

Open Communication
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The Shale Gas Revolution

The use of horizontal drilling in conjunction with hydraulic fracturing has greatly expanded the ability of producers to profitably recover natural gas and oil from low-permeability geologic plays—particularly, shale plays. The United States has gone from a natural-gas-importing country, to seven years later, preparing to become an exporting country.

Haynesville Shale Play

The Haynesville Shale is a geological rock formation that lies more than 10,000 feet below the surface of the Earth in the area of northwestern Louisiana, southwestern Arkansas and eastern Texas. The Haynesville Shale is located primarily in five parishes in Louisiana – Caddo, Bossier, DeSoto, Sabine and Red River parishes.

It has been estimated that the Haynesville Shale holds more than 245 trillion cubic feet of recoverable natural gas. At that volume, it contains the equivalency of over 30 billion barrels of oil, or nearly 18 years of current U.S. oil production.

The discovery and growth of the Haynesville Shale has created an overwhelming supply of domestic, clean-burning natural gas. Within just three years of its initial development, the Haynesville Shale has reached an average of 5.5 billion cubic feet of daily natural gas production, making it the largest producing onshore field in the entire United States. As of today, only around 25% of the natural resources have been extracted from the Haynesville Shale.

As of September 2, 2014 there are currently 2,642 producing Haynesville Shale wells. Of those 2,642 wells, 2,384 have been completed and are producing wells, 258 are in pre-production and waiting on operations, and 21 are in the process of drilling.

The Haynesville Shale has also brought about an unprecedented influx of jobs and economic expansion in our state. Between 2008-2010, operations in the Haynesville Shale have generated approximately \$40 billion in direct and indirect economic growth. Over that time period, the Haynesville has supported over 100,000 jobs and provided Louisiana with over \$1.3 billion in local and state tax revenue.

In 2009 alone, the extraction activities in the Haynesville generated approximately \$10.6 billion in new business sales and nearly \$5.7 billion in household earnings within Louisiana.

From 2010 to 2014 companies operating in the Haynesville will spend nearly \$25.8 billion in drilling expenditures, \$57.5 million in estimated lease payments, and will allocate approximately \$672 million in royalty payments.

Over the next five years, activity in the shale will generate \$61 billion in new business sales and \$15.6 billion in new household earnings. Local governments will generate nearly \$844 million and \$195 million will be paid in severance taxes to the State.

Central Louisiana Shale Plays

Central Louisiana is currently home to three important shale plays: The Tuscaloosa Marine Shale (TMS), Louisiana Eagleford Shale, and Austin Chalk. While these shale plays are in the early stages of development, the preliminary results are positive.

The TMS is an unconventional resource play that has been estimated to contain over 7 billion barrels of potential oil production. It has been suggested that the TMS has some of the same characteristics and geological age as the Eagle Ford shale located in southern Texas. The TMS potential area stretches across a large portion of central Louisiana into the Florida parishes, and into Mississippi.

A study conducted by the Basin Research Institute of Louisiana State University identified that the shallowest depth of the TMS begins at approximately 10,000 ft. Currently, several companies are in the process of leasing and developing exploratory wells in the region.

A new development that excites many throughout the state is the Austin Chalk formation. The Austin Chalk stretches across numerous fields in Texas, Louisiana and a small portion of Mississippi. Companies drilling the Austin Chalk are having huge success and are also finding other oil & natural gas rich zones such as the Eagle Ford Shale.

For decades, the Austin Chalk has produced prolific amounts of oil in parts of Texas. Today, oil and gas companies are discovering that the Austin Chalk trend is a very promising resource in Louisiana. Experts now realized that since the Austin Chalk retains thicker sands in Louisiana it could potentially exceed Texas in production from that geological horizon.

Overregulation

There are many examples of overregulation at the parish level including, St. Tammany parish, Tangipahoa parish, Vernon parish, Claiborne parish and the list goes on. Often, overregulation occurs when humans base their decision making off of inaccurate information. Overregulation can also occur as a result of fear from a lack of information completely.

A fine example of attempted overregulation can be seen in St. Tammany Parish as green groups are protesting a potential drilling site. These groups are making claims that oil and gas operations, such as hydraulic fracturing, will contaminate the aquifer system in St. Tammany Parish. When facts are given to these groups or to the media, the facts appear to fall on deaf ears.

Here are a few facts that could prevent overregulation in this specific case:

1. Hydraulic fracturing has been taking place in the United States since 1947 without any contamination of aquifers.
2. Since 2008 in Louisiana, over 2,600 wells have been completed using the method of hydraulic fracturing without one single case of contamination.
3. Over one million wells have been completed using the method of hydraulic fracturing in the United States since 1990, again with zero governmentally confirmed contamination cases.

However, when factual information is laid out before the public, there is a clear disconnect from the truth. Long after the facts and historical data have been given, lawsuits are being filed to prevent drilling operations. Economic development is being stifled all due to misinformation and fear. Again, this is how overregulation creeps into our system of government.

If the local regulation talk is not enough, the same can be observed at the federal level. The EPA is regulating an entire industry solely based on the alleged concept of carbon pollution leading to global warming. The EPA is requiring thousands of companies across the United States to reduce their carbon pollution, costing the companies billions of dollars to comply. The entire basis of this regulation is based on a “thought” that carbon pollution causes global warming. Jobs will be cut and companies will close as a result of this stiff regulation. Again, this entire new regulation is based on a long-term fear and a lack of conclusive information. The truth is required of the defendant in all cases except when it simply does not benefit the prosecution.

Communication is Critical

Relationships only develop and thrive when both parties have a desire to work together toward a common goal. While this might sound like the introduction to a Dr. Phil segment, it is actually the basis for a healthy industry-to-parish working atmosphere. In Louisiana, the oil and gas industry has the privilege of potentially working with 64 different parish government entities.

In addition to working together, frequent communication strengthens relationships. While industry has been around for over a century in Louisiana, only as of recently have parish governments taken on a more active role in the regulatory process. Overregulation by the parish can often happen due to fear of the unknown that often occurs when a lack of communication exists. As it should go without saying, oil and gas is a very technical industry. Moving parts, sophisticated equipment and a significant amount of manpower is needed for one rig sight. As industry plans to embark upon a community, it is vital for pre-operation meetings to take place.

Pre-operation meetings can consist of what parish roads will be traveled, the source of water that will be used, the amount of noise that could be projected, what infrastructure is nearby such as schools or homes, and finally when the actual drilling will take place. These pre-operation meetings can disarm the misinformation that exists in the

communities here in Louisiana and around the country. A simple sit down with the parish officials can clarify any confusion that might exist from what has been seen on an inaccurate movie or a social media outlet that has been written by a person with no professional experience.

First and foremost introduce yourself. Parish entities need a name with a face associated with a company so they know whom to call if a person has a question and/or concern. The last thing you want them to feel like is that new ordinances are the only way to have a question or concern addressed. Brag on your company and your industry. State the obvious; spelling out to them what is obvious to you will go along way in relieving fears. Talk through complex ideas of the industry, without getting into proprietary information. Have basic industry talking points ready for your pre-op meeting. LOGA can provide data for you and will attend any of your meetings with you

Topics for your pre-operation meetings should include: Roads, water sources, air, noise, visual effects, traffic, hydraulic fracturing, aquifer concerns, general fears. It's helpful to clarifying regulatory boundaries. When you discuss roads you are planning to use bringing a plan of your ingress/egress routes for them to have. Also, ask about videoing the roads, invite the road super intendant to go with you.

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