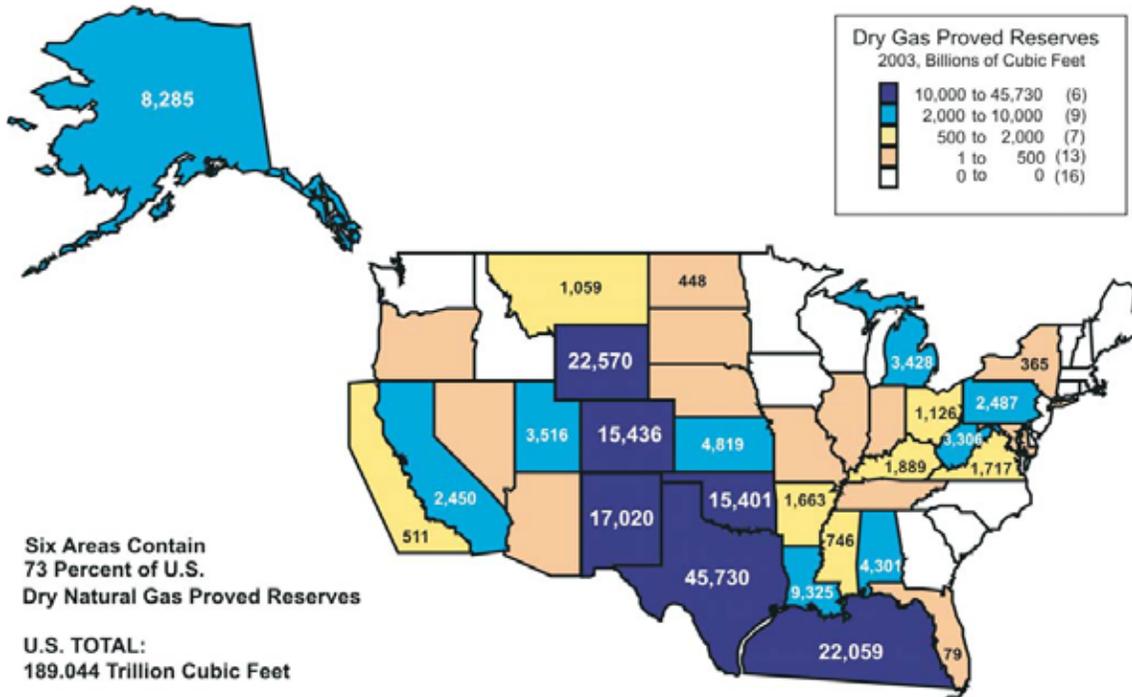


FIGURE i-3. 2003 U.S. DRY NATURAL GAS PROVED RESERVES.

Source: Energy Information Administration, U.S. Department of Energy. ¹⁹

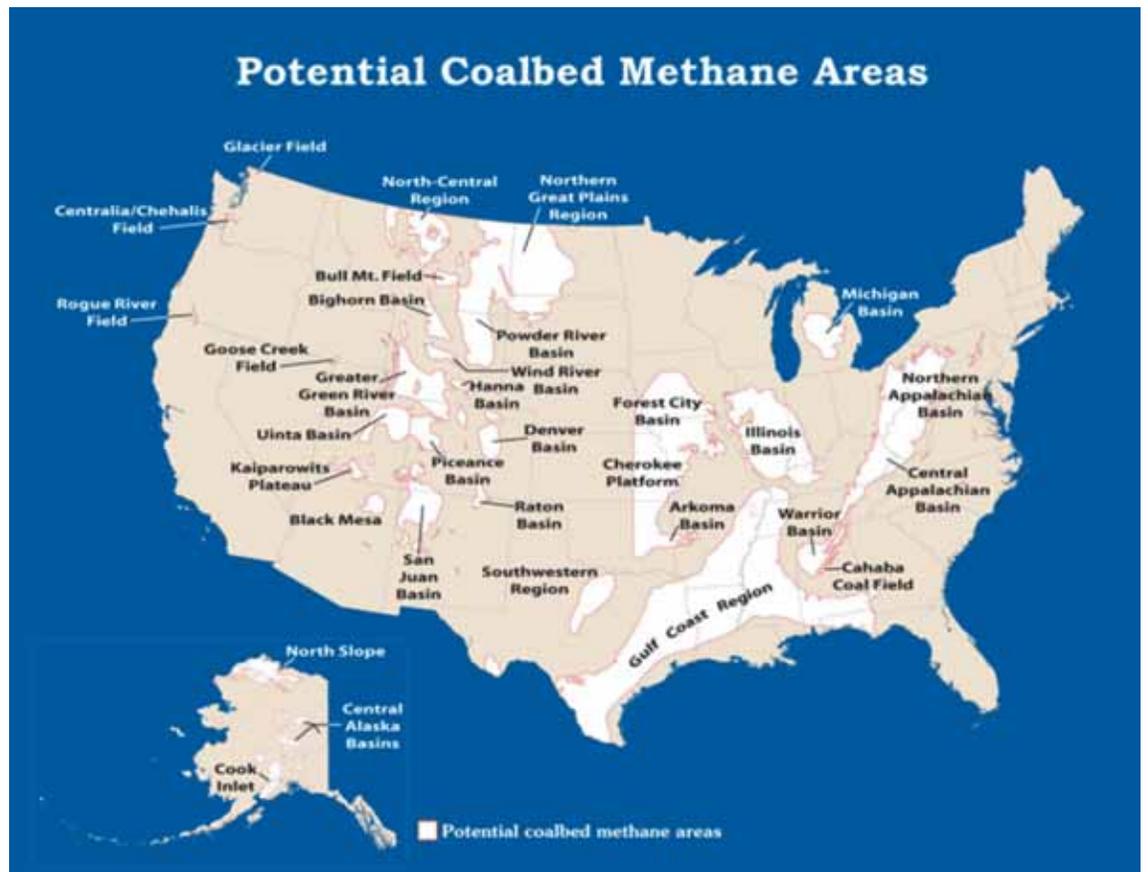
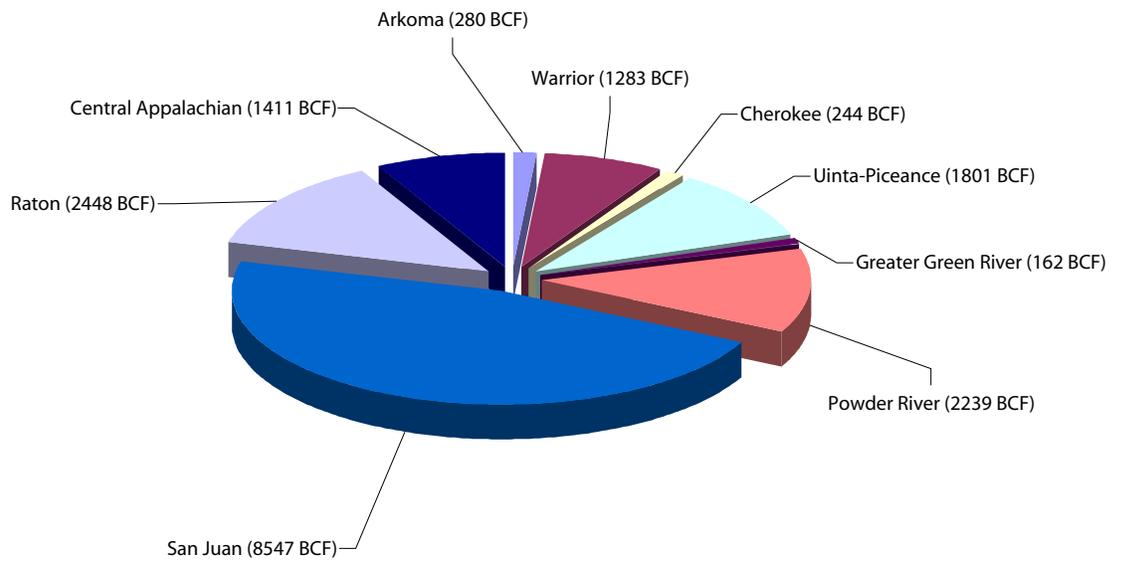


FIGURE I-4. POTENTIAL COALBED METHANE BASINS IN THE UNITED STATES.
 Source: Interstate Oil and Gas Compact Commission.²⁰



BCF - billion cubic feet of methane

FIGURE I-5. 2002 PROVED COALBED METHANE RESERVES.
 Source: Energy Information Administration, U.S. Department of Energy.²¹

Do you own the minerals associated with your land? You may own a piece of land, but do you own everything that is underneath it? Today, the reality is that many landowners own only the surface—not the subsurface—portion of land. This is mainly because previous owners retained ownership of the minerals when they sold the surface property.

Consequently, it is possible that a landowner may own some, all or none of the rights to the minerals, oil and gas that lay beneath the surface of their property. In Colorado, for example, only 15 percent of landowners also own the rights to the minerals under their lands.²²

Many conflicts involving oil and gas development are rooted in this “severance” of land title, where property is divided into the “surface estate” and the “mineral estate.” In many cases, surface owners are unaware that someone else owns rights to the minerals underneath their property. Even surface owners who are aware that they do not own the minerals may not realize that the mineral owner may have a legal right to enter the property, build roads, drill wells, install flow lines and maintain operations—all without permission from the surface owner or compensation for most damages caused by oil and gas development.

- If you are fortunate enough to own the minerals beneath your land, you have a lot more power to determine if and how development will proceed. And you may reap some financial benefits if oil or gas is found under your property.
- If someone else (an individual, company, tribe, or state/federal government) owns the minerals, and a company becomes interested in developing oil or gas there, it is unlikely that you will be able to stop that development from occurring on your property. You may, however, be able to affect the manner in which development proceeds.

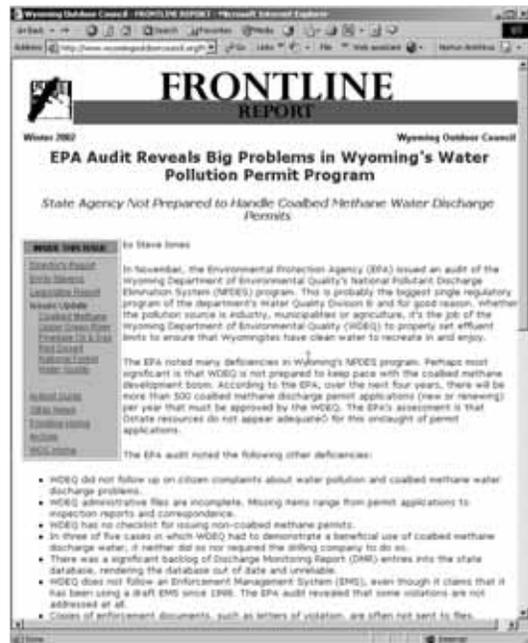
All of these ideas will be elaborated on in Chapter II.

Are you concerned about maintaining clean air, water and healthy landscapes? There are potential impacts associated with each stage of oil and gas development — exploration, drilling, production, product treatment, and plugging and abandonment of wells. Impacts may include: loss of land value due to surface disturbance, contamination, erosion or sedimentation; destruction or alteration of livestock and wildlife habitat; and human or animal health effects related to groundwater and surface water contamination, air pollution, or soil contamination.

In this guide, you will find more information on the potential impacts related to the various stages of oil and gas development.

There is no doubt that oil and gas development will have some impact on surrounding land, water and air. There are, however, a number of factors that can influence the extent or severity of the impacts. All of the following issues will be touched upon in this guide:

1. Location of the development (e.g., geology, topography, proximity to homes).
2. The financial situation and values of the company running the operation (e.g., do they have the money and the desire to mitigate the impacts).
3. The desires and values of the surface owners, and the ability of surface owners to influence the development.
4. Government regulations, and governmental willingness and capacity to enforce the regulations.



Government may not be able to effectively enforce regulations.

For the complete story, go to: www.wyomingoutdoorcouncil.org

IF YOU ARE A LANDOWNER FACING IMMINENT OIL AND GAS DEVELOPMENT

Chapters III and IV of this guide feature tips for landowners, as well as stories from landowners who have lived with oil and gas developments on or near their properties. Here are four basic tips to consider right away:

FOUR BASIC TIPS:

1. Don't panic

2. Get educated

3. Find allies

4. Understand which government agencies are involved.

1. Don't panic or feel pressured to sign anything (e.g., leases or surface use agreements) before you feel comfortable. It is important to understand the range of potential effects—positive and negative—before making decisions. This is especially important if you are going to sign a lease or an agreement, since you will have to live with the consequences.
2. Take time to educate yourself about your rights, the company's rights, the oil and gas industry, and oil and gas development. Read this guide and other resources. You may want to consult an attorney.
3. Find allies. While you may be able to accomplish certain things alone, there truly is strength in numbers. Strategies may develop from talking with a wide range of people. And you may need the emotional support. Fortunately, there are many who have been down this road before. Talk with your neighbors. Get support from local community and environmental groups. Talk about your concerns at homeowner association meetings. Find out where agricultural and ranching organizations, as well as local and state government agencies, stand on oil and gas development.
4. Understand which government agencies are involved in regulating oil and gas (federal, state, county, municipal). Communicate often with the agencies, and if possible, build relationships with agency staff. Familiarize yourself with the laws and regulations. And remember: often, the squeaky wheel does get the grease. So be persistent if companies are not acting in a responsible manner.