# H.R. 2728, PROTECTING STATES' RIGHTS TO PROMOTE AMER-ICAN ENERGY SECURITY ACT

# LEGISLATIVE HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

OF THE

# COMMITTEE ON NATURAL RESOURCES U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRTEENTH CONGRESS

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# LEGISLATIVE HEARING ON H.R. 2728, A BILL TO **RECOGNIZE STATES' AUTHORITY** TO **REGULATE OIL AND GAS OPERATIONS AND** PROMOTE AMERICAN ENERGY SECURITY, **DEVELOPMENT, AND JOB CREATION. "PRO-**TECTING STATES' RIGHTS TO PROMOTE AMERICAN ENERGY SECURITY ACT."

Thursday, July 25, 2013 **U.S.** House of Representatives Subcommittee on Energy and Mineral Resources **Committee on Natural Resources** Washington, D.C.

The Subcommittee met, pursuant to notice, at 9:36 a.m., in room 1334, Longworth House Office Building, Hon. Doug Lamborn [Chairman of the Subcommittee] presiding.

Present: Representatives Lamborn, Benishek, Flores, Cramer, Mullin, Cartwright, Lowenthal, and Garcia.

Mr. LAMBORN. The Committee will come to order. The Committee notes the presence of a quorum, which, under Committee Rule 3(e), is two Members.

The Subcommittee on Energy and Mineral Resources is meeting today to hear testimony on an legislative hearing on Mr. Flores and my bill to recognize States' authority to regulate oil and gas operations and promote American energy, security, development, and job creation, known as the "Protecting States' Rights to Promote American Energy Security Act."

Under Committee Rule 4(f), opening statements are limited to the Chairman and Ranking Member. However, I ask unanimous consent to include any other Members' opening statements in the hearing record if submitted to the clerk by close of business today.

[No response.]

Mr. LAMBORN. Hearing no objection, so ordered. Also, I ask unanimous consent that Mr. Markwayne Mullin of Oklahoma be allowed to participate in today's hearing, when he is able to join us.

[No response.]

Mr. LAMBORN. Hearing no objection, so ordered. I also ask unanimous consent that the author of the legislation under consideration today be permitted to give a 5-minute opening statement.

[No response.]

Mr. LAMBORN. Hearing no objection, so ordered. I now recognize myself for 5 minutes.

# STATEMENT OF THE HON. DOUG LAMBORN, A REPRESENTA-TIVE IN CONGRESS FROM THE STATE OF COLORADO

Mr. LAMBORN. I would like to start by thanking our distinguished panel of State official witnesses for being here today. Today we are meeting on the title of a bill, "Protecting States' Rights to Promote American Energy Security Act." This legislation, introduced by Congressman Flores and myself, would require the Department of the Interior to defer to State regulations, permitting, and guidance regarding hydraulic fracturing on Federal lands within the States' borders.

Since taking office, the Obama Administration has pursued the nationalization of hydraulic fracturing regulations, determining that a big government solution is the best solution. While the Administration claims these regulations are meant as a baseline, the reality is that these are burdensome and duplicative regulations that could significantly inhibit hydraulic fracturing on Federal land, thereby inhibiting energy production, American job creation, and continuing our dependence on foreign energy imports.

At a hearing last week, Secretary Jewell testified to our Committee that baseline standards covering flowback control, wellbore integrity, and other basic requirements were needed at the Federal level. However, the States have proactively taken the lead in managing hydraulic fracturing development on their lands, and have been successfully doing so for decades.

Nevertheless, the Administration continues to pursue implementation of its own unnecessary, one-size-fits-all Federal regulations, with practically no acknowledgment of the work that the States have been doing for years in managing energy production, while taking into consideration their own unique geography, hydrology, and production issues. This big government, one-size-fits-all generic approach to energy regulation will not work. Yet this Administration continues to approach energy regulation treating all 50 States the same.

While the Administration and Secretary Jewell claim they will accept existing State rules, in reality the proposed regulations place the burden nearly entirely on the shoulders of the energy producer to prove to the BLM on a well-by-well basis that the States they are operating in has adequate or comparable regulations.

The Administration's own reporting said that 99 percent of the impact of this rule will fall on small businesses and independent producers who will bear the brunt of these regulations. And these are people who are less able to absorb the additional regulatory cost, and less capable of moving off Federal land for their production.

In addition to being burdensome and duplicative, these regulations are unnecessary. State regulations have proven successful in managing hydraulic fracturing on their lands. The BLM claims the regulations are needed to prevent drinking water contamination as a result of energy development. However, multiple studies and witnesses have testified that extensive testing has shown no evidence of water contamination through hydraulic fracturing. Repeatedly we have seen the EPA retreat from radical statements on water contamination when the facts come forward, including in Pennsylvania, Wyoming, Ohio, and Texas. Time and time again, we have seen these false claims yield to science.

More recently, on Monday, DOE's National Energy Technology Laboratory in Pittsburgh released preliminary results showing no evidence that chemicals from natural gas drilling operations have contaminated drinking water. Additionally, witnesses from Utah, Colorado, Ohio, and multiple other States have testified before our Committee that there have been no instances of environmental contamination due to hydraulic fracturing.

The Protecting States' Rights to Promote American Energy Security Act will require the BLM to defer to existing State regulations and prohibit the Department from enforcing needless and duplicative Federal regulations in States that have existing regulations in place. This will allow domestic energy development to move forward, create and save American jobs, increase Federal revenue, and decrease our reliance on Federal—excuse me, foreign imports.

I would like to thank our witnesses for coming before our Committee today, and I look forward to hearing your testimony.

[The prepared statement of Mr. Lamborn follows:]

#### Statement of The Honorable Doug Lamborn, Chairman, Subcommittee on Energy and Mineral Resources

I'd like to start by thanking our distinguished panel of State witnesses for being with us today. Today we are meeting on the "Protecting States' Rights to Promote American Energy Security Act." This legislation, introduced by Congressman Flores, would require the Department of the Interior to defer to State regulations, permitting, and guidance regarding hydraulic fracturing on federal lands within the State's boundaries.

Since taking office, the Obama Administration has pursued the nationalization hydraulic fracturing regulations, determining that a big government solution is the best solution. While the Administration claims these regulations are meant as a "baseline," the reality is these burdensome and duplicative regulations could significantly inhibit hydraulic fracturing on federal land—thereby inhibiting energy production, American job creation, and continuing our dependence on foreign energy imports.

At a hearing last week, Secretary Jewell testified to our Committee that baseline standards covering flowback control, wellbore integrity, and other basic requirements were needed at the federal level. However, the States have proactively taken the lead in managing hydraulic fracturing development on their lands and have been successfully doing so for decades. Nonetheless, the Administration continues to pursue implementation of its own needless one size fits all federal regulations, with practically no acknowledgement of the work the States have been doing for years in managing energy production while taking into consideration their own unique geography, hydrology, and production issues. This big government one size fits all generic approach energy regulation will not work, yet this Administration continues to approach energy regulation like all 50 states are exactly the same. While the Administration and Secretary Jewell claim they will accept existing

While the Administration and Secretary Jewell claim they will accept existing state rules, in reality, the proposed regulations place the burden nearly entirely on the shoulders of the energy producer to prove to the BLM on a well by well basis, that the State they are operating in has adequate or comparable regulations. The Administration's own reporting said that 99% of the impact of this rule will fall on small businesses and independent producers who will bear the brunt of these regulations and are less able to absorb the additional regulatory cost and less capable of moving off federal land for their production.

In addition to being burdensome and duplicative, these regulations are unnecessary. State regulations have proven successful in managing hydraulic fracturing on their lands. The BLM claims the regulations are needed to prevent drinking water contamination as a result of energy development. However, multiple studies and witnesses have testified that extensive testing has shown no evidence of water contamination. Repeatedly we have seen the EPA retreat from radical statements on water contamination when the facts come forward including in Pennsylvaina, Wyoming, Ohio and Texas. Time and time again, we have seen these false claims yield to the facts of science. More recently, on Monday DoE's National Energy Technology Laboratory in Pittsburgh released preliminary results showing no evidence that chemical from natural gas drilling operations contaminated drinking water. Additionally witnesses from Utah, Colorado, Ohio, and multiple other states have testified before our Committee that there have been no instances of environmental contamination due to hydraulic fracturing. The "Protecting States' Rights to Promote American Energy Security Act" will require the BLM to defer to existing State regulations and prohibit the Department from enforcing needless and duplicative federal regulations in states that have existing regulations in place. This will allow domestic energy development to move forward, create and save American jobs, increase federal revenue, and decrease our reliance on foreign imports. I'd like to thank our witnesses for coming before our Committee today and I look forward to hearing your testimony.

Mr. LAMBORN. I would now like to recognize the Ranking Member for his opening statement.

# STATEMENT OF THE HON. MATT CARTWRIGHT, A REPRESENT-ATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. CARTWRIGHT. Thank you, Mr. Chairman. Mr. Chairman, natural gas reserves, now accessible all across the United States through the use of hydraulic fracturing techniques, have the potential to reduce our dependence on foreign oil, lessen pollution that leads to global warming, reshape our manufacturing sector, and boost our economy overall. In fact, we are now producing more natural gas in America under President Obama than we ever have before.

But we have to ensure that we develop this resource safely and in a way that protects our American environment. According to the Interior Department, 90 percent of all new wells drilled on public lands now employ hydraulic fracturing. As a result, the Interior Department has begun the process of conducting a rulemaking to govern the safety of hydraulic fracturing on public lands.

Hydraulic fracturing, or fracking, is a topic with which we are all well acquainted. Just a few months ago the full Committee held an oversight hearing on BLM's upcoming regulation. Last week Secretary Jewell discussed the issue in testimony when she appeared before this Committee. And in less than 1 month, the public comment period on those revised regulations will close.

Establishing minimum safety and environmental standards for fracking processes has been my top priority since being elected to the Congress. Now, this is why the first bill I introduced, the FRESHER Act, closed loopholes for oil and gas companies in the Clean Water Act, and has garnered 55 cosponsors so far. And that is why today I am introducing the CLEANER Act, which will ensure that oil and gas companies are required to test their waste to determine if it is hazardous and, if so, dispose of it using safe methods that other industries already are employing.

I believe these reforms are crucial to implement basic standards for the entire country. And while the Congress refuses to hold votes on these bills, the Administration really must lead the way on our public lands.

Now, the Majority has claimed that Federal regulation of fracking on America's public lands is not needed because States already have regulations in place. But State regulations vary widely in their requirements, in the stringency of those requirements, and the efficacy with which they are implemented. That is why it is important for the Interior Department to put in place a regulatory floor to ensure that there are minimum protections in place on public lands in all States. As stated by Secretary Jewell last Wednesday, part of her job is to make sure the Interior Department is watching over the Federal estate effectively.

Now, the bill we are considering today, however, has a far broader reach than just the proposed regulations on hydraulic fracturing. This bill purports to take away from the Department of the Interior all authority to regulate any part of the hydraulic fracturing process on public lands. Now, these are very broad terms that have severe implications.

For example, this bill would allow hydraulic fracturing to occur within any unit of the National Park System or any other Federal land, if permitted to do so under State law. Now, imagine a hydraulic fracturing well located next to the Grand Canyon National Park Visitors Center. If this bill were passed, the Federal Government would have absolutely no power to prevent just that from occurring.

It should also be noted as well that this bill does not mention tribal authority, nor does it distinguish between Federal lands and tribal lands held in trust by the Federal Government. As a result, the bill would grant States full control of tribal lands so long as any "component of the hydraulic fracturing process" is involved. This Committee has had multiple hearings over the past two congresses focusing on the important distinction between Indian lands and public lands. Yet this bill fails to make such a distinction. This neglect is an affront to the repeated unanimous testimony we have received from tribal witnesses over the past several years.

In short, the public lands in this country belong to the American people, and the Interior Department has a responsibility to ensure that companies drilling on them are doing so safely, and protecting our air and water. We already know that oil and gas companies are committing serious safety violations when drilling on public lands. A report issued last year by Democratic members of this Committee found that there were a total of 2,025 safety and drilling violations on Federal land that were issued to 335 companies drilling in 17 States between 1998 and 2011.

Moreover, the current drilling regulations that companies repeatedly violate for well construction have not been updated in nearly 25 years, and reflect neither the significant technological advantages of hydraulic fracturing, nor the tremendous growth in its use.

I look forward to hearing the testimony from our witnesses today, and I yield back.

[The prepared statement of Mr. Cartwright follows:]

#### Statement of The Honorable Matt Cartwright, a Representative in Congress from the State of Pennsylvania

Thank you Mr. Chairman.

Mr. Chairman natural gas reserves now accessible all across the United States through the use of hydraulic fracturing techniques have the potential to reduce our dependence on foreign oil, lessen pollution that leads to global warming, reshape our manufacturing sector, and boost our economy. In fact, we are now producing more natural gas in America under President Obama than we ever have before. But we must ensure that we develop this resource safely and in a way that protects the environment.

According to the Interior Department, 90 percent of all new wells drilled on public lands now employ hydraulic fracturing. As a result, the Interior Department has begun the process of conducting a rulemaking to govern the safety of hydraulic fracturing on public lands. Hydraulic fracturing, or "fracking," is a topic with which we are well acquainted: just a few months ago the Full Committee held an oversight hearing on the BLM's upcoming regulation; last week Secretary Jewell discussed the issue in testimony when she appeared before this committee; and in less than one month the public comment period on those revised regulations will close.

Establishing minimum safety and environmental standards for fracking processes has been my top priority since being elected to Congress. This is why the first bill I introduced, the FRESHER Act, closed loopholes for oil and gas companies in the Clean Water Act, and has garnered 55 cosponsors. And that is why today I am introducing the CLEANER Act, which will ensure that oil and gas companies test their waste to determine if it is hazardous, and if so, dispose of it using the safe methods that other industries already employ. I believe these reforms are crucial to implement basic standards for the entire country, and while Congress refuses to hold votes on these bills the Administration must lead the way on our public lands.

The Republican Majority has claimed that federal regulation of fracking on America's public lands is not needed because states already have regulations in place. But state regulations vary widely in their requirements, the stringency of those requirements, and the efficacy with which they are implemented. That is why it is important for the Interior Department to put in place a regulatory floor to ensure that there are minimum protections in place on public lands in all states. As stated by Secretary Jewell last Wednesday, part of her job is to make sure the Interior Department is watching over the federal estate effectively.

The bill we are considering today, however, has a far broader reach than just the proposed regulations on hydraulic fracturing. The bill purports to take away from the Department of the Interior all authority to regulate any part of the "hydraulic fracturing process" on public lands. These are very broad terms that have severe implications. For example, this bill would allow hydraulic fracturing to occur within any unit of the National Park System or any other federal land if permitted to do so under state law. Imagine a hydraulic fracturing well located next to the Grand Canyon National Park Visitors Center—if this bill were passed, the federal government would have absolutely no power to prevent that from occurring.

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In short, the public lands in this country belong to the American people and the Interior Department has a responsibility to ensure that companies drilling on them are doing so safely and that our air and water is protected. We already know that oil and gas companies are committing serious safety violations when drilling on public lands—a report issued last year by Democratic members of this Committee found that there were a total of 2,025 safety and drilling violations on federal land that were issued to 335 companies drilling in seventeen states between February 1998 and February 2011, 549 of which were classified as "major" by committee staff.

Moreover, the current drilling regulations that companies repeatedly violate for well construction have not been updated in nearly 25 years and reflect neither the significant technological advances of hydraulic fracturing nor the tremendous growth in its use. Rather than relying on state regulations that vary widely in their requirements, the stringency of those requirements, and the efficacy with which they are implemented, we should be ensuring that DOI's rule is strengthened in a number of key areas such as public disclosure and availability of information, management of waste water and well construction. This bill proposes to nullify proper regulation of hydraulic fracturing by the Interior Department and will have severe consequences for all public and Indian lands.

I look forward to hearing the testimony from our witnesses.

Mr. LAMBORN. Thank you.

And now we will hear, as earlier stated, from the author of the legislation, along with myself, Representative Flores of Texas for 5 minutes.

# STATEMENT OF THE HON. BILL FLORES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. FLORES. Thank you, Mr. Chairman. Chairman Lamborn, I want to thank you for holding this important hearing on H.R. 2728, the Protecting States' Rights to Promote American Energy Security Act. I have submitted a comprehensive set of comments on the bill for the record, and I will summarize those key points in a few minutes.

I would like to start out by exercising a little bit of personal privilege and recognize three important guests today. My wife, Gina, is with us today. My nephew, Landon, is with us. And also, we have an up-and-coming rising star among Texas elected officials, and that is Christi Craddick, the Commissioner of the Railroad Commission of Texas. I welcome each of you here.

I have also told them about what comedy we have in this Committee, and how we all get along. And so I am hoping that will be on display today.

This bipartisan-sponsored bill takes an important step toward reaffirming States' rights in determining energy production while providing a path forward for the House Republicans' goal of American energy security by the year 2020. This bill is also an important tool to grow good, American manufacturing jobs and reduce greenhouse gas emissions through the increased production use of abundant and efficient natural gas for our Nation's energy needs. You also heard the Ranking Member agree with those things just a few minutes ago.

Before we go too much further today, I think it is important to look at several important facts when it comes to American energy.

First, we are in the midst of an energy transformation in the way that we produce energy in this country cleanly, safely, affordably, and responsibly, through the use of proven technologies that continue to improve each year.

Second, because of this energy revolution, we are now in a position to be energy secure by the year 2020. This is a goal we should pursue, just as we did in the 1960s to put a man on the moon in less than a decade.

Third, this energy revolution has created hundreds of thousands of well-paying American jobs in the energy industry. More importantly, however, the energy from affordable and abundant natural gas has put America in a position to become globally competitive in manufacturing, and to create millions of great jobs for hardworking Americans that are currently worried about their family's future because of Washington policies.

Fourth, the expanded use of clean-burning natural gas has helped us improve the environment by reducing greenhouse gas emissions. In fact, because of this, the U.S. has reduced its emissions of GHGs by nearly 12 percent over the last 10 years. It ranks first among major nations in the reduction of its carbon footprint.

And if I could bring up chart number one, fifth, this resurgence of American energy production has occurred on State and privately owned lands, while energy production on Federal taxpayer-owned lands has declined over the last 5 years, because of the Obama Administration's war on America's oil and gas and coal companies, and the jobs that come from the employers in these industries. Sixth, increased production of American energy has huge potential to help fix our fiscal imbalances in two ways: by balance of trade improvements and by Federal deficit reduction.

Seventh, with respect to hydraulic fracturing, there are at least 10 different Federal agencies—we will bring up chart number two—that are studying the potential imposition of new Federal rules to restrict hydraulic fracturing. This is being done, even though congressional statutes specifically exempt many oil and gas activities, including hydraulic fracturing, from relevant statutes. These statutes essentially leave the bulk of the regulation of the oil and gas operations to the States.

Nonetheless, the Obama Administration is attempting to circumvent these exemptions by new rulemaking, change performance standards, and coordinate lawsuits with third-party environmental groups. This has resulted in numerous Federal agencies, including the Department of the Interior, attempting to restrict the use of this essential American energy technology.

Eighth, the Obama Administration's assault on hydraulic fracturing is a solution in search of a problem that does not exist. Despite lots of rhetoric and innuendo, the Federal Government has found no evidence of groundwater pollution or significant environmental issues from hydraulic fracturing technology.

If we go to chart three, you will see the testimony from one of two EPA Administrators, including Lisa Jackson, that have said that, "I am not aware of any proven case where the fracking process itself has affected water."

If we go to the next chart, former BLM Director Bob Abbey testified that hydraulic fracturing is safe, and there have been no proven cases where hydraulic fracturing itself has affected groundwater.

In chart number five, we see testimony from newly appointed Energy Secretary Ernest Moniz. He testified, "There has been no incidents of groundwater pollution from the hydraulic fracturing process." He has also been a strong advocate for States having the primary role in regulating hydraulic fracturing.

Just last week, the Department of Energy released results from an ongoing Federal study of hydraulic fracturing, suggesting that this drilling technique is not contaminating drinking water aquifers in the Marcellus Shale.

These are eight important facts regarding today's American energy revolution. This discussion brings us to why we are here today, to stop the Federal Government's next big threat to the current American energy revolution, the assault on hydraulic fracking.

In Congress we frequently address the powers of the States versus federalism on a myriad of issues, from health care to labor to education. The bill before us today is not a question of regulating or not regulating hydraulic fracturing. The bill before us today is about empowering local self-government and placing a check on the growth of an out-of-control, one-size-fits-all Federal Government.

I will end by posing a question. Why do we need two sets of regulation on any industry, when one set of effective and proven regulations is already working?

Mr. Chairman, thank you again for holding this hearing on H.R. 2728, and I yield the balance of my time.

# [The prepared statement of Mr. Flores follows:]

#### Statement of The Honorable Bill Flores, a Representative in Congress from the State of Texas

Chairman Lamborn, I want to thank you for holding this important hearing on H.R. 2728, the Protecting States' Rights to Promote American Energy Security Act.

This bill takes an important step toward reaffirming states' rights in determining energy production while providing a path forward for the House Republicans' goal of American Energy Security by the year 2020. This bill is also an important tool to grow good American manufacturing jobs and to reduce greenhouse gas emissions through the increased production and use of abundant and efficient natural gas for our nation's energy needs.

Before we go too much further today, I think it is important to look at several important facts when it comes to American Energy:

- 1. First, we are in the midst of an energy transformation in the way that we produce energy in this country—cleanly, safely, affordably, and responsibly through the use of proven technologies that continue to improve each year
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   Second, because of this energy revolution, we are now in a position to be "energy secure" by the year 2020; this is a goal we should pursue, just as we did in the 60's to put a man on the moon in less than a decade.
- 3. Third, this energy revolution has created hundreds of thousands of wellpaying American jobs in the energy industry. More importantly, however, energy from affordable and abundant natural gas has put America to be in a position to become globally competitive in manufacturing and to create millions of great jobs for hard working Americans that are currently worried about their families' futures because of Washington policies. This manufacturing revolution has happened in my very own Texas district where low-cost electricity generated by clean burning-natural gas has made the steel products produced by Nucor Steel globally competitive. This plant in Jewett, Texas employs almost 400 hard working Texans in well-paying jobs and it is one of the largest taxpayers to the local school district.
- 4. Fourth, the expanded use of clean burning natural gas has helped us improve the environment by reducing greenhouse gas emissions. In fact, because of this, the U.S. has reduced its emissions of GHG's by nearly 12% over the last five years, it ranks first among major nations in the reduction of its carbon footprint.
- 5. Fifth, this resurgence of American energy production has occurred on state and privately owned lands while energy production on federal taxpayer owned lands has declined over the past five years because of the Obama administration's war on America's oil and gas and coal companies and the jobs that come from the employers in these industries.
- 6. Sixth, the reduced importation of crude oil from unstable regimes in the Middle East as well as the potential export of liquefied natural gas, or LNG as it is more commonly known, has the potential to improve American national security and to make a huge change in the world's geopolitical balance. Imagine this, what if we were no longer buying oil from the Middle East and having our dollars being used to fund terrorist operations against our interests at home and around the world.
- 7. Seventh, increased production of American energy has huge potential to help fix our fiscal imbalances in two ways—by balance of trade improvements and by federal deficit reduction. Similarly, by manufacturing more American products here at home, exporting energy, and importing less energy, abundant and affordable energy can have dramatically improve our huge trade deficits. By producing more American energy on federal taxpayer owned lands and offshore areas, we can generate more revenues from lease bonus payments and royalties that can be used to reduce federal deficits. Furthermore, tax receipts from more American manufacturing jobs and economic growth could help us balance the budget in just a few years.
- 8. Eighth, one of the most important tools that has enabled this American energy revolution is the improved use of hydraulic fracturing technology. Without this technology, there would be no American energy revolution and no way to be talking about American Energy Security by 2020.
- 9. Ninth, with respect to hydraulic fracturing, there are at least 10 different federal agencies that are studying the potential imposition of new federal rules to restrict hydraulic fracturing. This is being done even though Congressional statutes specifically exempt many oil and gas activities, including hydraulic fracturing, from relevant statutes. These statutes essentially

leave the bulk of the regulation of oil and gas operations to the states. Nonetheless, the Obama administration is attempting to circumvent these exemptions by new rulemaking, changed performance standards, and lawsuits with third party environmental groups. This has resulted in numerous federal agencies, including the Department of Interior, attempting to restrict the use of this essential American energy technology.

10. Tenth, the Obama administration's assault on hydraulic fracturing is a solution in search of a problem that does not exist! Despite lots of rhetoric and innuendo, including a couple of very misleading movies, the federal government has found no evidence of ground water pollution or significant environmental issues from hydraulic fracturing technology. This fact is evidenced by the testimony of the last two EPA Administrators, including Lisa Jackson; they and former BLM Director Bob Abbey have testified that hydraulic fracturing is safe and that there have been no proven cases where hydraulic fracturing itself has affected groundwater. Recently, in testimony before the House Science and Technology Committee, newly appointed Department of Energy Secretary Earnest Moniz testified that there has been no incidence of groundwater pollution from the hydraulic fracturing process. Secretary Moniz has also been a strong advocate for states having a primary role in regulating hydraulic fracturing. Just last week, the Department of Energy released results from an ongoing federal study of hydraulic fracturing suggesting that this drilling technique is in fact not contaminating drinking water aquifers in a targeted area within the Marcellus Shale. During that same time, energy production in the area where this DOE study took place, has produced 234,000 jobs and added 1.6 billion in tax revenue to the state of Pennsylvania.

These are ten important facts regarding today's American energy revolution. In general, it happened in spite of Washington, rather than because of it. As stated above, the effects of the energy policies of the Obama administration are most clearly evidenced by reduced energy production from federal taxpayer owned lands and offshore areas, the shutdown of 20% of our nation's coal-fired electricity generation, the loss of thousands of jobs from those shutdowns, and the blocking of the Keystone XL pipeline.

This discussion brings to us to why we are here today—to stop the federal government's next big threat to the current American energy revolution—the federal assault on Hydraulic Fracturing. In particular, the Department of Interior, over which this Committee has Congressional oversight authority, has ignored our Constitution and ignored Congressional statutes by attempting to issue new federal regulations to control hydraulic fracturing. One of the reasons that my bill, HR 2728, "Protecting States' Rights to Promote American Energy Security Act" was introduced is to recognize the most important fact not discussed above. That reason is simple the reason that we have not experienced environmental problems with hydraulic fracturing is that the hydraulic fracturing operators and the states have effectively regulated this technology based upon real world experience over 60 years and over one million hydraulic fracturing in the production of American oil and natural gas. I think it would be helpful to first look at an analogy to understand the importance of hydraulic fracturing in the production of American oil and natural gas.

I think it would be helpful to first look at an analogy to understand the importance of hydraulic fracturing in the production of American oil and natural gas. Take this IPAD for instance; it is game-changer that has transformed many aspects of the way we do business and communicate in America. This IPAD needs energy to operate, however, after a few hours of operation, it is useless without its charger; its promise disappears.

Similarly, because of hydraulic fracturing and new drilling technologies, we now have a plentiful supply of environmentally friendly natural gas and growing supplies of American oil production; we can call this the IPAD of American Energy Security. In this analogy, hydraulic fracturing is the "charger" we need to enable these robust supplies of natural gas. If the federal government stops or excessively restricts hydraulic fracturing, it analogous to losing the charger to this IPAD. Eventually, natural gas production will begin to fall, supplies will diminish, prices will increase, and the opportunities to grow our manufacturing base and to become energy secure will evaporate; all because of misguided Washington policies.

Recent statistics have shown that oil and natural gas activities have decreased significantly on federal lands compared to activity levels on state and private lands across the nation. Burdensome and duplicative federal regulations are largely responsible for this inhibited activity. Our states have a long and successful track record of regulating oil and natural gas operations including hydraulic fracturing, well construction, and management of produced water. H.R. 2728 recognizes the effectiveness of state regulations by halting overreaching federal involvement in hydraulic fracturing operations.

Today, you may hear a lot of rhetoric about the need to wean our country off of carbon fuel—I agree; but, we must do it in a manner that is based upon the technological realities of alternative fuels. We also need to do this without destroying the American economy in the process and without the federal government picking winners and losers. In short, today's hearing should address the real world and not a world that does not yet exist. Today's energy resources are the "bridge" that will power us to the carbon free world of the future. We shouldn't burn that bridge before we get to that future world.

In Congress, we frequently address the powers of the states versus federalism on a myriad of issues from health care, to labor, to education. The bill before us today is not a question of regulating or not regulating hydraulic fracturing. The bill before us today is about empowering local self-government and placing a check on the growth of out-of-control one size fits all government. I will end by posing a question; why do we need two sets of regulations on any industry when one set of effective and proven regulations is already working?

Mr. Chairman, thank you again for holding this hearing on H.R. 2728. I also would like to welcome Railroad Commissioner Christi Craddick from my home state of Texas to testify before our subcommittee. I look forward to hearing from our witnesses today.

Mr. LAMBORN. All right. And I want to thank the Member for his statement, my colleague from Texas, also for his background and the knowledge he brings to this issue, and for the legislation that we have in front of us.

We will now hear from our four witnesses. We have this morning Ms. Catherine Foerster, Chair and Engineering Commissioner of the Alaska Oil and Gas Conservation Commission; we have Ms. Christi Craddick, Commissioner of the Railroad Commission of Texas; we have Mr. John Rogers, Associate Director of the Utah Division of Oil, Gas, and Mining; and we have Ms. Lois Epstein, Arctic Program Director for the Wilderness Society.

Like all of our witnesses, your written testimony will appear in full in the hearing record, so I ask that you keep your oral statements to 5 minutes. Our microphones are not automatic, so you have to push the button before you can get started.

And I want to explain how our timing lights work. When you begin to speak, our clerk will start the timer and a green light will appear. After 4 minutes, a yellow light comes on. And after 5 minutes, a red light comes on. And I would ask that you conclude at that time.

And we will now hear from Ms. Foerster. Thank you.

# STATEMENT OF CATHERINE P. FOERSTER, CHAIR AND ENGINEERING COMMISSIONER, ALASKA OIL AND GAS CONSERVATION COMMISSION

Ms. FOERSTER. Thank you, Chairman Lamborn, Ranking Member Cartwright, and members of the Subcommittee, for inviting me to testify today. The Alaska Oil and Gas Conservation Commission applauds Congressmen Flores and Lamborn for introducing this bill. The last thing the United States needs right now is duplicative regulation of an already stringently regulated process. Unless, of course, we need increased Federal spending and bureaucracy, delays in providing jobs, revenue, and affordable domestic energy, and one-size-fits-all regulations that are ignorant to regional differences. I believe my testimony will explain why I whole-heartedly support this bill. In arguing my support, let me first take you back a week to a hearing with this Committee and Secretary Sally Jewell. I feel that hearing created the potential for several misperceptions, and I would like to clear those up.

Secretary Jewell's answers to questions from Representatives Lamborn, Fleming, and Mullin gave the perception that no national standard exists for hydraulic fracturing, that some States regulate using 30-year-old technology, and that States new to hydraulic fracturing have nowhere to go for help in establishing appropriate regulations. None of these statements are true.

In America today, a State-funded NGO called the Interstate Oil and Gas Compact Commission, or IOGCC, located in Oklahoma City, represents the Governors of all oil and gas-producing States. The purpose of the IOGCC is to help all States in their regulation of oil and gas operations, including hydraulic fracturing. All Canadian Provinces with oil and gas operations also belong to IOGCC. IOGCC has guidance documents on a variety of oil and gas operations. They are very general, but they help States set high standards of environmental protection that are consistent with the varying engineering and geologic needs of each State.

In addition, an organization borne out of a joint effort between DOE and API called STRONGER, for State Review of Oil and Natural Gas Environmental Regulations, exists to provide a national standard for environmental protection in all aspects of oil and gas operations, and a critical review of individual State regulations to ensure that the national standard is being met, and that the local issues are also being addressed. STRONGER consists of representatives from industry, environmental NGO's and State regulators, and addresses the concerns of all three groups. STRONGER convenes subgroups to address individual issues. One such subgroup deals specifically with hydraulic fracturing. I am part of that group. And this is a copy of the 2013 STRONGER guidelines. Section IX deals with hydraulic fracturing. To imply, as Secretary Jewell did, that no national standard for hydraulic fracturing exists, is not true.

As for States needing help to address any new aspect of oil and gas regulations, States can, should, and do use the work already done by STRONGER and by the IOGCC and its member States. In fact, IOGCC even reaches out to States and provinces new to oil and gas, and invites them to join our compact. Also, during IOGCC's biannual meetings, members and guests sharing learning, so that if one State or province encounters a problem or issue, we all collaborate on the solution. So, to imply that State regulators have nowhere to go for help when they encounter hydraulic fracturing or any other new operation or technology, also not true.

As for the State's regulations being old and out of date, again, not true. The IOGCC member States meet twice a year to review the latest technology advances and operating practices, with an eye to the need for regulatory changes. The IOGCC seeks out industry representatives to provide information at these meetings on new and changing technologies and operating practices. And as a State regulator for over 8 years, I assure you we are almost constantly updating one regulation or another to keep up with these changes. Almost 80 years ago the IOGCC had the good idea to develop model statutes, which they did. On top of that, we revisit the standards and our individual State regulations constantly, to ensure that they are up to date. More recently, STRONGER has developed a comprehensive set of guidelines for State regulation, specifically of hydraulic fracturing, and one that I helped to update less than a year ago. We certainly don't need to duplicate any of these efforts.

There was also some discussion at that hearing of FracFocus and trade secret protection. I just want to remind the Subcommittee that the Uniform Trade Secrets Act is in place in 47 States and the District of Columbia, and that FracFocus is, and any other disclosure mechanism would be, bound by the provisions of that Act.

And keep in mind also that FracFocus requires that all ingredients be disclosed, it's just the quantities, in other words, the recipe of those ingredients, that is withheld as a trade secret.

I would like to clear up one more misperception from the hearing. Representative Lowenthal suggested that FracFocus is privately run and there is no guarantee it will be maintained. Although funded by DOE and industry, it is maintained by another State-funded NGO, the Groundwater Protection Council, in association with the IOGCC. So the concern about FracFocus not being around in the future is also unwarranted.

I am out of time. Thank you again, Mr. Chairman and Ranking Member, for allowing me to testify. I hope from my testimony you can see the rationale for my strong support of this bill, and my concern with adding unnecessary Federal regulations.

[The prepared statement of Ms. Foerster follows:]

#### Statement of Catherine P. Foerster, Chair and Engineering Commissioner, Alaska Oil and Gas Conservation Commission

Thank you, Chairman Lamborn, ranking member Holt, and members of the Subcommittee on Energy and Mineral Resources for inviting me here today to discuss hydraulic fracturing regulation.

The Alaska Oil and Gas Conservation Commission applauds Congressman Flores for introducing this bill and the members of this sub-committee for their interest in considering it. The last thing the United States needs right now is duplicative regulation of an already stringently regulated process, unless, of course, we need increased federal spending and bureaucracy; delays in providing jobs, revenue, and affordable domestic energy; confusion among operators and regulators; and one-sizefits-all regulations that are ignorant to regional differences.

In my testimony I believe you will hear why I wholeheartedly support Representative Flores' proposed legislation. In arguing my support for this legislation, let me first take you back one week ago to a hearing with this very committee and Secretary Sally Jewell. I feel that hearing created the potential for several misperceptions and I'd like to clear those up.

Secretary Jewell's answers to questions from Representatives Lamborn, Fleming, and Mullin gave the perception that no national standard exists for hydraulic fracturing, that some states regulate properly but others use 30-year-old technology, and that states that are just starting to deal with hydraulic fracturing have no place to go for help in establishing appropriate regulations. None of these statements is true.

In America today a state-funded NGO called IOGCC (Interstate Oil and Gas Compact Commission), officed in Oklahoma City, represents the governors of all oil and gas producing states. Its very purpose is to help all states in their regulation of oil and gas operations, including hydraulic fracturing. All Canadian provinces with oil and gas operations also belong to the IOGCC.

The IOGCC has a base set of guidance documents on a variety of oil and gas operations that is very general but that helps states set high standards of environmental protection that are consistent with the varying engineering and geologic needs of each state.

In addition an organization born out of a joint effort between the DOE and API, called STRONGER (State Review of Oil and Natural Gas Environmental Regulations), exists to provide a national standard for environmental protection in all aspects of oil and gas operations and a critical review of individual state regulations to ensure that the national standard is being met and that the local issues are also being taken into account. STRONGER consists of representatives from industry, environmental NGOs and state regulators and addresses the concerns of all three groups. STRONGER convenes sub-groups to address individual issues. One such sub-group deals specifically with hydraulic fracturing. I am a member of that subgroup.

To imply, as I believe Secretary Jewell did, that no national standard for hydraulic fracturing exists, is not true.

As for states needing help to address any new aspect of oil and gas regulations, they can, should, and do use the work already done by STRONGER and by the IOGCC and its member states. In fact, IOGCC even reaches out to states and provinces new to oil and gas and invites them to join the compact commission. Also, during bi-annual meetings, members of the IOGCC and guests share learnings so that, if one state or province encounters a problem or issue, we all collaborate on the solution.

To imply that state regulators have nowhere to go for help when they encounter hydraulic fracturing or any other new operation or technology is also not true. As far as the states' regulations being old and out-of-date, that is, again, not true.

As far as the states' regulations being old and out-of-date, that is, again, not true. The IOGCC member states meet twice a year to review the latest technology advances and operating practices with an eye to whether any regulatory changes are warranted. The IOGCC seeks out industry representatives to provide information at these meetings on new or changing technologies and operating practices. And as a state regulator for over eight years, I assure you that we are almost constantly updating one regulation or another to keep up with technology advances and operating changes.

Almost eighty years ago, the IOGCC had the good idea to develop model statutes, which they did. On top of that, we revisit the standards and our individual state regulations constantly to ensure that they are up-to-date. More recently STRONG-ER has developed a comprehensive set of guidelines for state regulation of hydraulic fracturing—one that I helped update less than one year ago. We certainly don't need to duplicate these efforts.

There was also some discussion during that hearing of FracFocus and trade secret protection. I just want to remind the subcommittee that the Uniform Trade Secrets Act is in place in 47 states and the District of Columbia and that FracFocus is (and any other disclosure mechanism would be) bound by the provisions of that act. I'm not an attorney but I suggest you ask an attorney to answer the question of how this act affects access to the data industry wants held confidential. Another thing to keep in mind is that FracFocus requires that ALL ingredients be disclosed; it is simply the mix of those ingredients that is withheld as a trade secret.

is simply the mix of those ingredients that is withheld as a trade secret. I'd like to clear up one more misperception from that hearing. Representative Lowenthal suggested that FracFocus is privately run and may not be maintained. Although funded by the DOE and industry, it is maintained by another state-funded NGO, the Groundwater Protection Council (GWPC) in association with the IOGCC. Thus, the concern about it being around in the future is unwarranted.

As for Alaska in particular, approximately 25% of Alaska's wells have been hydraulically fractured and we have been performing hydraulic fractures for about forty years. Moreover in its history of oil and gas operations, Alaska has yet to suffer a single documented instance of subsurface damage to an underground source of drinking water. As long as each well is properly constructed and its mechanical integrity is maintained, (in other words as long as operators follow our regulations) hydraulic fracturing should have no potential to damage any fresh groundwater.

hydraulic fracturing should have no potential to damage any fresh groundwater. The following paragraphs describe the current state of Alaska's regulation of hydraulic fracturing. However it should be noted that my commission is currently engaged in the deliberative process on proposed changes to these regulations. Proposed changes include fluid disclosure requirements (although all Alaska operators are currently disclosing voluntarily via FracFocus), water well sampling requirements, and adding a section titled "hydraulic fracturing" that either cites or refers to all our existing regulations that impact hydraulic fracturing operations. We are not creating this section because we currently have no regulations on hydraulic fracturing. Rather we are creating this new section simply to make it easier for the lay person to find the regulations that are currently scattered across a number of existing sections. For example the casing requirements are in the casing section, the cementing requirements are in the cementing section, and so on. The AOGCC's statutes and regulations, found in Chapter 5 of Title 31 of the

The AOGCC's statutes and regulations, found in Chapter 5 of Title 31 of the Alaska Statues and Title 20, Chapter 25 of Alaska's Administrative Code, apply to all oil, gas, and geothermal wells drilled in the state. These statutes and regulations include stringent well construction requirements that are designed to protect underground sources of water and ensure mechanical integrity during production and injection operations. The AOGCC has no specific section of its regulations entitled "hydraulic fracturing" but the requirements for mechanical integrity are found throughout our regulations. Additionally, the AOGCC is required by statute to take extra measures to protect underground sources of drinking water in "nonconventional gas" operations, including hydraulic fracturing operations. Non-conventional gas includes coal bed methane and shale gas, both of which usually require production and disposal of significant amounts of water to establish and maintain gas flow.

The AOGCC does not yet have any rules regarding disclosure of hydraulic fracturing fluids or baseline water well sampling, but we are in the deliberative process to consider these change and others. Under our current regulations, proposed fracturing programs are described in the application for permit to drill a new well (Form 10-401) or in an Application for Sundry Approvals (Form 10-403) when such work is planned on an existing well. Disclosure of the chemical composition or the anticipated volume of fluid is not currently required for either permit. However, Material Safety Data Sheets are required by federal law to be available on location. For hydraulic fracturing operations, these sheets list every chemical used in the fracturing process and must be disclosed to the AOGCC if requested. In instances where fracturing is proposed in a drilling permit application, volumes may or may not be included because completion interval thickness, permeability and other characteristics that determine required fluid volumes generally are not known before the well is drilled. The volume of fluid actually used must be disclosed in the final completion report for each fractured well.

On the North Slope, Alaska's most prolific oil and gas province, freshwater is not a concern. In this part of Alaska, a thick layer of soil is underlain by permafrost ground that remains frozen year round—so there is no liquid water, other than surface water, to a depth of 1,000 to 2,000 feet. Below the permafrost, only salt water is present, with very few exceptions. Regardless, wells on the North Slope are held to the same stringent construction requirements as other wells throughout the State.

Wherever underground sources of drinking water are present, they are protected by Commission regulations. All operators are required to obtain advance approval for well work, including drilling. AOGCC staff engineers and geologists review all applications to ensure the proposed well construction is appropriate for the well's planned use. Well mechanical integrity requirements are the primary means for protecting drinking water. In order to operate, all wells must demonstrate competent barriers to prevent the flow of any fluids from the well to the surrounding rocks. These barriers are supplied by strings of pipe in the wells as well as cement and mechanical devices that pack-off (i.e., seal) the pipe. Every well must have a surface casing that is set below the base of the deepest formation that could potentially be a source of drinking water. That casing must be cemented completely to the surface. As a well is drilled deeper, every additional casing string must also be cemented sufficiently to restrict fluids to their native reservoirs. Testing of the barriers and evaluation of cementing records verify a well has competent barriers installed. Wells which cannot demonstrate competent barriers are required to be shut-in unless the operator can demonstrate to the Commission's satisfaction that redundant barriers exist to adequately protect the surface and subsurface environment.

To assure compliance, every operator is required to install pressure measurement devices on every well and monitor those devices. If a measurement device indicates a compromise of the well's mechanical integrity, the operator is required to shutin the well immediately and notify the Commission. In addition to these monitoring devices, the Commission requires periodic mechanical integrity tests on all injection wells. The AOGCC has six field inspectors who randomly witness the tests as they are performed. Regardless of whether or not an inspector is present for a pressure test, the operators are required to submit to the AOGCC documentation for every test conducted. All test information is reviewed thoroughly by AOGCC engineers. Unannounced inspections also assure regulatory compliance.

A little more historical detail on the formation of STRONGER:

In 1989, the Interstate Oil and Gas Compact Commission (IOGCC) formed a Council on Regulatory Needs composed of environmental and oil and gas regulators representing the major producing areas of the country. There were nine advisors and nine official observers. The Council was funded by a grant from EPA. At the first Council meeting all participants were invited to the table and the stakeholder process was established. This Council was charged with developing guidelines for state oil and gas exploration and production waste regulatory programs. In early 1990 the Council produced the 1990 Guidelines. The 1990 Guidelines were organized by subject matter. They established environmental objectives for state regulatory programs. Fundamental differences exist from state to state, and within regions within a state in terms of climate, hydrology, geology, economics, and methods of operation. Consequently, regulatory programs vary in order to accommodate the differences in state administrative procedures, laws, and regulatory history. The Guidelines were used as a basis for state reviews. In 1993 the Guidelines were up dated and revised to include abandoned sites and naturally occurring radioactive materials (NORM). Follow-up reviews to document changes resulting from recommendations contained in reports of initial reviews were initiated. In 1999, State Review of Oil and Natural Gas Environmental Regulations (STRONGER) was formed to manage the state review process. STRONGER received funding from EPA, DOE and API. The 1994 Guidelines were revised in 2000, 2005 and 2010. Important additions were Spill Prevention, Performance Measures to evaluate how well state programs achieve their goals, Stormwater Management, and Hydraulic Fracturing. Hydraulic fracturing guidelines are currently being revised and air guidelines are under development.

Thank you again, Chairman Lamborn and ranking member Holt, for inviting me to appear before your Subcommittee.

Mr. LAMBORN. Thank you. Ms. Craddick.

# STATEMENT OF CHRISTI CRADDICK, COMMISSIONER, RAILROAD COMMISSION OF TEXAS

Ms. CRADDICK. Chairman Lamborn, Ranking Member Cartwright, and members of the Committee, my name is Christi Craddick, Commissioner of the Railroad Commission of Texas. Thank you for the opportunity to provide testimony in support of H.R. 2728. Texas has successfully regulated oil and gas production for almost 100 years, and knows better than the Federal Government how both to serve and protect the unique interests of our State. I am here today to provide my knowledge regarding the rules, regulations, and practices the State of Texas and the Commission have in place to safely and effectively regulate oil and gas exploration and production, and specifically the industry method of hydraulic fracturing, or fracking.

Fracking has been a common industry practice in Texas for more than 60 years, and horizontal drilling, another pioneering technology, was developed in Texas by George P. Mitchell during the 1980s and 1990s. The energy industry in Texas has become the number-one job creator in terms of jobs created and compensation with over 427,000 oil and gas jobs in Texas in 2012, averaging about \$120,000 a year in salary. Also, the largest economic contributor, the oil and gas industry paid \$12 billion in State taxes in Fiscal Year 2012.

The Commission has in place a successful and comprehensive regulatory framework to ensure that all oil and gas activities, including fracking, do not impact groundwater or surface water. Commission records do not indicate a single documented water contamination case associated with the process of fracking in Texas. And this is due to consistent and thoughtful regulation from within our State by regulators who know Texas best.

In addition to the Commission's strict well construction requirements and rigorous regulatory oversight, Texas is blessed with geology that aids in our water protection efforts. With Texas's experience in exploration and production, free-market practices and prime production conditions, the Commission has proactively developed regulatory oversight while allowing vast industry growth in innovation and increased production. In keeping pace with the advancements in the energy industry, the Commission has spent the past year evaluating rules to enhance our State's regulatory structure.

In February 2012, the Commission implemented one of the Nation's most comprehensive chemical disclosure rules for fracking a well in Texas. It requires oil and gas operators to disclose chemical ingredients and water volumes used in the fracking treatment of oil and gas wells on the FracFocus Internet Web site, hosted by the Groundwater Protection Council and the Interstate Oil and Gas Compact Commission.

In May of this year, the Commission amended its rules to update standards relating to the requirements for integrity testing of casing, cementing, drilling, well control, and well completion requirements. A recent case serves as an example to the differences in Texas and the Federal process.

In 2010, the EPA issued an endangerment order for Southern Parker County while the Railroad Commission had an active and ongoing investigation into whether Range Resources' gas wells had contaminated water wells in the area. After the EPA issued an endangerment order, the Commission held an extensive evidentiary hearing regarding the matter to which the EPA was invited, but chose not to participate. From the time a complaint was received by the Commission to the signing of the final order, it took the Commission  $7\frac{1}{2}$  months to determine that Range's gas wells were not the source of the natural gas in the water wells. A full year after the Commission's final order, the EPA vacated its endangerment order against Range.

Comparatively, Texas utilizes science and data to effectively and efficiently assess production activities that affect business within our State, while the Federal process is ineffective, inefficient, and cumbersome. A one-size-fits-all model does not work in Texas, as different rules for different States are most effective in adhering to different geography, geology, and environments. Texas energy regulation is based on rules, in contrast to permit or study-driven regulation. Free-market principles guided by rules and processes in Texas allow companies to drill, so long as the rules are followed.

While the oil and gas industry is one of the top economic drivers in Texas, we know that efficient and consistent predictable regulation within the energy industry is key to our State's economic success, and the success of domestic U.S. energy production.

Thank you again for allowing me to testify, and for sponsoring this bill. And I look forward to questions.

[The prepared statement of Ms. Craddick follows:]

#### Statement of Christi Craddick, Commissioner, Railroad Commission of Texas

Chairman Lamborn, ranking member Holt, and members of the Committee and Subcommittee:

Thank you for the opportunity to provide testimony in support of H.R. 2728 (Flores), the Protecting States' Rights to Promote American Energy Security Act, recog-

nizing States' authority to regulate oil and gas operations and promote American energy security, development, and job creation. Texas has successfully regulated oil and gas production for almost 100 years and

Texas has successfully regulated oil and gas production for almost 100 years and knows better than the federal government how to both serve and protect the unique interests of our state. As Commissioner of the Railroad Commission of Texas (Commission and/or RRC), I am here today to provide my knowledge regarding the rules, regulations and practices the State of Texas and the Commission have in place to safely and effectively regulate oil and gas exploration and production, and specifically the energy industry method of hydraulic fracturing, or fracing.

Fracing has been a common industry practice in Texas for more than 60 years. After Stanolind Oil introduced fracing in 1949, Halliburton conducted the first two commercial fracturing treatments in Stephens County, Oklahoma, and Archer County, Texas. Through the '80s and '90s, horizontal drilling, another pioneering technology was developed in Texas by George P. Mitchell. This technique combined with fracing, has opened the door and allowed operators to economically extract natural gas and other hydrocarbons from shale rock formations. As of December 2012, an estimated 2.5 million fracture treatments have been per-

As of December 2012, an estimated 2.5 million fracture treatments have been performed worldwide. It is estimated that approximately 60 percent of all wells drilled today are hydraulically fractured. Fracing not only increases a well's production rate, but it is credited with adding 9 billion barrels (BBL) of oil and more than 700 trillion cubic feet (Tcf) of gas to U.S. reserves alone, which otherwise would have been too costly to develop.

been too costly to develop. Much of the immense growth in production related to fracing and horizontal drilling has occurred in Texas, where energy production is booming. The Commission issued 22,479 drilling permits in 2012, a number consistent with a steady increase in drilling permits in the state from 9,716 permits issued in 2002. Well completions increased from more than 9,900 in 2010 (http://www.rrc.state.tx.us/data/drilling/ drillingsummary/2010/annual2010.pdf) to more than 15,000 in 2012 (http:// www.rrc.state.tx.us/data/drilling/drillingsummary/2012/annual2012.pdf). Texas produces almost one third of total U.S. crude oil today. Currently, Texas' crude oil production averages 1.68 million barrels (MMbbl) per day. Natural gas production averages 19.31 billion cubic feet (Bcf) per day. Because the energy industry in Texas is exceedingly active, it has quickly become

Because the energy industry in Texas is exceedingly active, it has quickly become the number one job creator in terms of jobs created and compensation. In 2012, there were a total of 427,761 oil and gas jobs in Texas in every sector of the oil and gas industry arena including drilling, extraction, distribution, refining, manufacturing, machinery and equipment operation, wholesale, transportation and support activities, with an average salary of about \$120,000 per year. An active energy industry in Texas has also generated substantial revenue for our state afform In forced user 2012, the gil and grae industry mid \$12 billion in state

An active energy industry in Texas has also generated substantial revenue for our state coffers. In fiscal year 2012, the oil and gas industry paid \$12 billion in state taxes, up from \$9.25 billion in 2011 and \$7.4 billion in 2010. In the last fiscal year, oil and gas severance tax income from oil production was 43 percent higher than estimated at \$2.1 billion, and the natural gas production tax brought in \$1.5 billion, 38 percent higher than estimated. Severance taxes make up the state's Rainy Day Fund, which currently has reserves of approximately \$8 billion, and that number is projected to rise to \$11.8 billion by the end of the 2014–2015 biennium. Another \$3.6 billion was collected in property taxes from oil and gas interests in fiscal year 2012 and sales taxes totaled \$2.5 billion.

Not only is Texas the number one oil and gas producer in the United States with more than 298,000 active oil and gas wells (http://www.rrc.state.tx.us/data/wells/ welldistribution/welldistribution062913.pdf), the state has a stellar environmental and public safety record, while fostering a job-creating industry. The Commission is recognized as a world leader and serves as an example across the globe in developing workable regulation for the energy industry and for its leadership in ensuring that resource recovery operations meet or exceed environmental and safety compliance standards.

With experience comes knowledge, and the Commission has been regulating the oil and gas industry for more than 90 years, including oil and gas production, intrastate pipeline inspection and safety, utility rate cases pertaining to natural gas, and surface mining and reclamation oversight. While the Commission's headquarters is based in Austin, the agency has nine field offices throughout the state that work through inspections and case work in the field to ensure operators are adhering to our rules.

Railroad Commission rules have set the precedent in guiding energy production regulations throughout the world. It is the mission of the Commission to serve Texas by the stewardship of natural resources and the environment, concern for personal and community safety, and support of enhanced development and economic vitality for the benefit of Texans. The Commission has in place a successful and comprehensive regulatory framework to ensure that all oil and gas activities, including fracing, do not impact groundwater or surface water. Commission records do not indicate a single documented water contamination case associated with the process of fracing in Texas, and this is due to consistent and thoughtful regulation from within our state by regulators who know Texas best.

Texas' success in energy regulation has resonated throughout the world, driving many other nations' government officials to Texas to learn about our successful oversight processes. Last year, the agency's subject matter experts provided technical information on how the Commission regulates oil and gas exploration and production to dignitaries from Brazil, Turkmenistan, South Africa, Norway, China, Iraq, Italy, Canada, and Mexico. The Commission works to provide insight on processes in place that have allowed Texas to effectively oversee energy production for economic development while protecting the environment and public safety, so that others may replicate our state's successful model. As our agency has worked to continuously update and develop new rules and processes for effective regulation of an ever-changing industry, regulators throughout the world have made efforts to learn from Texas' tried and true methods.

Many of those methods have become standard practice within Texas and across the globe. Any time a well is drilled in Texas, including an oil, gas or injection/disposal well, Commission rules require that surface casing in the well be set below the depth of usable quality water to protect the state's water resources. Because usable quality water levels vary throughout the state, the Commission's Groundwater Advisory Unit performs an essential function in determining specific groundwater protection depths for each new well.

The Commission's rules include strict well construction requirements that require several layers of steel casings and cement to protect groundwater. The first protection layer for usable quality groundwater in a well is the surface casing, a steel pipe that is encased in cement that reaches from the ground surface to below the deepest usable quality groundwater level. Surface casing acts as a protective sleeve through which deeper drilling occurs.

The second protection layer for groundwater is the production casing, a pipe placed in the wellbore to the well's total depth and permanently cemented in place. Some operators inject fracturing fluid in this casing. Depending on the fracturing pressure needed, other operators use a third protection layer by injecting fracturing fluid in the tubing string that conducts the fracturing fluid to the zone to be fractured and then produced.

For fracturing fluid to affect the usable quality water, a leak would have to escape several layers of casing protection and flow outside of the wellbore. For monitoring purposes, Commission rules require gauges for observation of these casings at the surface. If there is a problem down-hole, it is easily and quickly identified. In addition to the Commission's strict well construction requirements and rigorous

In addition to the Commission's strict well construction requirements and rigorous regulatory oversight, Texas is blessed with geology that aids in our water protection efforts. Depending on the shale, fracing in Texas can typically occur a mile or more below aquifers, with many thousands of feet of isolating rock in between fresh water zones and the hydrocarbon-bearing zones that are hydraulically fractured.

For example, freshwater zones vary throughout the Barnett Shale region in North Texas, which can range from the surface to a depth of 2,000 feet. Before you get to the Barnett Shale formation, there is another 4,000 to 6,000 feet of isolating rock protecting the fresh water zones. The tight shale fracing that is occurring in the Barnett Shale is more than a mile deep at depths of between 6,000 and 7,500 feet. In the Eagle Ford Shale in South Texas, the Carrizo Aquifer may be found from the surface to a 6,000 foot depth while 3,000 to 8,000 foot of isolating later of the source of the

In the Eagle Ford Shale in South Texas, the Carrizo Aquifer may be found from the surface to a 6,000 foot depth, while 3,000 to 8,000 feet of isolating layers of rock is found between the aquifer and the zone that is undergoing tight shale fracing at depths of between 8,000 and 15,000 feet (Note: These dimensions are not uniform throughout the Eagle Ford Shale). While there are some areas in Texas where operators drill to shallower depths and use small-volume hydraulic fracture stimulation, the Commission's new rules address any increased risk.

With Texas' experience in exploration and production, free market practices, and prime production conditions, the Commission has learned to proactively develop regulatory oversight, while allowing vast industry growth in innovation and increased production. In keeping pace with advancements in the energy industry, the Commission has spent the past year evaluating rules and processes to enhance our state's regulatory structure.

In February 2012, the Commission implemented one of the nation's most comprehensive chemical disclosure rules for fracing a well in Texas. As of Feb. 1, 2012, the Commission requires Texas oil and gas operators to disclose chemical ingredients and water volumes used in the fracing treatment of oil and gas wells on the FracFocus internet website hosted by the Ground Water Protection Council (GWPC) and the Interstate Oil and Gas Compact Commission (IOGCC) at: http:// fracfocus.org/. Texas is one of the first states to require making this information accessible to the public.

In May 2013, the Commission amended its rules to update standards relating to the requirements for integrity testing of casing, cementing, drilling, well control, and well completion requirements. For wells spudded on or after Jan.1 2014, operators in Texas will be required to: Adhere to new minimum standards for casing and cement to reflect best management practices already being used by most operators; Set minimum cement sheath thicknesses for various casing strings; Control annular gas migration; Test casing integrity throughout the drilling process; Isolate potential flow zones, zones with corrosive formation fluids, and zones being used for underground injection; Follow additional requirements for wells on which hydraulic fracturing treatment(s) will be conducted; and Receive Commission approval of any proposal to set surface casing to a depth of 3,500 feet or greater; Recognizing concerns about water use, several companies have applied for, and

Recognizing concerns about water use, several companies have applied for, and the Commission has approved, recycling projects to reduce the amount of fresh water used for fracing statewide and specifically in South Texas, a result of increased development in the Eagle Ford Shale. In March of this year, the Commission amended its rules to remove regulatory roadblocks and encourage recycling of such production fluids. In April, the amended recycling rules became effective and were designed to encourage recycling and reduce the use of fresh water to continue operators' water conservation efforts during fracing operations. By removing regulatory hurdles, the Commission fosters industry recycling efforts

By removing regulatory hurdles, the Commission fosters industry recycling efforts as operators continue to examine ways to reduce freshwater use when fracing wells. The new rules are designed to authorize non-commercial recycling under specified conditions if operators are recycling fluids on their own leases or transferring those fluids to another operator's lease for recycling. The new rules identify more clearly the Commission's commercial recycling permit application requirements and permit conditions. The Commission also adopted amendments to its commercial recycling operations for both solids and liquids and expand the two existing categories to five, to more accurately reflect the range of recycling practices currently used in the industry. The amendments establish a tiered approach for the reuse of treated fluid, including both authorized reuse of treated fluids in oil and gas operations and provisions for reusing the fluid for other non-oilfield related uses.

Through thoughtful processes and careful assessments, the Commission ensures that we have the sophistication to effectively regulate one of the most technologically advanced industries in the world. A recent case serves as an example to the differences in the Texas and federal process in assessing and efficiently and effectively regulating drilling. In 2010, EPA issued an endangerment order for southern Parker County even though the Railroad Commission had an active and ongoing investigation into whether Range Resources gas wells had contaminated water wells in the area.

After EPA issued an endangerment order, the Commission held an extensive evidentiary hearing regarding the matter to which EPA was invited but chose not to participate. The outcome of the hearing was that Range's gas wells were not the source of the natural gas in the water wells.

The primary difference between EPA findings and the Commission's findings is that the EPA relied solely on a comparison of isotope data from Barnett Shale production gas to natural gas that occurred in Mr. Lipsky's water well, whereas the Commission's findings were based on multiple lines of evidence (i.e., well integrity testing, microseismic data, an evaluation of local geology and other sources of natural gas, and testing of both production gas and gas in the bradenhead) that showed that Range's Barnett Shale gas wells were not causing contamination.

The mindset in Texas and federal processes in using science and data to effectively assess and regulate oil and gas exploration and production activities appear to be vastly different in this case. Moreover, it cannot be emphasized enough that EPA has since vacated its order against Range. A timeline of EPA and Commission actions in the Range Investigation is set out in the attached Appendix A.

Like all forms of energy production, fracing entails risks, but offers the prospect of economic and environmental benefits when properly regulated. As the production of energy through fracing continues, we must continue to study this technology and ensure that it is done safely. Texas and state regulatory bodies alike are best fitted for the task of overseeing the safe production of their resources within their boundaries for a number of reasons.

Texas and other energy producing states are quickly adapting and familiarizing their communities with oil and gas exploration and production processes. We are working to strengthen shale gas regulations to tighten well construction and waste disposal standards and requiring disclosure of fracing fluid ingredients, bringing together all interested parties, industry and environmental groups, in the process.

Texas has developed a regulatory system that fits our state's varying drilling conditions throughout different regions. A one size fits all model does not work in Texas, as different rules for different states are most effective in adhering to differing geography, geology, and environments. Operators will use different drilling specifications and methods, depending upon the location of the well site; and Texas' rules reflect these considerations. Regulatory bodies throughout the U.S. have overseen oil and gas development in their respective states for decades, and they know their issues well.

Not only are states more familiar with the intricacies of the geology in which their operators are drilling, but the majority of both the benefits and costs of fracing fall on states and local communities. Texas has experienced a direct gain from added jobs and tax revenue; and also properly manages pollution risks (the Commission does not have jurisdiction over traffic & noise). Therefore, the Commission is in the best position to figure out how best to balance the positive and potential negative facets of fracing.

Individual regulatory bodies are balancing benefits and risks in their own ways. We should continue to let individual regulatory bodies devise local solutions to local conditions. As our nation nears energy independence due to increased domestic production, it is important now more so than ever that energy producing states are not over-burdened by federal regulations that may stifle production growth.

While every regulatory body has their own model of how to regulate energy production within their borders, Texas too has developed its own case study on how to best regulate oil and gas exploration and production. Texas energy regulation is based on rules in contrast to permit- or study-driven regulation. Texas regulation is based in free market principles guided by rules and processes that allow companies to drill, so long as rules are followed. The cost to drill a well in Texas depending on geological location of the drill site and techniques used can be anywhere from \$1 million to \$5 million. Operators invest vast amounts of money in time in drilling operations that they hope to see successful.

Furthermore, Texas drilling permits are issued somewhere between 2–5 days. Unnecessary, cumbersome federal oversight will slow Texas' current efficient processes. While the oil and gas industry is one of the top economic drivers in Texas, we know that efficient, consistent and predictable regulation within the energy industry is the key to our state's economic success, and the success of domestic U.S. energy production.

Thank you again, Chairman Lamborn and ranking member Holt, for the opportunity to testify before your Subcommittee and for your attention to this legislation. The Railroad Commission of Texas applauds Congressman Flores for introducing this bill and the members of this subcommittee for their interest in considering it. I would be happy to answer any questions you might have regarding my testimony.

# Appendix A

## Timeline of EPA and Commission Actions in the Range Investigation

August 6, 2010: Water well owner, Mr. Steven Lipsky, filed a complaint of natural gas in a domestic water well. In response to the complaint, Commission District 7B (Abilene) staff initiated an investigation that included testing the domestic water well for presence of oil field contamination and inspecting the nearby Range gas production wells [Butler Unit Well No. 1H (Butler Well) and Teal Unit Well No 1H (Teal Well) in the Newark, East (Barnett Shale) Field, Hood County, Texas]. August 17, 2010: U.S. EPA, Region 6, Water Enforcement Branch first contacted

August 17, 2010: U.S. EPA, Region 6, Water Enforcement Branch first contacted the RRC Abilene District Office, which agreed to carbon copy EPA on all complaint correspondence.

August 26, 2010: Mr. Lipsky advised RRC Abilene District Office he intended to disconnect his water well from the house. October 2010: EPA technical staff contacted Abilene District Office staff request-

**October 2010**: EPA technical staff contacted Abilene District Office staff requesting to discuss plans to collect gas samples from the Lipsky water well and the Butler Well. EPA staff informed District Office staff that the EPA was considering issuing an endangerment order; however, EPA did not issue formal communication on this point to the Abilene office or RRC staff in Austin.

**October 21, 2010**: In a phone conversation, EPA technical staff informed RRC staff that EPA planned to collect a gas sample from the Lipsky well and a gas sample from the production casing of the Range production wells. RRC staff recommended that EPA also sample the bradenhead gas of the Range production wells, but EPA staff declined the recommendation.

October 26, 2010: EPA staff collected several samples from the Range production site including gas samples and produced water samples. RRC staff witnessed the collection of the samples. Range also collected samples of gas, including bradenhead gas. During discussion among the parties present about previous environmental investigations, RRC was informed that air monitors had been placed at various loca-

November 23, 2010: EPA staff emailed analytical results to RRC staff and invited RRC staff to a meeting with Range scheduled for December 2, 2010.
 December 1, 2010: EPA technical staff contacted RRC technical staff to advise

that the meeting with Range will not occur because Range has declined the invita-tion. EPA staff also notified RRC staff that EPA planned to issue an endangerment order under Section 1431 of the Safe Drinking Water Act [42 U.S.C. §300(i)(a)], based on recent isotope data that it believed connects Range's operations to gas in the Lipsky well.

**December 2, 2010**: EPA staff calls the RRC to share same information. RRC technical staff and EPA technical staff discuss the endangerment order. EPA staff read a statement from the draft endangerment order indicating that "RRC has not taken action to date." RRC staff disagreed with that statement and suggested the following alternate statement "although RRC is investigating the complaint, the RRC has not taken enforcement action to date." EPA staff also said that it would issue a press release, not to occur before the following Monday, December 6, 2010. December 3, 2010: EPA regional administrator contacted RRC chairman to ad-

vise of the planned endangerment order. EPA called RRC staff to ask about other occurrences of gas in shallow sands. RRC returned call and advised of two other complaints in area. EPA requested copies of the files. RRC staff began gathering in-formation on other water well complaints, per EPA request. Range sends a letter to RRC agreeing to take additional actions. RRC staff notifies EPA staff of the Dec. 3 letter from Range and emails a PDF of the letter to EPA staff.

**December 6, 2010**: EPA sent the following email to RRC staff: "As you are aware, the EPA is concerned about the safety of the private drinking water wells in Parker and Hood County that are near the Butler and Teal gas production wells. The EPA wants to make sure that all of the drinking water wells in this area are safe and not subject to methane contamination. Does the Railroad Commission of Texas have plans to sample these wells in the near future?" December 7, 2010: RRC staff replied to EPA's December 6 email, and advised

EPA staff that the RRC has an orgonic investigation and is gathering information about occurrences of gas in other water wells in the area. RRC sends PDF's of two other water well complaints in the area to EPA staff. December 7, 2010: EPA issues the Emergency Administrative Order (Docket No.

 December 7, 2010. If A issues the Energency Animistrative Order (Docket No. SDWA-06-2011–1208) against Range.
 December 8, 2010: RRC issues a Notice of Hearing to consider whether operation of the Range Production Company Butler Unit Well No. 1H and Teal Unit Well No. 1H in the Newark, East (Barnett Shale) Field, Hood County, Texas are causing or contributing to Contamination of Certain Domestic Water Wells in Parker County, Texas.

January 19–20, 2011: RRC hearings examiners hold a 2-day hearing in Austin. Appearances were made by Range, RRC staff, Enervest Operating Company, and the Texas Alliance of Energy Producers. Neither EPA nor the owners of the two water wells participated in the hearing. March 22, 2011: Commissioners Elizabeth Ames Jones, Michael Williams and David Porter signed a Final Order, which stated that, based on the evidence pre-cented at the Avariance the avaniance englydod, and the Commissioners englydod.

sented at the Hearing, the examiners concluded, and the Commissioners agreed, that gas in the water wells is from the Strawn Formation, which is in direct communication with the Cretaceous aquifer in which the water wells are completed. There was no evidence to indicate that either natural gas production well is the source of the gas in the water wells. This conclusion was supported by the following evidence found by the Commission hearing examiners:

- The appropriate geochemical parameters for fingerprinting to distinguish Strawn gas of Pennsylvania age from Barnett Shale gas of Mississipian age are nitrogen and carbon dioxide, not carbon. Gas from Pennsylvanian age rock, including Strawn, has higher nitrogen concentration and lower carbon dioxide concentration than Barnett Shale gas. Gas found in the water wells does not match the nitrogen fingerprint of Barnett Shale gas. The gas found in the water wells matches Pennsylvanian gas.
- Bradenhead gas samples from both water wells do not match Barnett Shale gas, confirming that gas is not migrating up the wellbores and that the Barnett Shale producing interval in the Butler and Teal wells is properly isolated.

- 3-dimensional seismic data indicates no evidence of faulting in the area of the water wells.
- Microseismic data available for more than 320 fracture stimulations in Parker County indicated a maximum fracture height of approximately 400 feet, meaning that almost one mile of rock exists between the highest fracture and the shallow groundwater aquifer.

#### Response to Questions Submitted for the Record by Christi Craddick, Commissioner, Railroad Commission of Texas

Chairman Lamborn:

Chairman Lamborn: I am happy to provide the below responses to Rep. Holt's subsequent questions following my testimony in support of H.R. 2728 (Flores), the *Protecting States' Rights to Promote American Energy Security Act*, recognizing States' authority to regulate oil and gas operations and promote American energy security, development, and job creation, before the Committee on Natural Resources, Subcommittee on En-ergy and Mineral Resources legislative hearing on July 25, 2013.

1. Commissioner Craddick, you state that, "Unnecessary, cumbersome fed-eral oversight will slow Texas' current efficient processes." Is there a lot of federal land in Texas? Is there a lot of federal production in Texas? It appears that the BLM's proposed rules would have negligible, if any, impact on Texas' regulatory program, since their proposal only applies to operations on federal oil and gas leases.

RESPONSE: Approximately 1.8 percent of land in Texas is held in trust by the federal government, and that 1.8 percent encompasses 2,977,950 acres of land. As of December 2012, the total number of leases in effect on federal land in Texas is 648. Since 2003, Texas has averaged 680.2 leases in effect on federal land. The number of federal acres under lease as of the last day of fiscal year 2012 in Texas is 377,454 acres. Since fiscal year 2003, Texas has averaged 446,098.6 federal acres of land under lease. The number of producing acres on federal lands as of the last day of fiscal year 2012 in Texas is 155,006 acres. Since fiscal year 2003, Texas has averaged 129,554.8 producing acres on federal lands. There are a number of pro-ducing states with similar successful regulatory policies that have much larger per-(69.1), California (45.3), Colorado (36.6), Idaho (50.2), Montana (29.9), New Mexico (41.8), Utah (57.4), and Wyoming (42.3). In my testimony, I commented on the impact duplicative federal oversight would have on Target approximate a matrix of the line of th

have on Texas' energy production. I expressed my firm belief and will stress again that any policy allowing for dual oversight of Texas' energy production would have negative repercussions on that production in Texas, and in any state already having similar successful regulatory policies in place.

Commissioner Craddick, you mention that "many of [Texas'] hydraulic fracturing practices have become standard practice across the globe. Indeed, the BLM has taken yours and other states' regulatory systems into account in creating their draft regulations. But the proposed legislation today takes away the authority of the federal government to regulate its own lands, and instead creates a state by state approach-potentially with 50 different regulatory bodies—that have no minimum stand-ards. If your system can be used as a model for China, Brazil, Mexico, and others, why is it not good enough for the American people on public lands?

RESPONSE: My testimony reinforces that states' regulatory policies for energy production are best for the American people on public and/or private land, and affirms that duplicative federal regulations on public land will hinder that production. As we are collaborating with governments throughout the world, Texas has first and foremost communicated directly with other states in working towards developing and revising regulations within our state. Texas and the Railroad Commission, as well as other states, have been active for decades in several collaborative national organizations in an effort to facilitate discussion and problem strategy amongst energy producing states. These organizations include the Interstate Oil and Gas Com-pact Commission (IOGCC), the Ground Water Protection Council (GWPC), and State Oil and Natural Gas Environmental Regulations (STRONGER, Inc.).

The Railroad Commission and other states are in constant contact to discuss possible solutions to mutual issues. For example, the Railroad Commission recently updated its drilling and completion rules (16 Texas Administrative Code §3.13) and reviewed and discussed other states' regulations to determine whether they faced similar issues and how they handled those issues. In addition, the Railroad Commission and the Louisiana Department of Natural Resources entered into a memorandum of agreement with respect to proposed disposal wells close to our respective borders, including in the Haynesville Field, which is located in West Louisiana and East Texas.

I feel strongly that states should develop, maintain and carry out regulatory policies related to energy production within their respective borders versus federal regulation of states' energy production. States are most efficient and effective in this responsibility, and States are much more effective in encouraging oil and gas exploration, development and production, while still protecting the environment and human health. It is clear that federal law and regulations detract operators from investments on federal lands, driving them towards production on non-federal land that is governed by greater regulatory certainty. Since 2012, all of the increases in oil and gas production have been on non-federal lands. A recent Congressional Research Service report (U.S. Crude Oil and Natural Gas Production in Federal and Non-Federal Areas, Congressional Research Service Report for Congress, March 7, 2013) demonstrates that, since 2007, production of natural gas on federal lands fell by 33 percent, while production on state and private lands grew by 40 percent. In 2012, crude oil production on federal lands was below 2007 levels but grew by 35 percent on non-federal lands.

States are more efficient in reviewing and processing permit applications. For example, in Texas, an operator generally may obtain a drilling permit in two to five days. Other states have similar permit processing timeframes. Although this most recent proposal eliminates some requirements that would have greatly delayed the processing of applications and approval to drill and perform hydraulic fracturing, the proposed revised rule will still cause further delay in drilling for and producing oil and gas resources. I understand that BLM currently takes 180–290 days to process an application for a permit to drill. I am aware that it can take up to a year for BLM to issue a permit to drill. BLM has indicated that it will need an additional 28,560 man hours per year to implement the proposed rules. Imposition of additional regulations are likely to result in an increase in the amount of time needed by BLM for approval of drilling permits and, therefore, a greater delay in production on federal lands.

States are more knowledgeable about the unique basins within their boundaries. State regulators base standards and requirements on known risk, accepted science, and proven engineering practices, as well as acknowledged differences between regions based on geography, geology, hydrology, and historic conditions. I understand that BLM has no staff actually posted in Texas and that the nearest staff is posted in New Mexico. While states do a good job in regulating hydraulic fracturing and work towards fine-tuning their regulatory frameworks, the federal government should applaud these efforts, not undercut states' authority.

snould appiaud these efforts, not undercut states' authority. The BLM proposed rule that you mention would unnecessarily duplicate state regulation. BLM stated that the proposed rule is intended to complement the efforts of some states, including Texas, that have recently revised their hydraulic fracturing regulations. However, the rule duplicates, rather than complements, existing state regulations of hydraulic fracturing that address well-bore integrity, flowback water, and require the disclosure of hydraulic fracturing constituents. And, BLM has not indicated how it believes that the state regulations are inadequate. BLM stated in the preamble that "a major impetus for a separate BLM rule is that States are not legally required to meet the stewardship standards applying to public lands and do not have trust responsibilities for Indian lands under Federal laws." However, BLM includes no discussion of how BLM's "stewardship standards applying to public lands" differ from similar state responsibilities. As stated in the preamble, the "Federal Land Policy and Management Act (FLPMA) directs the BLM to manage the public lands so as to prevent unnecessary or undue degradation, and to manage those lands using the principles of multiple use and sustained yield. FLPMA defines multiple use to mean, among other things, a combination of balanced and diverse resource uses that takes into account long-term needs of future generations for renewable and nonrenewable resources. FLPMA also requires that the public lands be managed in a manner that will protect the quality of their resources, including ecological, environmental, and water resources." This directive is virtually the same directive given to responsible state agencies for all lands within the boundaries of the state.

BLM has failed to note any state with insufficient hydraulic fracturing regulations already in place. As this proposed rule is duplicative and cumbersome and creates undue cost to operators with no further safeguard to our environment, this rule is unnecessary in states currently regulating hydraulic fracturing. Furthermore, it is clear that leaving the management of federal lands up to state regulators would result in an increase in exploration, development and production of oil and natural gas, and a subsequent increase in federal revenues to offset the nation's staggering and rapidly growing debt.

Thank you again, Chairman Lamborn, for the opportunity to present my thoughts on this legislation. I would be happy to answer any further questions you might have regarding my testimony.

Mr. LAMBORN. Thank you, Ms. Craddick. Now, Mr. Rogers.

# STATEMENT OF JOHN C. ROGERS, ASSOCIATE DIRECTOR, UTAH DIVISION OF OIL, GAS, AND MINING

Mr. ROGERS. Good morning, Chairman Lamborn and Committee members. I appreciate the opportunity to appear before you today.

The Utah Division of Oil, Gas, and Mining manages the permitting of regulation and monitoring of oil and gas and drilling class two injection wells, and oil and gas disposal facilities in Utah. This includes hydraulic fracturing, which it has regulated for many years, which is a primary focus of today's hearing. Hydraulic fracturing has been operational practice for completing

Hydraulic fracturing has been operational practice for completing and stimulating oil and gas wells in Utah since the early 1960s. In all the historical records of the Division, there has never been a verified case of hydraulic fracturing causing or contributing to contamination of water resources. The Division has always had very stringent rules concerning wellbore construction and the protection of water resources.

However, to make the process of hydraulic fracturing more transparent and alleviate the recent public fear of the process, the Division adopted a formal rule in October of 2012. This rule combined many of the Division's existing rules concerning overall best management practices for oil and gas production related to safe, efficient operations, as well as requiring public disclosure of the chemicals used in the hydraulic fracturing process.

There are three major concerns that have come to the forefront concerning hydraulic fracturing. The BLM has presented these in their proposed rules, and Utah has addressed them both historically and with their current rule: first, to provide public disclosure of the chemicals used in hydraulic fracturing; second, to include regulations to ensure wellbore integrity; and, third, to address issues related to flowback water.

First, public disclosure. The Utah rule requires operators to report to FracFocus within 60 days of completion of a hydraulic fracturing operation of the chemicals used in the process. The primary purpose of FracFocus is to provide factual information concerning hydraulic fracturing and groundwater protection.

FracFocus is a national hydraulic fracturing chemical registry accepted by both industry and government. It is managed by the Groundwater Protection Council and the Interstate Oil and Gas Compact Commission, two organizations whose missions both revolve around conservation and environmental protection. The site was created to provide the public access to reported chemicals used for hydraulic fracturing at specific well locations. This reporting process that the Division uses is the exact same as proposed by the BLM rule. Second, wellbore integrity. Existing rules are already in place to ensure wellbore integrity and construction. This includes detailed rules on casing and cementing, blowout prevention and uncontrolled flow, protection of freshwater aquifers, and casing pressure tests. The Utah rule emphasizes the use of already-existing rules that have managed oil and gas production in Utah for many years. The regulatory process of the Division are effective in ensuring the responsible development of Utah's resources with due regard for protection of environment. This begins with wellbore integrity.

The professional staff at the Division have local knowledge and expertise to address the technical and scientific challenges posed by Utah's unique geology and geography. A nationwide process of hydraulic fracturing and rulemaking would be no more effective in achieving better oversight of hydraulic fracturing operations than exist at the State level in Utah and other States with similar rules.

In addition, substantial cost of manpower and time for both government and private-sector organizations would be incurred.

On-site inspections of oil and gas wells are a key component of the Division's regulatory program. All wells drilled on State or private lands in Utah are subject to a rigorous inspection program that includes inspection and witnessing of well control equipment tests, casing and cementing operations, and drilling operations, to name a few.

In 2012, 8,983 such onsite inspections were performed by the Division's field operations staff. Through a detailed and very comprehensive geologic study, the depth of the usable groundwater has been mapped in the primary oil and gas-producing areas of Utah, the Uintah Basin, recognizing the usable water and its protection is of primary concern when developing a casing program for a potential well.

Third, the management of flowback water and surface protection. The Division's rules state the operators shall take all reasonable precaution to avoid polluting lands, streams, lakes, reservoirs, natural drainages, and underground water. Prior to any drilling operations, all drill sites have onsite inspection and are analyzed for surface conditions, and best practices are employed to prevent any contamination of surface water or ground water. The Division Board has recently approved new rules entitled "Waste Management and Disposal." These rules update methods for disposal of RCRA-exempt waste for oil and gas production. This would include the management of hydraulic fracturing fluid flowback.

Most wells in Utah, the production water is injection, 94 percent of that amount, with 6 percent going to evaporative ponds.

The Board has recently approved new rules which include chemical testing, subsurface and surface geology, size and depth limitations to these wells.

I believe that Utah Division does an excellent job in monitoring hydraulic fracturing and oil and gas operations in Utah. It is also my experience that other States also perform at this similar exceptional level. It would seem redundant to add further rules, as proposed by the EPA's fracturing study and the proposed BLM rule, when many States have been managing the oil and gas operations, including hydraulic fracturing, for many years. Thank you.

[The prepared statement of Mr. Rogers follows:]

#### Statement of John C. Rogers, Associate Director of The Division of Oil, Gas and Mining for The State of Utah

My name is John Rogers and I am the Associate Director of the Division of Oil, Gas and Mining for the State of Utah (DOGM). The Division manages the permit-ting, regulation and monitoring of oil and gas drilling, Class II UIC injection wells and oil and gas disposal facilities in Utah. This includes hydraulic fracturing which it has regulated for many years, which is the primary purpose of this hearing. Hydraulic fracturing (HF) has been an operational practice for completing and stimulating oil and gas wells in Utah since the 1960's. State government regulation of the oil and gas industry commenced with creation of the Utah Oil and Gas Con-servation Commission in 1955. In all of the historical records of DOGM, there has never heen a verified case of hydraulic fracturing causing or contributing to con-My name is John Rogers and I am the Associate Director of the Division of Oil,

never been a verified case of hydraulic fracturing causing or contributing to con-tamination of water resources. The Division has always had very stringent rules concerning well bore construction and the protection of water resources. However, to make the the process of hydraulic fracturing more transparent and alleviate the recent public fear of hydraulic fracturing, the Division adopted a formal hydraulic fracturing rule in October 2012. This rule combined many of the Division exiting rules concerning overall best management practices for oil and gas production as re-lated to safe and efficient operations, as well as a public disclosure of chemicals used in the hydraulic fracturing process.

There are three major concerns that have come to the forefront concerning hydraulic fracturing. The BLM has presented these in their proposed rule and Utah has also addressed them historically and with their current hydraulic fracturing rule.

- (1) Provide public disclosure of chemicals used in hydraulic fracturing
- (2) Include regulations to insure well-bore integrity
- (3) Address issues related to flowback water

#### PUBLIC DISCLOSURE

The Utah rule requires operators to report to fracfocus.org within 60 days of completion of the hydraulic fracturing operation of the chemicals used in the process. The primary purpose of fracfocus.org is to provide factual information concerning Ine primary purpose of fractocus.org is to provide factual information concerning hydraulic fracturing and groundwater protection. FracFocus is the national hydrau-lic fracturing chemical registry accepted by both industry and government. It is managed by the Ground Water Protection Council (GWPC) and the Interstate Oil and Gas Compact Commission (IOGCC), two organizations whose missions both revolve around conservation and environmental protection. The site was created to provide the public access to reported chemicals used for hydraulic fracturing at spe-ifs well hearting. To help upon put this information into reasoning the balance of the second s cific well locations. To help users put this information into perspective, the site also provides objective information on hydraulic fracturing, the chemicals used, and the purposes they serve and the means by which groundwater is protected. This reporting process that The Division uses and is also proposed by the BLM

rule.

#### WELL BORE INTEGRITY

Existing rules were already in place to insure well bore integrity and construction. This included detailed rules on:

- Casing and cementing programsBlowout prevention and uncontrolled flow
- Protection of freshwater aquifers
- Casing pressure tests

The Utah hydraulic fracturing rule emphasizes the the use of already existing rules that have manage oil and gas production in Utah for many years. The regulatory processes of The Division (that include permitting, inspection, compliance, and enforcement) are effective in ensuring the responsible development of Utah's resources with due regard for and protection of the environment. This begins with well bore integrity. The professional staff of DOGM has the local knowledge and expertise to address the technical and scientific challenges posed by Utah's unique geology and geography. A nationwide process of hydraulic fracturing rulemaking would be no more effective in achieving better oversight of hydraulic fracturing operations than exits at the state level in Utah and other states with similar rules. In addition, substantial cost of manpower and time for both government and the private sector organizations would be incurred.

On-site inspection of oil and gas wells are a key component of The Division's regu-latory program. All wells drilled on state or private lands in Utah are subject to a rigorous inspection program that includes: inspection and witnessing of well control equipment tests, casing/cementing operations, follow up to third party com-plaints, general compliance verification, drilling operations, emergency response, final land restoration/bond release, well plugging, production/environmental, and workover/recompletion. In 2012, 8,983 such on-site inspections were performed by DOGM field operations staff.

Through a detail and very comprehensive geologic study, the depth to the usable ground water has been mapped in the primary oil and gas producing area of Utah, the Uintah Basin. Recognizing the usable water and its protection is the primary concern when developing a casing program for a potential well.

#### MANAGEMENT OF FLOWBACK WATER AND SURFACE PROTECTION

The Division's rules state that the operators shall take all reasonable precautions to avoid polluting lands, streams, lakes, reservoirs, natural drainages and underground water. Prior to any drilling operations all drill sites have on-site inspections and are analyzed for surface conditions and best practices are employed to prevent any contamination of surface water or ground water. The Division's Board has recently approved (July 1, 2013) a revised set of rules entitled "Waste Management and Disposal" These rules update methods and restraints for disposal of RCRA (Resource Conservation Recovery Act) exempt waste from oil and gas production. This would include the the management of hydraulic fracturing fluid flow back.

Utah production water is dispose of by two methods:

- UIC Class II injection wells (94%)
- Evaporative disposal ponds (6%)

DOGM has primacy from EPA region 8 to permit Class II injection well on all non-Indian Country. The Division just recently went under an extensive review of the process from EPA and was found to be in compliance with their rules and regulations.

The Board at DOGM has recently approved new rules that revised the regulations concerning surface disposal facilities that accept hydraulic fracturing flowback. This includes:

- Chemical testing as needed
- Surface and sub-surface geology
- Size and depth limited to 10 acre-feet
- Protection of drinking water, flood plains and ground water
- Duel liners with leak detection system
- Bermed area to contain any catastrophic failure
- Safety and emergency plans
- Increased and escalated bonding.

The management of hydraulic fracturing flow back is monitored through both surface disposal and UIC Class II wells as directed by the EPA. No other regulation is necessary.

# FEDERAL/STATE INTERACTION

The Division has worked very well with federal agencies when concerned with spacing, flaring and split estate issues. However, there is no collaboration concerning hydraulic fracturing. The Division believes that a state wide standard as defined by The Division's hydraulic fracturing would be beneficial, rather than several regulations as proposed.

#### STATE AND INDUSTRY

State and industry have worked very well together to establish a win-win situation concerning hydraulic fracturing flowback that is injected into the ground for water floods. Facilities, both permanent and temporary have been used to clean flowback water and use it in the water flood of an oil field. This recycled water greatly reduces the amount of fresh water that is used in hydraulic fracturing. In addition, water flow lines have been constructed in order to greatly reduce truck traffic and improve air quality.

#### CONCLUSION

I believe that Utah DOGM does an excellent job in monitoring hydraulic fracturing in Utah. Also, it is my experience that other States also perform at a similar exceptional level.

Mr. LAMBORN. OK, thank you. Ms. Epstein?

# STATEMENT OF LOIS N. EPSTEIN, P.E., ARCTIC PROGRAM DIRECTOR, THE WILDERNESS SOCIETY

Ms. EPSTEIN. Good morning, Chairman Lamborn and other Subcommittee members, and thank you for inviting me to testify. My name is Lois Epstein, and I am an Alaska-licensed engineer representing The Wilderness Society. The Wilderness Society is a national public interest conservation organization with over 500,000 members and supporters.

My background in oil and gas issues include serving on the Department of the Interior's Ocean Energy Safety Advisory Committee, established after the BP Gulf spill in 2010; testifying before Congress on numerous previous occasions; analyzing the environmental performance of Alaska's Cook Inlet and North Slope onshore and offshore oil and gas infrastructure. I have worked for three private consultants and for national and regional conservation organizations in both Washington, D.C. and Anchorage, Alaska.

Today's hearing addresses H.R. 2728. This bill prohibits the Federal Government from regulating hydraulic fracturing operations, including associated operations such as chemical and wastewater storage and disposal on Federal lands, even if States have issued only hydraulic fracturing "guidance," or have developed ineffective regulatory programs.

The bill is indifferent to how well such programs protect surface and groundwater, wildlife habitat, and the public. And it is a fact that surface activities associated with hydraulic fracturing operations have caused water contamination. So statements focusing only on the fracking process itself being benign are misleading. And that is an important distinction.

For example, a State agency could issue a vague guidance on wellbore cementing for fracturing operations and any Bureau of Land Management regulation, no matter how specific on wellbore cementing, would be rendered void under the language of the bill.

Section 2(a) is sufficiently vague, in fact, that BLM might be unable to enforce any Federal regulation with any relationship to oil, gas, or geothermal energy, simply because States have guidances or regulations regarding hydraulic fracturing. States potentially could argue that their oil and gas guidance or regulations supersede any Federal oversight program, thereby allowing fracturing, as we heard by the Ranking Member, in national parks, national wildlife refuges, wilderness areas, where such activities currently are prohibited.

Currently, BLM and tribal lands are subject to a patchwork of State hydraulic fracturing regulations. Some States require best practices, and we have heard from the States represented here that many of those practices are in place in these States, while other States, however, do not require such practices. And that is an important point. According to the FracFocus information Web site, "While nearly all States"—this is a quote—"require the circulation of cement on surface casing, it is not a universal requirement."

Additionally, in some States it is common for State personnel to witness the running of cementing of casing strings, while in other States the submission of a completion report which details the amounts and types of casing and cement used in the completion of the well is considered sufficient evidence of proper well construction.

As an engineer, it does not make technical sense to have non-protective or inadequately enforced requirements in place in particular States. In fact, all States care about their usable groundwater and surface water resources. So a national baseline of technical measures ensuring wellbore integrity, including proper cementing and casing, suitable management of flowback water, and robust chemical disclosure makes sense, such as that developed by BLM.

From a policy perspective, Federal lands which are owned by all Americans should be protected at roughly equivalent levels throughout the country, and not subject to the oversight whims of particular States and their powerful industries.

Moreover, the Federal Government has a congressionally mandated stewardship requirement for these lands, and trust responsibilities for Indian lands, unlike States. Baseline Federal standards, which are applicable across the country, have been a common feature of our Nation's approach to ensuring that all Americans enjoy protection from harm from industrial activities. The Clean Air and Clean Water Acts, for instance, provide minimum Federal standards, while allowing States to impose more stringent or specific requirements. The benefit to this approach, which has remained in place on a bipartisan basis for decades is that it brings needy consistency for companies operating in multiple States.

For States, this approach saves governmental resources, particularly in States without the ability to do their own analyses to establish the regulations. And there are several States that are currently entering oil and gas drilling, and they don't have a lot of expertise at this time.

The regulations proposed by BLM earlier this year for hydraulic fracturing will not undercut State programs. There are strong technical and policy reasons for Federal baseline requirements, especially regarding wellbore integrity and water resource protections. States should not be allowed to undermine Federal requirements because the end result will be contamination problems.

Thank you very much for your attention to these concerns. I look forward to answering your questions.

[The prepared statement of Ms. Epstein follows:]

## Statement of Lois N. Epstein, P.E., Engineer and Arctic Program Director, The Wilderness Society, Anchorage, Alaska

Good morning and thank you for inviting me to testify today. My name is Lois Epstein and I am an Alaska-licensed engineer and the Arctic Program Director for The Wilderness Society. The Wilderness Society, or TWS, is a national public interest conservation organization with more than 500,000 members and supporters. TWS's mission is to protect wilderness and inspire Americans to care for our wild places.

My background in oil and gas issues includes membership from 1995–2007 on the U.S. Department of Transportation's Technical Hazardous Liquid Pipeline Safety Standards Committee which oversees oil pipeline regulatory and other agency activities, serving on the Department of the Interior's Ocean Energy Safety Advisory Committee established after BP's Gulf spill in 2010, testifying before Congress on numerous occasions, and analyzing the environmental performance of Alaska's Cook Inlet and North Slope onshore and offshore oil and gas infrastructure. I have worked on oil and gas environmental and safety issues for more than 25 years for three private consultants and for national and regional conservation organizations in both Washington, DC and Anchorage, AK, and currently am actively engaged in development of hydraulic fracturing requirements in Alaska. I have a bachelor's de-

gree in mechanical engineering from MIT and a master's degree in civil engineering from Stanford University.

#### The Language of the Bill

Today's hearing addresses H.R. 2728, the stated purpose of which is "To recognize States' authority to regulate oil and gas operations and promote American energy security, development, and job creation." Because there is no controversy regarding states' authority to regulate oil and gas operations, we must look to the bill's lan-guage to see what it actually does. The key provisions in the bill are contained in Sec. 2(a), which states that "The Department of the Interior shall not enforce any Federal regulation, guidance, or permit requirement regarding . . . the hydraulic fracturing process, or any component of that process . . ." and Sec. 2(b) which states that "The Department of the Interior shall recognize and defer to State regulations, permitting, and guidance, for all activities . . . on Federal land regardless of whether those rules are duplicative, more or less restrictive, shall have different requirements, or do not meet Federal guidelines." In other words, the bill prohibits the fed-eral government from regulating hydraulic fracturing operations—including associated operations such as chemical and wastewater storage and disposal-on federal lands even if states have issued only hydraulic fracturing "guidance" or have developed ineffective regulatory programs. The bill is indifferent to how well state regu-

latory programs protect surface and groundwater, wildlife habitat, and the public. For example, a state agency could issue a vague guidance on wellbore cementing for fracturing operations such that any Bureau of Land Management (BLM) regulation on wellbore cementing, no matter how specific, might be rendered void. The language in Section 2(a) is sufficiently vague that BLM might be precluded from enforcing any federal regulation with any relationship to oil, gas, or geothermal en-ergy, simply because states have guidelines or regulations regarding hydraulic fracturing. This includes federal regulations issued pursuant to the Mineral Leasing Act, the Federal Lands Policy Management Act (FLPMA),<sup>1</sup> as well as other acts.

The bill's effort to nullify federal law where it conflicts with state law turns on its head the principle behind the Constitution's Supremacy Clause, whereby state law is preempted to the extent it conflicts with federal law.<sup>2</sup>

#### Federal and State Roles Regarding Hydraulic Fracturing

Currently, BLM and tribal lands are subject to a patchwork of state hydraulic fracturing regulations, with some states not having performed much work on this issue. Some states require best practices in some areas, while other states do not. According to the FracFocus website:<sup>3</sup>

While nearly all states require the circulation of cement on surface casing, it is not a universal requirement. In some states, cement is required only across the deepest ground water zone . . .

[Additionally,] [i]n some states it is common for state personnel to witness the running and cementing of casing strings, while in other states the submission of a completion report which details the amounts and types of casing and cement used in the completion of the well is considered sufficient evidence of proper well construction. In a few states such as Alaska, Michigan and Ohio, an additional verification method using geophysical logs such as Cement Bond Logs (CBL) and Variable Density Logs (VDL) may be required. By measuring the travel time of sound waves through the casing and cement to the formation, the CBL shows the quality of bonding be-tween the casing and the cement. The VDL performs a similar function to measure the bond between the cement and the borehole. By measuring the quality of the cement to casing and cement to formation bond, the sealing quality of the cement in the space between the casing and the borehole (called the annulus) can be evaluated.

Clearly, not all states have similarly-protective requirements, nor do they have equivalent resources or enforcement efforts related to oil and gas development. In Pennsylvania, for instance, where flowback water has been legally taken to waste-

<sup>&</sup>lt;sup>1</sup>FLPMA requires BLM to issues rules and regulations to prevent unnecessary or undue degradation of public lands, and to protect ecological, environmental, and water resources for future generations. See 43 U.S.C. §§ 1702(c), 1733, 1740.

<sup>&</sup>lt;sup>2</sup>See, e.g., Florida Lime & Avocado Growers, Inc. v. Paul, 373 U.S. 132, 142–143 (1963), Guarino v. Wyeth, LLC, No. 12–13263, 2013 WL 3185084 (June 25, 2013). <sup>3</sup>See http://fracfocus.org/hydraulic-fracturing-how-it-works/casing.

water treatment plants, several rivers were contaminated with chemicals that could create carcinogens in drinking water. According to the Scranton Times-Tribune:4

Citing concerns about high levels of bromides in western Pennsylvania rivers, acting Department of Environmental Protection Secretary Michael Krancer gave the drillers until May 19 to stop taking the waste to treat-ment facilities that were grandfathered into state rules that curb how much salt can be discharged into streams.

The request-which does not have the legal weight of an order-comes after federal environmental regulators, scientists and drinking water suppliers raised concerns about the drilling wastewater, which is laden with salts, metals and naturally occurring radioactive material that cannot be com-pletely removed by conventional treatment plants.

The request came on the same day that the Marcellus Shale Coalition, an industry group, acknowledged that drilling wastewater is contributing to elevated bromide levels in the Allegheny and Beaver rivers.

Reducing the amount of salts, or total dissolved solids, in the wastewater also reduces bromides, which are nontoxic but can turn into cancer-causing compounds called brominated trihalomethanes when combined with chlorine at drinking water treatment facilities.

"Now is the time to take action to end this practice," Mr. Krancer said, citing "more definitive scientific data, improved technology and increased vol-untary wastewater recycling by industry" since the facilities were given special exemptions to the state total dissolved solids standards when they were implemented last year.

As an engineer, it does not make technical sense to have non-protective requirements in place in certain states. In fact, all states care about their usable groundwater and surface water resources, so a national baseline of technical measures ensuring wellbore integrity including proper cementing and casing,<sup>5</sup> suitable management of flowback water, and robust chemical disclosure makes sense from an engineering perspective.

From a policy perspective, federal lands—which are owned by all Americans should be protected at roughly equivalent levels throughout the country, and not subject to the regulatory or enforcement whims of particular states. Moreover, the Fderal government has Congressionally-mandated stewardship requirements under FLPMA and trust responsibilities for Indian lands,<sup>6</sup> unlike states. BLM must ensure that:

public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use.

FLPMA also directs BLM to manage the public lands so as to prevent unnecessary or undue degradation, and to protect the ecological, environmental, and water resources for future generations.8

It is essential that the federal government ensure adequate regulations are in place for industrial activities occurring on the lands it manages while providing states with the ability to exceed those requirements or to address atypical condi-tions. This regulatory model—where baseline federal standards are applicable across the country—has been a common feature of our nation's approach to ensuring that all Americans enjoy protection from harm from industrial activities. The Clean Air and Clean Water Acts, for instance, are structured to provide minimum federal

<sup>&</sup>lt;sup>4</sup>See http://thetimes-tribune.com/news/gas-drilling/state-calls-for-halt-to-shale-wastewater-treatment-at-15-plants-1.1135095 (April 20, 2011). <sup>5</sup>Notably, the Western Energy Alliance (WEA) report on the Economic Impact of Revised BLM Completion Rule issued on May 24. 2013, (see the report at http://westernenergyalliance.org/wp-content/uploads/2013/07/Final-Economic-Analysis-of-the-BLM-Fracing-Rule-Revision.pdf, July 19, 2013) shows that 90% of the compliance cost of BLM's proposed rule on hydraulic fracturing is from enhanced casing, an essential component of well integrity. The WEA acknowledges that operators have an obligation to protect actual drinking water sources (feature 14 in the study operators have an obligation to protect actual drinking water sources (footnote 14 in the study, which does not mention an obligation to protect potential drinking water sources). If that is the case, there will be some cost to doing so effectively and that cost will be debatable as it is difficult to predict on a nationwide basis.

ficun w r <sup>6</sup>*E.g.*, Indian .... § 3504(e)(6). <sup>7</sup> 43 U.S.C. 1701(a)(8). <sup>8</sup> 43 U.S.C. §§ 1702(c), 1740. Indian Mineral Leasing Act, 25 U.S.C. §2103(b); Indian Energy Act, 25 U.S.C.

standards, while allowing states to impose more stringent or specific requirements. A benefit to this approach, which has remained in place on a bi-partisan basis for decades, is that it brings needed consistency for companies operating in multiple states. For states, this approach saves governmental resources because each state can rely on the federal government with its greater capacity to develop an adequate set of minimum regulatory requirements.

# **Deferring to State or Tribal Requirements**

BLM currently is developing regulations to set a baseline for hydraulic fracturing operations on the lands it manages. Earlier this year, BLM issued a revised draft version of these regulations for public comments.<sup>9</sup> The proposed regulations would allow BLM to issue a variance for all wells within states or within Indian lands, or to specific fields or basins within states or Indian lands (proposed section 3162.3–3(k)). BLM specifically requested comments on whether compliance with proposed chemical disclosure requirements (section 3162.3–3(i)(1)) should be satisfied by compliance with state or tribal requirements for the same or more information about the chemical constituents of hydraulic fracturing fluids.

TWS supports allowing federal compliance to be achieved where state or tribal disclosure requirements meet or exceed the federal standard and where states or tribes have adequate systems for conveying information about hydraulic fracturing activities to the public (though such an approach is unwieldy and a single database is preferable).

### Conclusion

In its proposal to address several important issues that have arisen around hydraulic fracturing on federal public lands, BLM is attempting to fulfill its legal responsibilities to ensure a baseline level of regulatory protection and consistency for the American public. The regulations proposed by BLM earlier this year for hydraulic fracturing will not undercut state regulatory initiatives in this area. BLM's proposed hydraulic fracturing requirements operate like Clean Air and Clean Water Act requirements, allowing states to exceed federal requirements to meet state-specific technical needs or public desires for increased protection. On federal lands, there are strong technical and policy reasons for federal baseline requirements—especially regarding wellbore integrity and water resource protections—to ensure equitable standards throughout the country. States should not be allowed to undermine federal requirements because the end result will be contamination problems that will adversely affect regions and the industry as a whole.

Thank you very much for your attention to these concerns. I look forward to answering your questions.

# Response to Questions Submitted for the Record by Lois N. Epstein, P.E., Arctic Program Director for The Wilderness Society

### **Questions from Rep. Holt**

### 1.) Ms. Epstein, can you summarize how hydraulic fracturing operations not just the fracking process itself—can contaminate water resources?

Hydraulic fracturing, a well treatment process used to enhance oil and gas production, has been used in a number of places in the U.S. with underground shale formations. Use of hydraulic fracturing increased tremendously in recent years following refinement of these well stimulation techniques and federal deregulation of hydraulic fracturing in the Energy Policy Act of 2005. Shale formations generally are located in different areas than "conventional" oil and gas reservoirs.

The process of fracturing is not the only activity associated with these wells, however. In order to fracture, operators also must store chemicals, and manage wastewater (i.e., storage, reinjection, discharge, and/or transport operations) and oil and gas drilling wastes. These activities—if not done well—can contaminate water resources near drilling sites.

Fracturing, itself, hypothetically can contaminate groundwater resources though the data on that has not been robust so far and research is continuing. This situation can occur with inadequate well integrity close to groundwater resources, if fractures extend beyond projected locations due to inadequate modeling and/or poor implementation of well stimulation, if fractures intersect faults or fractures from other wells, or if inadequate well closure/abandonment occurs.

<sup>&</sup>lt;sup>9</sup>78 Federal Register 31636–31676 (May 24, 2013), http://www.gpo.gov/fdsys/pkg/FR-2013-05-24/pdf/2013-12154.pdf.

Additionally, wastewater discharges to surface water of bromide generated at hydraulic fracturing sites at legal, permitted levels have combined with chlorine at downstream drinking water treatment plants to form trihalomethanes, which are carcinogens.

2.) Ms. Epstein, we talk a lot about "certainty" in this committee. The Majority has consistently argued that extractive industries need more certainty from this administration. Yet, the Majority also insists—as evidenced by this bill-that we need a state by state approach to regulating hydraulic fracturing. How does that provide certainty to industrv?

Developing and enforcing clear federal rules that apply when operating on Bureau of Land Management (BLM) lands would provide certainty and consistency to industry on federal expectations for hydraulic fracturing and the associated operations described in the answer to Question 1. Because H.R. 2728 allows a variety of stilldeveloping state rules and guidance—no matter how inadequate—to preempt fed-eral rules covering fracturing, operators would not have certainty and consistency for their fracturing operations when operating on BLM lands in multiple states.

3.) Ms. Epstein, as you testify, this bill purports to reverse traditional notions of authority over federal land by giving states complete control over hydraulic fracturing, drilling and gas operations. Are there any safeguards against abuse of power by the states? Do the states have comparable authority in other laws which allow them to fully dictate the use of federal lands?

There are no safeguards in the bill to prevent abuse of power by the states. H.R. 2728 Section 44(b) is vague regarding which state laws would require federal deference. Presumably the bill does not intend to override EPA's authority under the Clean Water Act. But what if a state's laws or guidance conflict with the Bureau of Land Management's mandate under the Federal Land Policy Management Act (FLPMA) to manage public lands under the principles of multiple and sustained use?<sup>1</sup> Would state "guidance"—a term included in Sec. 44(b)—trump FLPMA? This is a concern, as states are not legally required to meet the stewardship standards in place for federal lands.<sup>2</sup> Nor do states share in the federal government's trust responsibilities for Indian lands.<sup>3</sup>

The Wilderness Society's (TWS's) review of U.S. laws has not revealed a comparable federal law allowing states to fully dictate the use of federal lands. The Clean Water Act  $(CWA)^4$  and the Clean Air Act  $(CAA)^5$  are carefully designed to allow states to serve as partners in implementing federal baseline standards, while enabling states to implement more stringent state-specific standards if desired.<sup>6</sup> States may tailor federal standards (e.g., water quality criteria under the CWA), es-tablish compliance strategies (e.g., state implementation plans under the CAA), im-plement permit programs (e.g., state pollutant discharge elimination systems under the CWA), and enforce rules (e.g., state administrative and judicial procedures). A similar cooperative approach could be applied to hydraulic fracturing through BLM's proposed rulemaking.

4.) Ms. Epstein, the Majority has forgotten that we are talking about the federal mineral estate. Should we grant state police departments the authority to control military operations on federal bases within state lines? Is there any precedent for granting states full authority over drilling and gas operations on all public lands?

As a nation, we have collectively decided that issues of national importance with trans-state implications should not be regulated solely by states. This is the principle behind the Commerce Clause of the U.S. Constitution, which allows Congress to regulate interstate commerce and navigable waters. Additionally, we also have given federal agencies the authority to oversee the lands and resources belonging

<sup>&</sup>lt;sup>1</sup>43 U.S.C. § 1732. <sup>2</sup> FLPMA directs BLM to manage the public lands so as to prevent unnecessary or undue degradation, and protect the ecological, environmental, and water resources for future generations. 43 U.S.C. §§ 1702(c), 1740.

 <sup>43</sup> U.S.C. §§ 1702(c), 1740.
 <sup>3</sup>E.g., Indian Mineral Leasing Act, 25 U.S.C. §2103(b); Indian Energy Act, 25 U.S.C. §3504(e)(6).
 <sup>4</sup>42 U.S.C. 7401, et seq.
 <sup>5</sup>33 U.S.C. 1251, et seq.
 <sup>6</sup>See 33 U.S.C. §1370; 42 U.S.C. §7416.
 <sup>7</sup>PLM. Oil and Case Hydraulis Execturing on Fodoral and Indian Lands. 78 Fod. Reg. 31636

<sup>&</sup>lt;sup>7</sup>BLM, Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands, 78 Fed. Reg. 31636 (May 24, 2013).

to the citizens of our nation for the benefit of all Americans through various laws governing the management of federal public lands, forests, and waters.

While many aspects of oil and gas operations are regulated by states,8 the federal government retains influence through overarching laws such as the CWA, the CAA, the Oil Pollution Act,<sup>9</sup> the Natural Gas Act,<sup>10</sup> and the Energy Policy Act.<sup>11</sup> With respect to federal lands, the federal government is explicitly required by statute to manage the oil and gas resources owned by all Americans under the auspices of the Mineral Leasing Act, FLPMA, as well as other relevant statutes. Federal land managers such as the BLM are subject to federal laws governing how they manage public lands. These laws have provided the basis for regulations, guidance and orders on oil and gas leasing, exploration, and production. BLM has acted on its responsibility to manage lands by developing a proposed rule that provides minimal stand-ards for hydraulic fracturing on BLM lands. The proposed rule gives states the option to substitute their own regulations if the regulations provide equivalent or greater protection.<sup>12</sup>

5.) Ms. Epstein, an oft-repeated concern of the Majority is that proposed regulation by the federal government doesn't take into account that geology and hydrology may differ between states. In testimony before this Committee last week, Secretary Jewell clearly responded to this concern by stating that the three main topics addressed in the BLM regulations-1) chemical disclosure, 2) well construction standards, and 3) managing flowback—are necessary in any fracking operation and are not dependent on ground characteristics. Would you agree that these three focus areas are applicable to all fracturing operations?

Yes, these three focus areas are applicable to all fracturing operations. In the comments TWS submitted to BLM on September 15, 2013, attached, TWS supports BLM's efforts to develop this rule, though we also stated our disappointment that BLM did not include other requirements essential to ensure adequate fracturing (and other forms of well stimulation such as "acidizing") oversight regardless of geology and hydrologic differences. These needed requirements include pre- and postfracturing water monitoring, pre-fracturing notice of chemical constituents, measures to reduce flaring, the use of enclosed tanks for storing fracturing fluids, proper well abandonment and remediation, and a prohibition on the use of diesel-based and other toxic chemical-based fracturing fluids as water-based alternatives are available.

As an engineer who has worked on oil- and gas-related technical issues for over 25 years, I understand the consequences of inadequate well integrity/well construction, i.e., contamination of water and soil that must be cleaned up. I don't believe anyone on the Committee is in favor of poor well integrity for wells on BLM lands, which is what could result if we rely on existing or future inadequate state regulations or guidance. Many states currently are in a learning phase regarding hydraulic fracturing as they have not had major oil and gas operations there for many years (or perhaps ever), and do not have the technical staff needed to ensure adequate standards.

Regardless of geology and hydrology, chemical disclosure allows the public and emergency responders from any state who spend time near fracturing operations to know what chemicals are in use. As for managing flowback wastewater, this is an essential, technical measure that ensures states will not adversely contaminate surface or groundwater through poor wastewater recycling, treatment and/or disposal practices.

<sup>&</sup>lt;sup>8</sup>For example, in Alaska, the Alaska Oil and Gas Conservation Commission regulates the drilling for and production of oil and gas resources, the principles of oil and gas conservation, and the underground injection for both waste management and enhanced recovery. See Alaska Stat. §31.05.030, §31.05.110. The Alaska Department of Natural Resources is responsible for leasing state lands and prescribing unit plans. See Alaska Stat. §31.05.110, §31.05.180. The Alaska Department of Environmental Conservation oversees pollution-related industrial activities including storage and spill prevention for oil and hazardous substances, air and water discharges, and solid waste management. See Alaska Stat. Title 46.

 <sup>&</sup>lt;sup>9</sup> 33 U.S.C. §40, et seq.
 <sup>10</sup> 15 U.S.C. §717, et seq.
 <sup>11</sup> 42 U.S.C. §13201 et seq

<sup>12</sup> Proposed 43 C.F.R. §3162.3-3(k).

6.) Ms. Epstein, as you point out in your testimony, the Clean Air Act and the Clean Water Act both provide minimal federal standards while allowing states to impose more stringent or specific requirements. Isn't it true that the same principle applies with BLM's proposed hydraulic fracturing rule?

Yes. As stated in TWS's comments submitted to BLM on September 15, 2013: The Clean Air and Clean Water Acts both are structured to provide minimum federal standards. This approach brings needed consistency for companies operating in multiple states. For state governments, this approach saves resources, as each state can rely on the federal government with its greater capacity to provide an adequate regulatory baseline.

Based on experience to date regarding hydraulic fracturing, if the states alone regulate these operations, there will be gaps in those standards (i.e., no state has "model" regulations), and inadequate stringency or delays in implementation in states with powerful hydraulic fracturing interests. (pp. 3-4)

The federal government can help ensure adequate technical and public disclosure requirements until such a time that states meet or exceed those standards.

# 7.) Ms. Epstein, the discrepancies in state standards are why a federal standard is needed. But

BLM's proposed rule is significantly weaker than the draft issued last year. For example:

- 1. In the proposed rule, cement evaluations now don't have to be submitted until after the well is stimulated. Do you think cement evaluations should be submitted prior to the stimulation of a well?
- 2. In the proposed rule, operators don't have to provide BLM with information (depth, volume of fluids, chemicals, water source, size of fracturing) about each well and instead can just use one packet of generic information to be submitted for all "similar wells." Do you think oil and gas companies should be required to submit information on individual wells?
- 3. In the leaked (sic) rule, disclosure of fracking chemicals would not have to be disclosed (sic) until after a well is drilled using FracFocus. Do you think disclosure should be required before fracking, as is required in Wyoming?

### Cement evaluations

TWS believes that cement evaluations should be submitted prior to well stimulation. Doing so would enable BLM to ensure that stimulation would not proceed until mechanical integrity tests prove successful.

### "Type well" testing vs. individual well testing

TWS's comments provide extensive discussion on use of "type wells" vs. providing BLM with testing (cement evaluation logs or CELs and mechanical integrity tests or MITs) results on individual wells. According to proposed 43 C.F.R. section 3162.3–3(h)(i), however, "The information required in paragraphs (i)(1) through (i)(8) of this section must be submitted . . . for each well, even if the BLM approved fracturing of a group of wells." Sections (i)(1) through (i)(8) cover true vertical depth, volume of fluids, and other items listed in Question 7.

volume of fluids, and other items listed in Question 7. Regarding "type wells" vs. individual well testing information, TWS's comments to BLM state:

The proposed regulations in sections 3162.3–3(d) and 3162.3–3(e) would require CELs only on "type wells," wells that are not preceded by approved type wells or are not part of an approved field development proposal, and whenever there is evidence of a problem with cement jobs. The definition provided for "type well" in section 3160.0–5 is "an oil and gas well that can be used as a model for well completion in a field where geologic characteristics are substantially similar within the same field, and where operations such as drilling, cementing, and completions using hydraulic fracturing are likely to be successfully replicated using the same design."

But the proposed rule does not require the operator to certify that it will use similar cement composition, fracturing fluids or drilling practices in subsequent wells. Nor does it require the operator to submit proof that subsequent wells have substantially similar geological characteristics. The use of type wells assumes that geologic zones are compositionally, texturally, and mechanically homogeneous media, even though this is often not true. Faults can remove or add sections of rock over short distances. Folding can result in reoriented or repeated sections of rock. Tilting can result in formations at differing depths with missing sections. Missing sections can also result from the presence of unconformities. Even if the geology is perfectly consistent, operator inconsistencies during drilling could result in unexpected differences in borehole geometry that could affect the cement as it is squeezed into the annulus.

BLM acknowledges some uncertainty about the benefits of the type well con-cept in the preamble to the proposed rule: "there is uncertainty about the effectiveness of the type well concept, and how reliably the CEL results on casing strings of a type well assure adequate cementing for subsequent wells in the same geologic area."<sup>13</sup> We recommend that BLM require cement evaluation logs on all wells where casing serves as a barrier between fracturing operations and usable water (similar to what was proposed in 2012); or to

operations and usable water (similar to what was proposed in 2012); or to ensure the similarity of wells, cementing, fracturing fluids and processes, and homogeneous, non-complex geologic characteristics prior to utilizing "type well" approval procedures.<sup>14</sup> (p. 13) We further suggest that BLM clarify that MITs are required for each and every well—not just for a type well. The Federal Register description of the proposed rule at page 31652 states that it is "necessary to perform a MIT prior to each refracturing operation,"<sup>15</sup> but the rule itself at section 3162.3– 3(f) does not specifically state that a MIT must be performed on each well. MITs are as important for older wells being refractured as for new wells. MITs are as important for older wells being refractured as for new wells. According to oil and gas technology supplier Schlumberger, by the time an oil or gas well is 15 years old there is a 50 percent probability that it will have measurable sustained casing pressure—an indicator of compromised zonal isolation in a well.<sup>16</sup> (p. 14)

# Pre-fracturing disclosure

As discussed in TWS's comments to BLM:

Pre-fracturing public disclosure is important to allow land owners, public land managers, and users of nearby water sources to conduct independent baseline water quality testing to determine if water resources are uncontaminated or if they contain any of the chemicals planned to be injected during hydraulic fracturing. If specific chemical data are not provided until after hydraulic fracturing occurs, a concerned person would not know which chemicals may have been used and therefore which analytical tests should be performed. Without the ability to conduct effective baseline test-ing, it will be difficult if not impossible to establish causal responsibility when chemicals are discovered where they do not belong. Pre-fracturing, baseline water quality testing avoids the defense that "the contamination was there before we arrived." If fracturing chemicals are safe and leaks are unlikely, then there should be little resistance to pre-fracturing disclosure. Prior disclosure is particularly important in areas that will be fractured by multiple operators. For example, in North Dakota's Bakken formation, over 3,000 new wells have been drilled in the past five years with over 80 companies leasing, drilling and hydraulically fracturing in the area.<sup>17</sup> Without prior disclosure, a landowner cannot know which operator will be fracturing a particular well, or if fracturing fluids used by different operators differ. (pp. 5-6)

# 8.) Ms. Epstein, what would be your recommendations for strengthening the Obama administration's proposed fracking rule? What are the main issues that you think should be addressed before the rule is finalized. See the first paragraph in our answer to Question 5.

 <sup>&</sup>lt;sup>13</sup> Proposed Rules, 75 Fed. Reg. 31664 (May 24, 2013).
 <sup>14</sup> See DNV Recommended Practice, p. 33 ("Cement logging represents a core quality control procedure in the construction of shale gas wells. Casing cement that forms part of the well barrier envelope in the fracturing or production operation shall be verified by cement bond logs. . . . It is important to track local changes of the production casing/liner and the interface between the casing wall, cement and formation.")
 <sup>15</sup> See also 78 Fed. Reg. 31654 (explaining that BLM received some comments stating that an MIT is not needed on every well, but that BLM decided not to change this requirement).
 <sup>16</sup> Claudio Bruffato et al, From Mud to Cement: Building Gas Wells, Oilfield Resources (Autumn 2003). 63. available at http://www.slb.com/~/media/Files/resources/oilfield review/ors03/

tumn 2003), 63, available at http://www.slb.com/~/media/Files/resources/oilfield\_review/ors03/aut03/p62\_76.ashx

<sup>&</sup>lt;sup>17</sup>Natural Resources Defense Council and Sierra Club's Response to Questions for the Record from Chairman Wyden Regarding Disclosure Senate Committee on Energy and Natural Re-sources, May 23, 2013 Hearing, p. 4, submitted June 5, 2013, available at http:// www.eenews.net/assets/2013/06/07/document\_ew\_01.pdf.

Mr. LAMBORN. OK, thank you. We will now do our question portion of the hearing. And we do have votes coming up around 10:45, so we are going to try to conclude at that time. But we will get in as many questions as we can between now and then. And they may go a little bit longer. We will find out.

Commissioner Foerster, does the hydraulic fracturing section of the STRONGER guidelines that you referred to provide comprehensive guidelines for all issues relating to hydraulic fracturing?

Ms. FOERSTER. Chairman Lamborn, yes, it does. I know you are in a hurry, but let me quickly go to Section IX and read you some of the things.

Mr. LAMBORN. Is your microphone on?

Ms. FOERSTER. It is. I am just bad at using it. Yes. Yes, it does. Let me just read you-go to Section IX, "Standards for Casing and Cementing; Standards for Water Handling; Standards for Fluid Disposal; Wastewater Treatment; Reuse and Recapture; Well Water Sampling.'

Mr. LAMBORN. OK, thank you.

Ms. FOERSTER. Yes. Mr. LAMBORN. Would you be able to leave us a copy of that?

Ms. FOERSTER. I will leave you a copy of this.

Mr. LAMBORN. Now, what is your response when Secretary Jewell says that we need national minimum standards?

Ms. FOERSTER. Again, Chairman Lamborn, sure, we need them, but we have already got them. The IOGCC, the STRONGER, API provide those standards. And the States can use them and do use them. And any new State that needs a standard has got it. It is right here.

Mr. LAMBORN. What has been the record of BLM in regulating energy development in Alaska?

Ms. FOERSTER. In one word, abysmal. But the BLM operates over 100 wells in Alaska that have been in violation of Alaska regulations, especially those on safety and environmental, for a long time. And their answer is, "Federal law trumps State law; you can't make us clean them up." Some of the wells are currently leaking hydro-carbon gas, and they are not doing anything about it. Some have leaked oil. Some of the sites are drowning hazards for children and small animals. Some of the sites are just a mess, littered with glass, plastic, metal, wood debris, piles of dried-up drilling mud of various concentrations and compositions. I will go back to the word "abysmal."

Mr. LAMBORN. And with that record, they want to tell all 50 States how to run their business?

Ms. FOERSTER. Yes, they do. And another thing that they do, they recently, after the Macondo disaster, came to Alaska and drilled some coal bed methane wells, and they failed to use blowout prevention equipment. And then, when we tried to investigate that, they tried to hide it from us, after we had told them that they had to use it.

Mr. LAMBORN. That is amazing.

Ms. FOERSTER. It is not amazing-

Mr. LAMBORN. That is amazing.

Ms. FOERSTER [continuing]. It is disgusting. [Laughter.]

Mr. LAMBORN. Yes. Commissioner Craddick, in your testimony, you say because of the success of Texas in regulating energy, dignitaries from countries around the world, including Brazil, South Africa, Canada, and Mexico have visited Texas to learn about how you do things. Has the BLM or other Federal Government agencies come to you to likewise seek advice on how Texas is successful in regulating energy?

Ms. CRADDICK. No, unfortunately. And actually they won't participate in our hearings when we have things. So we would be glad to visit with them at any time, but we feel like we have had a long history. People do come and ask us questions, and we now have, I believe, using API and STRONGER standards, one of the best casing rules now in the country that we have just done. So we would be glad to explain to them how we have done it.

Mr. LAMBORN. Well, here is another amazing thing. They are not even willing to take advice from the States and admit they can learn something.

Mr. Rogers, in your testimony you point out that in 2012 almost 9,000 onsite inspections were performed by DOGM field staff. In the course of these inspections, has your staff found any problems or issues with these wells that led you to believe further regulation at the Federal level is necessary?

Mr. ROGERS. Well, concerning hydraulic fracturing, there has been no incidents. There are obviously other issues that we may find, violations, but nothing that could be enforced by a Federal— I think we do a fine job on the local level.

Mr. LAMBORN. OK, thank you. Now, if someone raises a scare tactic and says, "Oh, someone is going to set up an oil well next to Old Faithful Geyser," or something like that, what is the actual state of affairs when it comes to Federal iconic national parks and things like that?

Mr. ROGERS. Well, that would be fairly straightforward. To put a well beside Old Faithful, you would have to have a lease from that property to drill there, and I doubt any national park or Federal agency would lease that land to drill. So there would never be an opportunity to frack near anything of that sort.

Mr. LAMBORN. And you are aware that—because in Utah there are five national parks and a number of national monuments.

Mr. ROGERS. Yes. There would be no drilling there. As you know, in the past we have had leases pulled just because they are nearby a park or a wilderness area. So to drill right actually on a park would be—it just wouldn't happen.

Mr. LAMBORN. Thank you for setting the record straight. I would now like to recognize the Ranking Member for 5 minutes.

Mr. CARTWRIGHT. Thank you, Mr. Chairman. And I want to move quickly, I want to get to each of you. I will start with you, Ms. Epstein. From your testimony, it seems that you are implying that under this bill, if any State has regulations pertaining to hydraulic fracturing operations, that oil and gas operations could occur on lands where such activities are currently prohibited. Is that what you are saying?

Ms. EPSTEIN. I am not a lawyer, but several attorneys have looked at this and said that the language is sufficiently broad and vague that perhaps it could be interpreted that if a State has a rule on hydraulic fracturing, that would trump any sort of Federal ability to oversee oil and gas-

Mr. CARTWRIGHT. So, for example-

Ms. EPSTEIN [continuing]. Operations on Federal lands.

Mr. CARTWRIGHT [continuing]. If a State law would trump Federal prohibitions on development in national parks, is it possible that Arizona could authorize drilling and hydraulic fracturing in the Grand Canyon?

Ms. EPSTEIN. I don't know that. Arizona could do that. We just heard a discussion about leasing in the Grand Canyon. If, perhaps, there is a portion of a park that Congress felt ought to be leased, it is possible. This is a theoretical possibility, given the language that we have right now.

Mr. CARTWRIGHT. OK. Ms. Foerster, you state in your testimony that Secretary Jewell may have misled this Committee last week when she said there is no national standard for hydraulic fracturing. You then cite voluntary participation in NGO's, such as the Interstate Oil and Gas Compact Commission, which actually have no authority to regulate as a reason for this rebuttal.

In my humble opinion, sharing information and promotion of best management practices, while important, is not a valid substitute for inspection, enforcement, and required construction standards. Does that IOGCC enforce any national standard over Federal lands, as your testimony implies?

Ms. FOERSTER. Ranking Member Cartwright, through the Chair, as a State regulator, I can't think of any one of us who would refuse to take advantage of the best practices and guidelines. And I can't think of a single State who doesn't do it and who isn't al-ready putting forth guidelines. We are all statutorily required— Mr. CARTWRIGHT. But it is voluntary, right?

Ms. FOERSTER. We are all statutorily required by our State constitutions to do this job right, and this is the way we do it.

Mr. CARTWRIGHT. But it is voluntary, right?

Ms. FOERSTER. Well, it is voluntary for every one of us to do the job that it is statutorily required. And we can get fired if we don't.

Mr. CARTWRIGHT. All right. Now, Ms. Craddick, in your testimony you wrote, "Commission records"—the Railroad Commission in Texas records—"do not indicate a single documented water contamination case associated with the process of fracking in Texas.' Did you write that?

Ms. CRADDICK. Yes, sir.

Mr. CARTWRIGHT. And I wanted to follow that up. You talked about Parker County, Texas, and you talk about, oh, a study that was done there by the Texas Railroad Commission that ended up agreeing that there was natural gas in the water wells of neighbors, but they concluded that the causation was an issue.

In other words, they agreed there was natural gas in the water wells. And we all know from Pennsylvania what happens when natural gas gets in water wells. That is what leads to a video of people turning on the tap at home and they can light their tap water on fire. That is what happens, right?

Ms. CRADDICK. Well, I would say, one, we know that in that part of our State we have naturally occurring natural gas in the water table already. And that was there before the-

Mr. CARTWRIGHT. We will get to that. But that is what leads to those videos lighting your tap water on fire when there is natural gas in your well water, right?

Ms. CRADDICK. Well, not in Texas, but potentially in Pennsylvania, I guess.

Mr. CARTWRIGHT. OK. And the only thing that you came to issue with was the causation. Where did that natural gas come from that got in the water wells? Right?

Ms. CRADDICK. The causation was the main part of the case. Yes, sir. And, frankly, if you already have naturally occurring gas, which we all knew, that is a well-known fact in that part of our State, that methane and natural gas exist in the water, so we knew that.

Mr. CARTWRIGHT. I understand that was the conclusion of the Texas Railroad Commission. But what I am asking you is to get to that conclusion, did they use tracer elements? You know they are talking about putting regulations in to have tracer elements in the fracking process. That would just button down the proof about where the natural gas came from that got in people's water wells, wouldn't it?

Ms. CRADDICK. Not necessarily. There are other ways to prove that. And one of the things that we did do in Texas is prove it by the type of natural gas, and where the gas came from, and where the type of gas you get out of a formation is like a tracer in some respects. It is very specific to where you get gas in different formations and-

Mr. CARTWRIGHT. So do you oppose tracer regulations?

Ms. CRADDICK. I think it is a potential tool, but I don't think it should be mandated any place at this time.

Mr. CARTWRIGHT. All right. My time has expired. Mr. LAMBORN. OK, thank you. Representative Flores?

Mr. FLORES. Thank you, Mr. Chairman. Ms. Foerster made a comment a few minutes ago saying my bill may affect leasing activities on Federal lands. I just want to assure everybody that it doesn't.

During his opening testimony, the Ranking Member said that tribal issues had been ignored by my bill. That is a fact. It wasn't intentional. And we are going to work with members of this Committee whenever we have a mark-up on this bill to address that issue. And I think my friend from Oklahoma, Mr. Mullin, has an amendment that he may introduce to fix that. So we will address that.

Let's pull up chart one, if we can. This gives, I think, a good overall view of what happens under a Federal regulatory structure, versus a State structure. So I would like Ms. Craddick, let's start with Commissioner Craddick, let's start with you. What happens if the Federal Government-actually, let's go to the third chart in this deck.

Let's go to this one. This shows how the two different regulatory structures work in terms of permit processing time. Let's assume that the BLM goes where they would ultimately like to go, and that is have one standard for everybody. What would happen to oil and gas operations in the State of Texas if we wind up with this sort of Federal overlay?

Ms. CRADDICK. I think it would basically shut us down because, one, we are doing it quickly and doing it well in Texas. And, like I stated, we do by rulemaking, we don't do by studies, we don't elaborate your permits. And what happens, if you don't follow the rules in Texas, we don't allow you to produce. And so, that is a real incentive, first and foremost, to get our business done. And frankly, we have been doing it well for a long time.

Mr. FLORES. And, Ms. Foerster, I apologize for the statement I said when I started this series. It was actually what Ms. Epstein said about leasing, it wasn't you. I apologize for that.

Ms. Epstein, can you address the same question?

Ms. EPSTEIN. Yes, I can. Actually-

Mr. FLORES. I am sorry, I meant Ms. Foerster.

Ms. EPSTEIN [continuing]. I would like an opportunity, if I could, as well.

Mr. FLORES. For some reason I am getting my right and left confused today. So, Ms. Foerster, can you address that?

Ms. FOERSTER. Well, I think Ms. Craddick pretty much summed it up, but—

Mr. FLORES. OK. Well, let's look at it this way. Under this you said it would shut us down. And so, presumably we would have a decrease in natural gas production. What would that do to greenhouse gas emissions in the country? Ms. Foerster, we will start with you.

Ms. FOERSTER. Oh. Natural gas production is—even if you are strongly opposed to fossil fuels—natural gas is the bridging fuel to green technology and green fuel. And we don't have a green technology that is affordable right now and that can replace oil and natural gas.

So, holy smokes, we need natural gas, because it is not a big greenhouse producer. If we don't have natural gas, we are going to use coal. And I apologize to the coal people in the audience. But, relatively, the greenhouse effect is much——

Mr. FLORES. Understand.

Ms. FOERSTER [continuing]. Less with natural gas.

Mr. FLORES. Mr. Rogers, what would happen to the tax base in Utah? And I realize most of your tax base belongs to the Federal Government. But what would happen to the tax base in Utah if you had this type of a Federal overlay on top of what is a working State regulatory system?

Mr. ROGERS. The impression I get from industry is that people would tend to move out, because of the issue of trying to get a Federal permit. Right now we are seeing similar trends, where the people are moving away from Federal into State lands.

But the problem is we have large tracts of lands with tribal, private, and State. And the industry is not going to just simply produce State and fee, they want the whole block. And so, having that overlay of induced regulation for the Federal Government, they tend to move elsewhere. So it would reduce the tax base. And so it would be—

Mr. FLORES. Ms. Craddick, what would happen to the tax base for K-12 education in Texas under a Federal processing overlay, FederalMs. CRADDICK. Well, right now we have \$12 billion worth of taxes that the oil and gas industry pays. It is 25 percent of our economy. And when I say \$12 billion in taxes, that is severance taxes, property taxes, sales taxes, our entire tax base. So you would see a large reduction in our tax base, and you would see our taxes increase, quite frankly, in the State. And I think you would probably see companies move out. And there are always other opportunities to go elsewhere in the world. We have finite resources, but people are willing to invest other places.

Mr. FLORES. Ms. Epstein implied in her comments that each of you are beholden to the oil and gas industry in your States. Can each of you, in the next few seconds, tell me for whom you work in your States? Ms. Foerster?

Ms. FOERSTER. Mr. Flores through the Chair, I work for the people of Alaska.

Mr. FLORES. OK. Commissioner Craddick?

Ms. CRADDICK. The people of Texas.

Mr. FLORES. Mr. Rogers?

Mr. ROGERS. The people of Utah, the State of Utah. Mr. FLORES. Thank you. I yield back.

Mr. LAMBORN. I would like to now recognize Representative Lowenthal.

Dr. LOWENTHAL. Thank you, Mr. Chair, and thank you to our witnesses for being here today.

Well, I was very unhappy to see this bill introduced and this hearing called. To be clear, I strongly oppose this legislation. Instead, I think we should all want, and I know my constituents want, a minimum level of public health and safety for setting basic standards that all oil and gas operators should comply with.

Now, again, I did not think that hydraulic fracturing is inherently a bad thing. And natural gas has the potential, as been pointed out, to be a low-carbon bridge fuel. But we have to do it right.

Instead, this bill says that we shouldn't even try to put a minimum floor for protecting human health and safety. The bill says we should scrap any uniform public health and safety assurances on Federal and Indian lands for hydraulic fracturing all together.

And let me remind all the witnesses. We are talking here about Federal Government setting public health and safety standards on Federal lands that are owned and governed by Federal law for the benefit and protection of all Americans. As much as many of the witnesses' testimony seemed to forget, these are not State lands.

But let me touch on one issue that I am concerned about in the existing draft BLM fracking rule, and that is the long-term integrity and the public accessibility of the fracking fluid data in FracFocus.

I notice in both your written testimony and your oral testimony today, Ms. Foerster, that you don't share my same concerns. In fact, you think they are unwarranted.

Let me quote your prepared testimony. As you quote, "I would like to clear up one more misperception from the hearing. Representative Lowenthal suggested that FracFocus is privately run and may not be maintained. Although funded by the DOE and industry, it is maintained by another State-funded NGO, the Groundwater Protection Council, in association with the Interstate Oil and Gas Compact Commission. Thus, the concerns about it being around in the future—the concern is unwarranted."

Ms. Foerster, how can you be so certain that FracFocus will exist in perpetuity? First, let me tell you that I have seen in my many years in public service prior to this, being both a city council member and a State legislator, that many NGO's come and go. And you know what? Their Web site and their data go with them.

I have also seen State funding come and go. And their funding for NGO's come and go. So the fact that FracFocus is partly funded by the State also does not allay my concerns. So, I am wondering. Because we have been trying to get the an-

So, I am wondering. Because we have been trying to get the answer to this and maybe you know something special that the BLM has not told us, Ms. Foerster, how can you be so certain that FracFocus will exist in perpetuity?

Ms. FOERSTER. Representative Lowenthal through the Chair, first, State funding does come and go, but so does Federal funding. And the IOGCC has been around for 80 years, and as long as States like Alaska, Texas, and Utah strongly support it, it will continue to be around. And it funds and supports.

Dr. LOWENTHAL. Ms. Epstein, do you think this is a problem?

Ms. EPSTEIN. I think it is an issue worth raising. We would certainly rather see a national data base. There are a number of reasons in addition to its perpetuity that a national data base would be preferable, because there would be more ability to be responsive to the public. FracFocus has a lot of issues that haven't been well addressed, and the public—

Dr. LOWENTHAL. Yes, we will get back to that in just a sec. Any other witnesses? Do you have anything? Yes.

Ms. CRADDICK. Well, I think one of the things that we have done in Texas is say, in our statute, that if anything happens to FracFocus you still have to continue reporting to the Railroad Commission, and that information continues going to us. So there is perpetuity—

Dr. LOWENTHAL. No, you just-

Ms. CRADDICK [continuing]. In our agency.

Dr. LOWENTHAL. You just mentioned "if anything happens," so you realize it could happen.

Ms. CRADDICK. I don't think that it will. But if anything happens—

Dr. LOWENTHAL. Thank you.

Ms. CRADDICK [continuing]. We have put a backstop in our statute.

Dr. LOWENTHAL. Thank you. And Ms. Foerster, do you agree with the BLM in the issue that was just raised by Ms. Epstein and the DOE and previous expert witnesses before this Committee that the data tools in FracFocus are insufficient for proper data analysis?

Ms. FOERSTER. Representative Lowenthal through the Chair, FracFocus was created to provide a resource that an individual concerned entity could go to and find out the specific details—

Dr. LOWENTHAL. Do you agree that the data—

Ms. FOERSTER [continuing]. And FracFocus was not developed to allow Harvard to do sorting and collating of data. Harvard has a lot of really smart IT people——

Dr. LOWENTHAL. Where else can one go for that data?

Ms. FOERSTER. I beg your pardon?

Dr. LOWENTHAL. Where else can one go?

Ms. FOERSTER. You can-

Dr. LOWENTHAL. Without a national data base.

Ms. FOERSTER. Oh. As far as a national data base? FracFocus is that national data base.

Dr. LOWENTHAL. And it is insufficient?

Ms. FOERSTER. It is not sufficient for the purposes that—

Dr. LOWENTHAL. Thank you.

Ms. FOERSTER [continuing]. Harvard wants to use it for, but it is for the individuals—

Dr. LOWENTHAL. I yield my time.

Mr. LAMBORN. Thank you. Representative Mullin?

Mr. MULLIN. Thank you, and thank you for my time. And, Chairman Lamborn, if you would just give me just a second, I know I am here to talk about sovereignty issues, but I have just got to say this. From a guy that is from Oklahoma, I have been in the plumbing industry my entire life. To hear my colleagues from the opposite side bring up this scare tactic about lighting tap water on fire, what a load of crap. I am just going to say it as plain as that. And it is shameful that they use such scare tactics.

It is funny how people comment on things that they don't have, no offense, but a clue. And so I am just, I know that is stepping away, but, Chairman, sorry, I had to get that off my chest. I feel better now. So, anyway, my staff is probably just really upset at me right now.

[Laughter.]

Mr. MULLIN. I may not be invited back to this Committee. All right.

Anyway, Chairman Lamborn, thank you for letting me join the Subcommittee today. I applaud Representative Flores for his work on this legislation. In Oklahoma, we know a thing or two about fracking technology. We have been safely and effectively fracking since 1949. In fact, we have 193,000 current active wells in our State.

As a member of the Cherokee Nation and someone who advocates for our Tribes, I do have some concerns with this bill in its current form. In this bill, as written, Indian land is not addressed. This Administration will continue to wrongly treat Indian land like public land. When it comes to Federal Indian policy, when we use the term "Indian land," what we mean is land held in trust for our Tribes. To put it in simpler terms, Indians own this land. The public does not.

In this proposed hydraulic fracking rule, however, the Administration treats Indian lands as though they are held for the benefit of the public, as well as Indian beneficiaries. This is contrary to the law. Unless Congress steps in, these actions by this Administration will proceed to harm Indian Tribes. Treating tribal land as public land is insulting, and a clear violation of the agreement between our sovereign nations.

It is my hope that, as this bill continues to work its way through the Committee process, that my colleagues will work together to tighten up this proposal so we can assure the sovereignty of our nations is respected. Mr. Chairman, I yield back. Mr. LAMBORN. OK, thank you. And I can say, with Representative Flores, as one of the two sponsors of the bill, that we will work to address the important issue of tribal lands. I thought we had already done so sufficiently, but we are happy to go the next step to make sure that gets done.

Mr. MULLIN. Thank you.

Mr. LAMBORN. OK. I would now like to recognize Representative Cramer.

Mr. CRAMER. Thank you, Mr. Chairman, Ranking Member Cartwright, and to the witnesses, for being here. I represent the congressional district of North Dakota. And one of the things I want to get into is this whole issue of a one-size-fits-all national standard that we are talking about. And the closest thing to a country at the witness table would be Texas, of course.

And I say that because Texas is a big place. And I would ask you, Commissioner, in Texas, do you have a statewide water standard, or do you treat West Texas differently than East Texas, in other words, do you have different hydrological sort of understanding and methods and standards, depending on where in Texas you are doing your work?

Ms. CRADDICK. Well, right now, I think our best example is we do have a statewide casing rule that we have just passed. However, we have 10 field offices in the State, and there is lots of exemptions, because, you are correct, if you are in East Texas, you have a lot of water over there. If you are in West Texas, we have about 11 to 14 shale plays over there, and there is a lot less water. In fact, we are in a drought in West Texas. South Texas is very different, as well.

So, we do have allowances. We try to have a standard. However, it is very difficult to have that across the board in a State as big as we are. So I can't imagine how you do it in a country as large as we are.

Mr. CRAMER. Well, I think one of the great illustrations, and thank you for this, but I think this Committee, the make-up of this Committee, and certainly the make-up of this panel, is Exhibit A, as to why we don't need a minimum standard.

And I am sorry that my friend from California had to leave, because I think his point is an interesting point. He said something to the effect that "my constituents want this minimum standard." And I don't doubt that they do. And, in fact, they have one. It is called the California standard. And for that they have high unemployment, they have a shrinking economy, they have 50 percent dependance on foreign oil, 25 percent on oil from Saudi Arabia and Iraq, or Iran. They have to ship it on big ships, and it has a greater carbon footprint than if they piped it from North Dakota or Texas.

So, they have their standard. Good for them. Good for them. But quite frankly, as I have said before, Mr. Chairman, I am not really sure why we would want to have the Federal Government impose its mediocrity on the excellence of our States.

[Laughter.]

Mr. CRAMER. I mean in North Dakota we meet all ambient air quality standards. We have some of the cleanest water in the country. We have some of the richest top soil in the world that we use to feed hungry people. And, frankly, the sustainability of that land is far, far more important to the people that have been there for a couple of hundred years, and whose kin will be there for a couple hundred more.

One other issue I want to explore just a little bit with regard to EPA, I have noticed that there was reference to, I think Ms. Epstein referenced to one of the questions something to the effect, she said, "Perhaps it could be interpreted." Perhaps it could be interpreted. In other words, the standard is the possibility of things. As scientists, as engineers, do we set regulations based on what is possible? Or do we do it as the EPA is doing in their hydraulic fracturing investigation, use what is possible as the standard to determine what we should not allow?

That is a very different standard. Those are very different standards. And I think, frankly, if we use what is possible as a standard, as opposed to say what is likely, or at least test the likelihood of it, we could stop pretty much everything from happening. Because anything is perhaps possible.

Could somebody speak to that standard of possible, versus likely, as a minimum standard? Perhaps, Ms. Foerster, you could begin. Ms. FOERSTER. Well, as an engineer on the panel, I guess we put

Ms. FOERSTER. Well, as an engineer on the panel, I guess we put all of our regulations into place, not just in the oil and gas industry. We do everything we do based on something that has happened, or that science says could happen.

When man hit the planet, we didn't have regulations. When this country came into place, we didn't have regulations. We have slowly built up a number of regulations based on science, based on facts, based on things that happen. And that is what we have. If we put regulations in for things that might happen or that we are worried could happen, I wouldn't have flown a plane here today. Mr. CRAMER. Yes, that is a good point. Well, my time is expiring,

Mr. CRAMER. Yes, that is a good point. Well, my time is expiring, so I will just wrap up by saying, yes, you are right, and we have been trying to add to the 10 Commandments and the Constitution pretty regularly the last couple of hundred years, and I don't think we have improved things much.

So, with that, my time has expired, Mr. Chairman.

Mr. LAMBORN. OK, thank you. We will have 5 more minutes by Representative Benishek, and then we will wrap up this hearing so we can go vote

Dr. BENISHEK. Thank you, Mr. Chairman and Ranking Member Cartwright. I appreciate the time. And thank you all for coming to Washington to testify.

I have a question for Mr. Rogers. I have a great deal of tribal land in my district, and I know Utah has a lot of tribal land. And many Tribes would like to develop their land for oil and gas production, and yet they are subject to Federal regulations.

In your interaction with any of the Tribes, what are their feelings versus the Federal versus the State regulatory schemes?

Mr. ROGERS. Right now, any kind of permitting done on a tribal property is done through the BLM. And I know that the Tribe has felt frustration of the length of the process, and how it is not moving along fast enough. They see other lands being permitted and drilled, and they are seeing they are sort of left behind. And so they are hoping to change that. It is a process that, we met with them and tried to help them and talk them through how we could help them. But right now, they feel frustration with the BLM process here right now.

Dr. BENISHEK. I understand their dealings with the Federal Government are very frustrating. But do they feel if the State had control of the regulatory process they would be in a better position to develop their land?

Mr. ROGERS. I can't speak for the Tribe. But certain members of the Tribe and people I met with there feel that the process that we have and the faster turnaround time would certainly benefit them, compared to what they have right now. And so they have alluded that they would like to learn from us and do things similar to the way we are doing it, rather than the way the Federal Government is doing it.

Dr. BENISHEK. Thanks. I want to follow up a little bit on Mr. Cramer's thought, too. You know, Michigan, we have the Antrim Shale, which is a large natural gas formation in my district, and natural gas production is a huge employer in my district. And he mentioned the differences in formations around, even the State of Texas. But the State of Alaska has different concerns, as well.

And Ms. Craddick, what is your opinion on this one-size-fits-all regulatory plan for the State of Alaska? I mean your formations are different than Texas. Explain to me a little bit further why you don't feel a blanket plan is the answer.

Ms. FOERSTER. Which one of us were you asking?

Ms. CRADDICK. I am from Texas; do you want from the Alaska or Texas—

Dr. BENISHEK. Oh, oh, I want the gal from Alaska, sorry.

Ms. CRADDICK. We will give you both, but—

Dr. BENISHEK. Sorry.

Ms. FOERSTER. Alaska?

Dr. BENISHEK. Yes.

Ms. FOERSTER. Well, Alaska has, as does every single State that you talk to, we have things that make us different and special.

One, we are probably the only State that deals with permafrost, the first thousand feet or so of our land up on the northern part of the State is frozen. So there are no fresh ground waters, and there are engineering and geologic issues that you have to address in how you drill and produce the wells that deal with permafrost. Nobody else has that. A Federal standard wouldn't address that.

We have some of the things that other States might be concerned about, I know there is truck travel with the increased activity. That is the least of our worries, because most of our State doesn't even have roads. So, for us, it is tundra travel, and it can only be done during the winter on ice.

So, we are just rife with unique issues that we have to address that aren't part of a national standard, and wouldn't be appropriate in a national standard. But they are really important to us. And we know about them, and we deal with them every day, and that is why we are the best ones to regulate them.

Dr. BENISHEK. Thank you. I will yield back, in view of the votes. Thank you.

Mr. LAMBORN. OK, thank you. Let me set the record straight. On this legislation, besides the original sponsor, Representative Flores, there are four cosponsors: Representative Doc Hastings, who is the Chairman of the Full Committee; myself; Representative Cynthia Lummis of Wyoming; and Representative Henry Cuellar of Texas. This is a bipartisan list of cosponsors that are happy to be on this legislation.

I want to say that I have chaired a lot of Subcommittee meetings and I have sat in on a whole host of Committee meetings over the last  $6\frac{1}{2}$  years. And of all of the witness panels I have ever seen, this has been maybe one of the very best. All four of you bring a lot to the witness table. You have all been clear, passionate, articulate, persuasive. So I just want to express appreciation for all four of you for being here, giving of your time, and helping us understand this important issue.

If any members of the Committee submit questions to you in writing, I would ask that you would respond to those. And if there is no further business, we stand adjourned.

[Whereupon, at 10:49 a.m., the Subcommittee was adjourned.]

[Additional material submitted for the record follows:]

[A letter submitted for the record by the Energy Producing States Coalition (EPSC), follows:]

July 25, 2013

The Honorable John Boehner Speaker of the U.S. House U.S. House of Representatives Washington, D.C. 20525 The Honorable Nancy Pelosi Speaker of the House House Democratic Leader U.S. House of Representatives Washington, DC 20515

Dear Speaker Boehner and Representative Pelosi:

As the Executive Committee of the Energy Producing States Coalition (EPSC) and on behalf of the EPSC membership, we wish to express our support of H.R. 2728, the "Protecting States' Rights to Promote American Energy Security Act," and encourage all Members of the House of Representatives to support this important bill.

EPSC is a group of state legislators working together to develop positions on matters of common interest to energy producing states and advocate for sound public policy on issues that affect domestic energy production and transmission. The group was founded in 2011 and currently includes legislators representing 13 states including Alaska, Arizona, Colorado, Idaho, Indiana, Mississippi, North Dakota, Ohio, Oklahoma, Texas, Utah, Wisconsin and Wyoming.

EPSC believes that expanded domestic energy development is vital to economic growth and job creation. In the midst of the recent economic downturn, the energy sector led the economic recovery and job creation and will likely continue to do so. The dramatic increase in domestic natural resource development over the past few years has been largely due to the innovative process of hydraulic fracturing. Currently, states where this process takes place have established regulations that developers are familiar with to ensure that necessary precautions are taken to safely develop energy while at the same time protect the environment. As legislators representing many of these states, as well as other elected, community, business and labor officials, we are committed to protecting our environment in addition to developing our natural resources to provide needed economic growth and job creation. Existing state regulations for hydraulic fracturing have proven successful, providing strong environmental, health and safety protections as well as regulatory cer-

Existing state regulations for hydraulic fracturing have proven successful, providing strong environmental, health and safety protections as well as regulatory certainty. As state legislators, we understand the specific needs and concerns of our communities more so than the federal government ever could. With different geologies among the states, a standard federal regulation on hydraulic fracturing would not be as effective as existing state by state regulations that take into account state specific concerns. The potential for delaying natural resource development would have a serious negative impact on our states in terms of reduced employment, economic growth and federal mineral revenues. Adding yet another layer of regulation would increase federal spending and provide the federal government with yet another excuse to reduce our state's share of federal mineral revenues. Already this year, the Department of the Interior has arbitrarily reduced state's share of federal mineral revenues by nearly \$110 million and adding additional federal regulations will only limit state's share by reducing overall natural resource development within our states on public lands.

H.R. 2728 allows those regulators who know the community best to be the one's leading oversight of those communities. It would eliminate the potential for duplicative regulations whose only goal would seem to be to delay the production of natural resources on public lands. Existing state regulations are already in place and as technology improves, development should not be hindered by extended regulatory delays brought on by the federal government. Greater clarity about the ability to access and develop domestic resources is nec-

Greater clarity about the ability to access and develop domestic resources is necessary for long-term investment decisions. With so much uncertainty due to regulatory adjustments advocated by Washington, DC, potential investment in our states and workforce likely will be delayed or even cancelled. In order for investment to remain in our communities, the federal government must foster a more certain and encouraging operating environment for energy producers. Approving H.R. 2728 would allow existing state hydraulic fracturing regulations to remain the primary regulation entities must follow. The Department of the Interior should recognize the value of and defer to existing state regulations and focus on other more pressing issues currently facing the Department. In closing, EPSC urges both Republicans and Democrats to vote in support of

In closing, EPSC urges both Republicans and Democrats to vote in support of American energy development. Harnessing our domestic resources is in the best interest of our nation's consumers. We look forward to the House's action on this important measure.

Sincerely,

Representative Roger Barrus Utah State Legislature Chairman, EPSC Speaker Thomas Lubnau

Ŵyoming Legislature Past Chairman, EPSC

Senator Cathy Giessel Alaska Legislature Chairman-Elect, EPSC

[The web ink to "STRONGER Guidelines" issued by State Review of Oil and Natural Gas Environmental Regulations (STRONGER) submitted for the record by Catherine Foerster follows:]

http://www.strongerinc.org/stronger-guidelines