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IMPLEMENTATION OF TITLE III, OIL AND GAS PROVISIONS OF THE ENERGY POLICY ACT OF 2005

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

OF THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

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CONTENTS

	Page
Hearing held on Tuesday, April 17, 2007	1
Statement of Members:	
Costa, Hon. Jim, a Representative in Congress from the State of California	1
Pearce, Hon. Stevan, a Representative in Congress from the State of New Mexico	3
Udall, Hon. Mark, a Representative in Congress from the State of Colorado, Prepared statement of	27
Statement of Witnesses:	
Bartis, James T., Senior Policy Researcher, RAND Corporation	39
Prepared statement of	41
Bramble, Hon. Curtis S., Senate Majority Leader, Utah State Senate	35
Prepared statement of	36
Cicio, Paul, President, Industrial Energy Consumers of America	56
Prepared statement of	58
Letter submitted for the record	60
Haspel, Dr. Abraham E., Assistant Deputy Secretary, U.S. Department of the Interior	5
Prepared statement of	8
Kelley, Kathleen, Former State Representative, Colorado	45
Prepared statement of	46
Morgan, Ann J., Vice President for Public Lands, The Wilderness Society	13
Prepared statement of	14
Simpson, Oscar, Public Lands Community Organizer, National Wildlife Federation	51
Prepared statement of	53
Additional materials supplied:	
Casper Star Tribune article "Public comments: Slow development" submitted for the record	74
Lambert, Hon. Keith, Mayor of Rifle, Colorado, et al., Letter submitted for the record	76
O'Connor, Terry, Vice President, Communications, Regulatory and Government Affairs, Shell Exploration & Production Company, Unconventional Resources, Statement submitted for the record	66

OVERSIGHT HEARING ON IMPLEMENTATION OF TITLE III, THE OIL AND GAS PROVISIONS OF THE ENERGY POLICY ACT OF 2005.

Tuesday, April 17, 2007
U.S. House of Representatives
Subcommittee on Energy and Mineral Resources
Committee on Natural Resources
Washington, D.C.

The Subcommittee met, pursuant to call, at 2:05 p.m. in Room 1334, Longworth House Office Building, Hon. Jim Costa [Chairman of the Subcommittee] presiding.

Present: Representatives Costa, Bishop, Udall, Pearce, Sali.

STATEMENT OF THE HON. JIM COSTA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. COSTA. The oversight hearing by the Subcommittee on Energy and Mineral Resources will now come to order. As we are aware, there are many committees and subcommittees that are meeting not only today but this week, and therefore we have the challenge of trying to maintain the flow of the testimony and the questions with our witnesses, and with the added burden of members coming and going and trying to keep attention and focus. So we will do our very best with the time allotted that we have here this afternoon.

The hearing is on the testimony dealing with the implementation of Title III of the Oil and Gas Provisions of the Energy and Policy Act of 2005. I mean in essence what we are really talking about here this afternoon is best management practices. Under Rule 4(g), the Chairman and Ranking Member may make opening statements. If any other members have statements, they will be included in the record under unanimous consent. We try to do that to expedite the time for the witnesses to testify and to ask questions.

Additionally, under Committee Rule 4(h), additional material for the record should be submitted by members and witnesses within 10 days after the hearing. I am reminded to urge all of you when you do that not to wait until the 9th or the 10th day but earlier is better than later. We would appreciate the witnesses' cooperation in such submissions.

Let me just say that the purpose, as I indicated, of this afternoon's hearing is to discuss an effort since the enactment of the 2005 law, which is best management practices, and to define a balance to determine ways, and obviously how, we increase our energy efforts domestically as it relates to oil and natural gas, but also we have renewable sources that we think are a part of the equation or the solution, and as we do so to be mindful of the fact that it is nice to talk about energy independence but that goal and the ability to reach that goal, I think in terms of reality, are very difficult at best.

Also we want to include the current affects under the 2005 law on energy policy or practices as it relates to impacts on climate change and the environment. Who do we have here today? Well we have a diversity of perspectives with our witnesses. We have in both Panel I and Panel II, I think, the breadth and width of the Department of Interior reflected and from people formerly involved in the Bureau of Land Management. We have the academic focus of RAND, and sports members. We have local elected officials, and an industry energy consumer advocate.

So as we listen to the testimony this afternoon to assess and review implementation of the Oil and Gas Provisions of the Energy Policy Act of 2005 and its impact on primarily western public lands and the communities within those lands to see if, in fact, we are increasing the amount of energy—both in terms of domestic oil and natural gas production and its impact environmentally and socially in those various communities.

We know that oil shale, for example, in terms of its research and development, has an important role, we hope, to play. But given the challenges in terms of the cost effectiveness of producing oil shale and oil sands, is it really realistic to sell those various leases by 2008 when, in fact, most of the experts tend to indicate that it will be at least another 10 years before cost-effective technologies are able to represent themselves in a way that makes this source of energy real?

There are obviously a lot of estimates in terms of the potential recovery of oil in the U.S. as it relates to oil shale compared to reserves in Saudi Arabia, and most of those reserves are located in Federal lands in Utah, Colorado and Wyoming. We know what happened to the last major venture that ended in the early 1980s, and when the price of oil fell, of course, the interest in that effort almost was completely eliminated.

Recent advances in extraction we think make it more realistic. Certainly $70 a barrel oil makes it more realistic, and so when we listen to the testimony this afternoon one of my questions will be to ask whether or not the Energy Policy Act deadline is reasonable. We also need to look at the potential impacts of energy policy on habitat. We have witnesses in the second panel that will talk about it.

We know that the Western Governors' Association has been calling for a repeal of Section 390 of the Energy and Policy Act, which exempts certain activities from the National Environmental Policy Act because they believe it is having an adverse impact in those respective western states. I will be interested to listen to witnesses

testify as to whether or not they support or concur with the Western Governors' Association.

Finally, where are we going? The goal of this hearing is to determine what, if any, legislation is necessary to address these issues and concerns that are brought out and vetted in this public forum, the facts and data that back up people's beliefs, philosophical views and assertions that you as witnesses will make in your statements. Certainly we have a number of witnesses here that will testify.

I am looking forward to that testimony, and at this time I would like to allow my colleague, the gentleman from New Mexico, the Ranking Member of the Subcommittee on Energy and Mineral Resources, to make an opening statement. Mr. Pearce.

STATEMENT OF HON. STEVAN PEARCE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW MEXICO

Mr. PEARCE. Thank you, Mr. Chairman. I appreciate that.

Mr. COSTA. Welcome back from the Easter break.

Mr. PEARCE. And you too. California and New Mexico are not bad places to be during the recess I think.

Mr. COSTA. I concur.

Mr. PEARCE. Chairman Costa and I both voted for the Energy Policy Act of 2005 because the Act was positive and a landmark step in the effort to lower energy prices for our constituents and reduce our dependence on foreign oil. I do not know about other parts of the country, but $5 a gallon gasoline is not OK in Hobbs, New Mexico. The focus of this hearing is Title III, the Oil and Gas Provisions of the Act and rightly so as this committee played a significant role in the adoption of those provisions.

I would remind our panel that we both, Democrats and Republicans, signed off on that bill as it went through conference, and any single member, either a Democrat or Republican, could have voided any provision in that bill. Among other policies that the oil and gas provisions were intended to accomplish, they were intended to encourage increased domestic production of oil and gas by streamlining the Federal permitting process. They are providing potential incentives for technically challenging oil and gas from the deep depths of the outer continental shelf, and to encourage the domestic development of more than two trillion barrels of oil from the oil shale in the western U.S.

The title of today's hearing is Implementation of Title III, the Oil and Gas Provisions of the Energy Policy Act of 2005. The key word for me in this title is implementation which means to accomplish or to carry out. I worry that as I look at the trajectory that we have another agenda in mind not to implement but, in fact, to strike down and repeal, and we hear that echo beginning to come from the witnesses today.

We saw that agenda in H.R. 6 earlier this Congress when four provisions of the very title we are having a hearing on today were repealed with no hearing, no markup and no process. To me, H.R. 6 should be renamed the $5 a gallon gasoline bill, and unfortunately that process, that trajectory does not seem to be stopping with H.R. 6, as I see it foreshadowed in testimony today.

I welcome all of our witnesses and look forward to the testimony, but I insist that your testimonies be fact based. The Chairman has

stated adequately that we in Congress to which legislation that we should be passing, and we are going to base that on your testimony. So we take your testimony very seriously.

I am concerned about different things that I find especially disturbing in Ms. Morgan's written statements. I know her previous experience as BLM's Colorado State Director would tell her otherwise. The first example when she states that oil and gas has become the predominant use of public lands on page 1 of her testimony, if I could get my staff to hold up the chart, it is just plain wrong. The BLM manages 700 million of subsurface minerals estate. That subsurface mineral estate includes BLM lands, the national park lands, the national wildlife refuge lands, the wilderness lands and the Department of Agriculture lands.

Of that 700 million acres of Federal lands, 6 percent or 42 million acres are currently under lease for oil and gas development. Six percent is not predominant. One point eight percent or 12.4 million acres have active oil and gas production. That is a smaller piece of the pie chart there. Is 6 percent or 1.8 percent predominant? I think that is a very important question.

Also she cites EPCA II study on page 2 of her testimony saying that close to 80 percent of BLM acreage is available for development. Again let us be accurate and fact based. EPCA II found that 13 percent, not 80 percent, of onshore Federal land is accessible under standard lease terms. Now 80 percent that is a big jump from 13 percent.

EPCA II also found that 60 percent of onshore Federal gas may be developed but only under heavy restrictions such as no surface occupancy. Have you ever tried to drill for natural gas without touching the surface? That is not accessible. It is not available but it is misleading.

Another example is on page 6 of her testimony where she states that in Fiscal Year 2004 BLM approved applications to drill for 6,052 wells but just drilled 2,702. I have the BLM data here at the desk and would request unanimous consent to put that into the record. It states that 3,770 well leases were spotted, not 2,702. That is more than 40 percent off.

Another example of exaggeration is the statement that the Administration has a rush to lease policy on page 7. We learned in the past several hearings that the number of new leases issued under the current Administration is substantially lower than the number of leases issued under the Clinton Administration, 61 percent lower if you are counting the number of actual leases, 75 percent if you are counting by acreage. We should restrict ourselves just to the facts.

When I read the recommendation to repeal Section 366 regarding APD timelines because there are no environmental protections, I wonder if the witness actually read the rule because when I read it, it says that if the environmental protections are met then that NEPA must be followed and complied with, and when they are met, then we can open 366. So I do wonder about the factual basis of that part.

Her recommendation to repeal Section 390 regarding NEPA categorical exclusions because these exclusions would mean that BLM would no longer need to analyze or disclose the environmental

impacts. I am especially disappointed because I know that particular provision very well. It was in this committee, the Resources Committee, one afternoon during the markup of the entire Energy Policy Act when George Miller and Mr. Abercrombie from Hawaii both began a debate and a discussion about what things we should include here, and it was a very forefront discussion, forward discussion here in this committee, the full Committee of Resources, where we adopted those provisions.

And to state that they are just not working very well simply says that neither party, this bipartisan agreement on those provisions, was not adequate. So again I worry about the entire hearing and its purpose. As I look at the trajectory over the past several weeks of the hearings that we had, I see a trajectory that leads us to conclude that the intent of the majority is to repeal the entire Oil and Gas Provision, the entire section of the Energy Policy Act of 2005.

So Mr. Chairman, I appreciate the hearing. I appreciate the opportunity to express my opinions. I look forward to the witnesses and their testimony and discussing how to implement the Title III of the Energy Policy Act of 2005. I yield back the balance of my time.

Mr. COSTA. Well, thank you very much, gentleman from New Mexico. Since we both exceeded our time allotment, I figure it is tit for tat but I will take that as instructive. Very clever to in your statement to get a whole host of questions into the witness before your opportunity to ask questions. I will remember that in the future.

Mr. PEARCE. Thank you, Mr. Chairman.

Mr. COSTA. No. I am crediting you with it. Anyway, let us get to the witnesses. That is why we are here. Our first witness is Dr. Haspel, Assistant Deputy Secretary for the Department of Interior. You have an extensive background during your public career, and we appreciate that, and we are looking forward to your testimony. Please begin. You know we have the five-minute rule, and I am not holding that part against you right now but keep it to five minutes, and we have the submission of your testimony, and I will advise that to all witnesses please.

STATEMENT OF ABRAHAM HASPEL, ASSISTANT DEPUTY SECRETARY, U.S. DEPARTMENT OF THE INTERIOR

Mr. HASPEL. Mr. Chairman, members of the Subcommittee, thank you for the opportunity to appear here today to discuss the Department of the Interior's implementation of the Energy Policy Act of 2005 in general, and the milestones and accomplishments of the Bureau of Land Management with respect to Title III, in specific.

Mr. COSTA. Could you bring the mike a little closer to you? It is going to be helpful to us. We really do want to hear you and those behind you.

Mr. HASPEL. OK.

Mr. COSTA. I will not count that against your time. Please go ahead.

Mr. HASPEL. All right. Interior is committed to the timely implementation of the tasks given it in EPAct. Shortly after its passage, the Department established the Interior Energy Coordination

Council to coordinate the implementation of the EPAct throughout Interior. It is in my role as the lead coordinator of the ECC that I appear before you today to report on both Interior's and the BLM's progress in implementing EPAct.

The ECC identified 101 tasks mandated by the various provisions in the titles of EPAct. Interior has completed 65 and continues to make great progress in completing the remaining tasks. Because of BLM's responsibilities in managing onshore energy development on the public lands, it has been given a role to play in the implementation of 60 provisions of the EPAct. In the 56 provisions within Title III in which Interior identified tasks, the BLM is involved in 36.

BLM's success at completing its tasks is high. As you can see on the chart before you, they have finished almost 70 percent of their 31 tasks thus far, and three more tasks are expected to be completed in the next three months which will bring their success rate to almost 80 percent. Among the many tasks required by Title III, there are three BLM efforts I would like to highlight.

First, the pilot project to improve Federal permit coordination, Section 365; second, best management practices for oil and gas development, Section 362[b]; and third, the oil shale program, Section 369. One, a significant EPAct implementation effort for the BLM has been establishing the Section 365 pilot project to improve Federal permit coordination. On October 24, 2005, ahead of the 90-day timeframe in EPAct, the Environmental Protection Agency, the Department of Agriculture, the Corps of Engineers and Interior signed an interagency memorandum of understanding to implement the oil and gas pilot offices.

A total of 116 out of 150 approved BLM pilot office positions have been filled to date. My written testimony goes into detail regarding staffing from other Federal and state agencies. I am pleased to report that the BLM has received outstanding cooperation and personnel from the Corps of Engineers, the Fish and Wildlife Service, the Forest Service, the Bureau of Indian Affairs and the Bureau of Reclamation.

Montana and Wyoming have both agreed to supply personnel, and the BLM is in discussions with Utah and Colorado regarding their participation. The new staff now engaged in intensive training will be facing an increased workload. The number of APDs has risen by 46 percent over the last three years. BLM has increased their processing and approvals of APDs by 20 percent over the same time. With regard to inspection enforcement, since 2001 the number of inspections completed has increased by almost one-third. With the recent staffing efforts, the BLM anticipates both APDs and inspection enforcement outputs will increase further during this fiscal year.

Two, in order to improve the administration of the onshore oil and gas program, the BLM and the Forest Service have developed and are implementing best management practices. The BLM has updated the Gold Book of Surface Operating Standards and Guidelines For Oil and Gas Exploration and Development. The BLM has also issued three instruction memorandums that one, established offsite compensatory mitigation guidelines for oil and gas authorizations that provide additional opportunities to address impacts of

proposed projects; two, that established oil and gas process improvement teams in BLM field offices; and three, that provided guidance on the review of binding requirements for oil and gas operations.

The BLM continuously seeks new ways to minimize, mitigate or compensate for any adverse impacts from development activities. Innovation of the type envisioned in EPAct is already underway at BLM. One example in my written testimony discusses how drilling multiple wells from a single location, centralizing production facilities or relocating them offsite in the Pinedale area of Wyoming is achieving an overall reduction in the footprint of development involved in winter drilling projects in the Pinedale and declined from what otherwise would have resulted.

The BLM is also using performance based standards to challenge industry to reduce emissions, minimize surface disturbance, and develop quick and effective reclamation techniques to improve restoration of disturbed areas. I would also like to note that some of the recently developed BLM land use plans have been among the most restrictive ever developed for oil and gas leasing on Federal lands.

The BLM land use planning process seeks to ensure that domestic oil and gas development on public lands is done in a way that protects the environment. In addition, the President's 2008 budget includes a healthy lands initiative, a priority for Secretary Kempthorne which will help address some of the conflicts between development and production of our natural resources.

My next section was going to discuss the oil shale program. Since I have 20 seconds left, I will answer whatever questions you have on that.

Mr. COSTA. You can elaborate a little bit more. I cut into your time.

Mr. HASPEL. OK. The BLM supports and is developing an oil shale program consistent with the declared policy of Congress expressed in Section 369 of EPAct which states that, and I will quote, "Development should be conducted in an environmentally sound manner, using practices that minimize impacts, and development should occur with an emphasis on sustainability to benefit the United States while taking into account affected states and communities."

The BLM published a call for nominations for 160-acre research development and demonstration oil shale leases on public lands in Colorado, Utah and Wyoming in the Federal Register on June 9, 2005. It received 20 nominations for RD & D leases. After review of the nominations, eight proposals were further evaluated. Six were ultimately selected, five in Colorado, the other in Utah.

My written testimony details the chronology of events that have taken place thus far in the development of this program. I would like to emphasize that the BLM Colorado and Utah state offices worked with each of these nominated proposals to complete the NEPA review process which included opportunities for public input. Public open houses were held in Rangely, Meeker, Rifle, and Grand Junction, Colorado, as part of the public comment process. Further, all of the preliminary environmental assessments included the opportunity for a 30-day public review.

The Colorado leases were executed on December 15, 2006. The final environmental assessment and decision record for the Utah proposal is currently being reviewed by the BLM Washington office. Further, Colorado, Utah, and Wyoming requested an opportunity to provide input on preparation of the oil and shale regulations. A listening session was held with these states on December 14, 2006, in Denver to provide this opportunity. Another listening session is scheduled for later this month on April 26, 2007, in Salt Lake City.

Finally, with regard to the program EIS, the Federal Register notice of intent for the EIS was published on December 13, 2005, and the draft EIS is currently scheduled for release late in the summer of 2007, at which time the public will be given an opportunity comment.

Mr. Chairman, thank you for the opportunity to testify today. I hope my remarks have illustrated the careful diligence with which Interior and the BLM are engaged in EPAct implementation, and the efforts that we have made to encourage public participation and solicit public input. This concludes my prepared remarks. I would be happy to respond to questions you may have.

[The prepared statement of Mr. Haspel follows:]

Statement of Dr. Abraham E. Haspel, Assistant Deputy Secretary, U.S. Department of the Interior

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to appear here today to discuss the Department of the Interior's implementation of the Energy Policy Act of 2005 (EPAct), in general, and the milestones and accomplishments the Bureau of Land Management (BLM) has achieved with respect to Title III, in specific.

Before I speak to the specifics of implementation of EPAct, I would like to mention a high priority of Secretary Kempthorne, the Healthy Lands Initiative included in the President's FY 2008 budget. As activities on public land increase, we are seeing growing conflicts among recreation users, energy developers, hunters, ranchers, and others all competing to protect, access, and use these public lands. BLM will join with the U.S. Geological Survey and the Fish and Wildlife Service to identify, restore, and mitigate the potential impacts of increased energy production in wildlife-energy interface areas and potentially prevent the listing of certain species such as sage grouse.

The potential listing of sage grouse as an endangered species could severely constrain public land use, particularly for current and future energy production. The habitat of the sage grouse covers over 100 million acres. Interior's Healthy Lands Initiative includes $22.0 million in new funds, which combined with existing program resources, will allow Interior to implement a strategic vision to protect and restore sage grouse habitat, maintain migratory corridors for other species, and assure continued access to energy. These investments will support new land use planning techniques and new policy tools that will complement current activities and enable us to work with non-Federal partners to restore and conserve habitat and maintain access for energy and other uses.

Focused on six strategic areas, these funds will transform land management from the current parcel by parcel approach to landscape-scale decision making, drawing upon partnerships and new policy tools to help BLM provide increased access for energy and other uses, while simultaneously preserving important habitat corridors and sites for the benefit of species. In 2008, including this increase, over 400,000 acres will be restored in partnership with Federal leaseholders, private landowners, state, local, and tribal governments—to benefit wildlife. The Healthy Lands Initiative includes $15.0 million for BLM to conduct landscape-scale conservation, $2.0 million for U.S. Fish and Wildlife Service, and $5.0 million for USGS.

EPAct and Title III Implementation

There is within the Department an Interior Energy Coordination Council (ECC), the stated purpose of which is to:

- coordinate the implementation of the EPAct throughout Interior;

- ensure the allocation of current efforts and resources are appropriately focused;
- ensure the timelines of EPAct are met;
- ensure that policy decisions are made promptly and in a coordinated manner; and
- ensure viability and consistency among the various interests within Interior and within the Administration.

The membership of the ECC, which continues today, includes all of the Assistant Secretaries and the Solicitor, with the Bureau and the Office Directors participating on an issue-by-issue basis. The ECC is chaired by the Senior Advisor to the Secretary. I am its lead coordinator. With this responsibility comes the leadership of the ECC Liaison Group, the senior career staff support group that deals with the day to day implementation of the EPAct and which identifies the cross-cutting issues needing resolution by the ECC. It is in this role that I appear before you today to report on both Interior's and the BLM's progress in implementing the EPAct.

The ECC identified 101 tasks mandated by the various provisions in the titles of EPAct. Of these, 57 have statutory due dates, with 44 due prior to today. Another 44 tasks have no statutory due date. Interior has completed 65 of the mandated tasks, including three-quarters of those without statutory due dates. For example, in titles other than Title III, Interior has issued the joint hydropower licensing rules, established the technical advisory panel for the North Slope Science Initiative, established and implemented an Indian Energy Resource Development Program, submitted a plan to Congress for the National Geological and Geophysical Data Preservation Program, conducted an offshore oil and gas inventory as well as completed a number of reports. Interior continues to make great progress in completing the remaining tasks.

Because of the role the BLM plays in managing onshore energy development on the public lands, it was given a role to play in the implementation of 60 provisions of the EPAct; for 52 of those provisions the BLM was tasked as the lead agency. Of the 56 provisions within Title III in which Interior identified tasks, the BLM is involved in 34 of those and has the lead responsibility for 31 provisions and 33 tasks. Twenty of the provisions in Title III include statutory due dates, five of which are in the future; 14 have no statutory due date. BLM's success at completing its tasks is high. They have finished almost 70 percent of the tasks for which they are responsible, thus far, and three more tasks are expected to be completed in the next three months, bring their success rate to almost 80 percent. (See attached chart)

Highlights of BLM's Successes in Meeting Title III Requirements

Among the many tasks required by Title III, there are three BLM efforts I would like to highlight: first, the pilot project to improve Federal permit coordination; second, best management practices (BMPs) for oil and gas development; and, third, the oil shale program.

Pilot Project to Improve Federal Permit Coordination, Section 365

A significant EPAct implementation effort for the BLM has been establishing the Section 365 Pilot Project to Improve Federal Permit Coordination. On October 24, 2005, ahead of the 90-day timeframe in EPAct, the Environmental Protection Agency (EPA), the U.S. Department of Agriculture, and the Corps of Engineers and Interior signed an Interagency Memorandum of Understanding (MOU) to implement the oil and gas Pilot Offices. The Interagency MOU establishes the roles, responsibilities and delegations of authority among the federal agencies for streamlining Application for Permit to Drill (APD) processing and Inspection and Enforcement (I&E) activities in the seven BLM Pilot Offices (in Rawlins, WY; Buffalo, WY; Miles City, MT; Farmington, NM; Carlsbad, NM; Grand Junction/Glenwood Springs, CO; and, Vernal, UT) identified in EPAct.

The Minerals Management Service established a Treasury Account for the Permit Processing Improvement Fund for the Pilot Offices on November 1, 2005. The BLM completed fund transfers for six Forest Service positions, ten U.S. Fish and Wildlife Service positions, 3.5 Corps of Engineers positions, and one Bureau of Indian Affairs position for these agencies to support the Pilot Offices under the Interagency MOU—and the BLM is currently reviewing additional funding requests for additional positions for the Forest Service and the U.S. Fish and Wildlife Service for FY 2007.

In October 2005, the BLM began the recruitment process for an initial 105 positions to support the APD approval process and I&E activities.. Bureau-wide vacancy announcements for Petroleum Engineering Technicians and Natural Resource Specialists in the seven BLM Field Offices were issued on October 5 and October 7, 2005 respectively. Because the BLM Vernal Field Office noticed a substantial in-

crease in APD workload during the first half of FY 06, it identified a need for additional positions to meet that workload demand. On June 9, 2006, BLM approved 11 additional BLM positions for the Vernal Pilot Office. Further, in February 2007, the BLM management approved another 34 BLM positions for the Pilot Offices. This increased the total number of approved BLM positions for the Pilot Offices to 150 positions. A total of 116 BLM Pilot Office positions have been filled to date. In addition, the BLM has hired seven contract positions to support the Pilot Offices.

With regard to staff from other federal and state agencies:

- All collateral duty Corps of Engineer positions (total of 3.5 FTE) are on board.
- The U.S. Fish and Wildlife Service positions in all of the offices have been filled.
- The Forest Service positions in Farmington, Buffalo, Vernal and Glenwood Springs have been filled. Under the terms of the MOU, the BLM and the Forest Service are cooperating closely to administer oil and gas development on lands managed by the Forest Service. Particular attention is being given to improving communication and information-sharing, field reviews, and I&E activities. Furthermore, the BLM and Forest Service are ensuring increased cooperation concerning threatened and endangered species during project planning and implementation.
- The Bureau of Indian Affairs has agreed to fill a position in the BIA Gallup Regional Office and BLM signed the transfer of funds letter for the position on May 26, 2006. The BIA has designated an individual as a point of contact until the position is filled on a permanent basis.
- The BLM New Mexico State Office and the Bureau of Reclamation signed an Interagency Agreement for a Reclamation position in Carlsbad, New Mexico.
- An agreement on two positions with the New Mexico Oil and Gas Conservation Commission (Carlsbad and Farmington) was reached in mid August. The Oil and Gas Commission plans to use existing staff for the two positions, with a six month rotation for the staff in order to provide an opportunity for more staff to work directly with the BLM.
- The BLM Montana State Office and the Montana State Department of Environmental Quality (DEQ) signed an agreement on June 1, 2006, to fill one hydrologist position and one air quality specialist position in Miles City and one permitting position in Helena. The Montana DEQ permitting position in Helena has been filled. BLM Montana also has entered into an agreement with the Montana Department of Fish, Wildlife and Parks for a wildlife position in Miles City. Interviews for this position began in January 2007.
- The BLM Wyoming State Office has met with the State Game and Fish Department to discuss participation in the Pilot Project and is working with the State DEQ for a position in Buffalo and a position with the State Historic Preservation Office (SHPO) under a new statewide cultural resources protocol agreement.
- The BLM Utah State Office has had discussions with the State Division of Wildlife Resources and the SHPO regarding assistance in the Vernal Field Office.
- The BLM Colorado State Office has visited with the State Department of Natural Resources to discuss support to the Pilot Project.

Staffing at the pilot offices is nearly complete as the result of the BLM's planning and recruitment efforts, and the new staff are now engaged in intensive training. The number of APDs submitted has risen steadily over the last three years—from 6,979 in 2004 to 8,351 in 2005 to 10,220 in 2006. BLM has been working hard to keep pace with the increase, processing 7,351 APDs in 2004, 7,736 in 2005, and 8,854 in 2006 and approving 6,452 APDs in 2004, 7,018 in 2005, and 7,743 in 2006. With regard to I&E, since 2001, the number of inspections completed increased from 12,785 to 16,967. With the recent staffing efforts, the BLM anticipates that both APD and I&E outputs will increase further during this fiscal year

The BLM, through the Interior's National Business Center, contracted with Booz Allen Hamilton on December 22, 2005, to assist in the review and reporting of implementation and performance of the Pilot Office streamlining efforts over a 3-year period. An initial contract meeting with Booz Allen Hamilton was held on January 10, 2006 in Denver. The contractor worked with BLM in the development and tracking of performance measures for the Pilot Offices, the preparation of site visit reports, and a 1-year progress report.

Management of Federal Oil and Gas Leasing Programs, Section 362(b)—Best Management Practices (BMP)

In order to improve the administration of the onshore oil and gas program, the BLM and the Forest Service have developed and implemented BMP. The BLM has updated the Gold Book of "Surface Operating Standards and Guidelines for O&G

Exploration and Development" and posted the update on September 28, 2005, on the BLM Best Management Practices webpage at www.blm.gov/bmp. The BLM also issued Instruction Memorandum No. 2005-069 on February 1, 2005, that established offsite compensatory mitigation guidelines for oil and gas authorizations, to provide additional opportunities to address impacts of proposed projects. The BLM further issued Instructional Memorandum No. 2006-071 on January 19, 2006, that established oil and gas process improvement teams in BLM Field Offices. Furthermore, the BLM issued Instructional Memorandum No. 2006-206 on August 3, 2006, that provided guidance on the review of bonding requirements for oil and gas operations.

The BLM continually seeks new ways to minimize, mitigate, or compensate for any adverse impacts from development activities. Innovation of the type envisioned in EPAct is already underway at the BLM. For example, BLM is:

- initiating a pilot block survey in the Carlsbad Pilot Office to identify cultural resource properties in the area;
- evaluating an experimental drilling technique proposed by the operator in the Jonah Field in Wyoming using temporary wooden pallets for roads and well pads to determine if this technology reduces impacts to surface vegetation and soil; and
- incorporating advanced technologies and environmental Best Management Practices, such as drilling multiple wells from a single location, centralizing production facilities or relocating them offsite. For example, in the Pinedale area of Wyoming, concerns about impacts to wildlife have resulted in reduced surface disturbance compared to past development by implementing such measures as the consolidation of infrastructure, such as roads, pipelines, and production facilities. As a consequence, the BLM has achieved an overall reduction in the footprint of development involved in winter drilling projects in the Pinedale Anticline relative to what would otherwise have resulted.

Some of the recently developed land use plans have been among the most restrictive ever developed for oil and gas leasing on Federal lands. The BLM's land use planning process seeks to ensure that domestic oil and gas development on public lands is done in a way that protects the environment.

The BLM is also using performance-based standards to challenge industry to reduce emissions, minimize surface disturbance, and develop quick and effective reclamation techniques to improve restoration of disturbed areas. If on-site mitigation measures do not achieve the desired conditions, companies have the option of undertaking off-site mitigation measures. For example, in March 2006, the BLM announced that EnCana is contributing up to $24.5 million over ten years toward an office dedicated to funding offsite mitigation and monitoring in the Jonah Field. The BLM believes that offsite mitigation can potentially become an increasingly useful tool for improving habitats adjacent to certain natural gas development areas.

Oil Shale, Tar Sands, and Other Strategic Unconventional Fuels, Section 369

In section 369 of EPAct, Congress declared that it is the policy of the United States that oil shale, tar sands, and other unconventional fuels are strategically important domestic resources. Under that section, the Secretary of the Interior is required to make available for leasing lands necessary to conduct research and development activities with respect to technologies for the recovery of liquid fuels from oil shale and tar sand resources on public lands in Colorado, Utah, and Wyoming. In addition, the Secretary is also required to develop a program for the commercial leasing of oil shale and tar sands resources on public lands.

The BLM published a call for nominations for 160-acre Research, Development and Demonstration (RD&D) oil shale leases on public lands in Colorado, Utah, and Wyoming in the Federal Register on June 9, 2005. It received 20 nominations for RD&D leases. After review of the nominations, eight were further evaluated and six proposals were selected. Five of the selected nominations were for lands in Colorado, and the other selected nomination was for lands in Utah.

The BLM Colorado and Utah State Offices worked with each of these proposals to complete the NEPA review process, which included opportunities for public input. Public open houses were held in Rangely (March 28, 2006), Meeker (March 30, 2006), Rifle (April 4, 2006), and Grand Junction, Colorado (April 6, 2006) as part of the public comment process.

The preliminary Environmental Assessment for the one proposal in Colorado was released on July 28, 2006, for a 30-day public review. The preliminary Environmental Assessments for the remaining Colorado proposals were released on August 15, 2006. The preliminary Environmental Assessment for the Utah proposal was released on September 18, 2006, for a 30-day public review period. The final Environmental Assessments for the Colorado proposals were completed on November 9, 2006. The Colorado leases were executed on December 15, 2006. The final Environ-

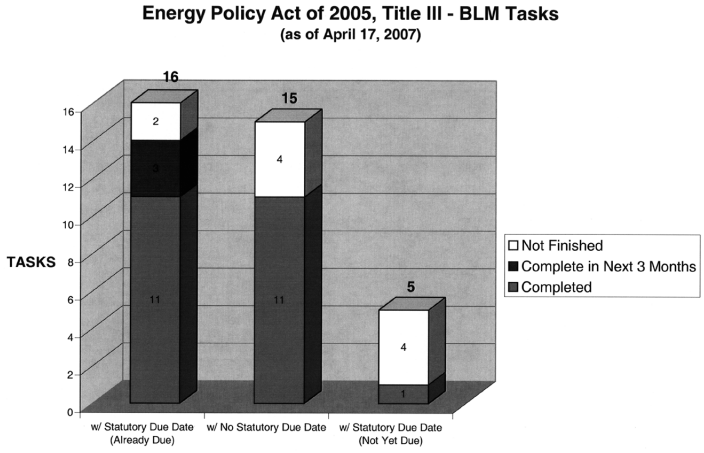
mental Assessment and decision record for the Utah proposal is currently being reviewed by the BLM Washington Office.

The BLM engaged in a number of other activities with respect to oil shale.

- A 90-day report to Congress was provided on December 6, 2005, that discussed the status of implementation actions to: 1) promulgate regulations; 2) to prepare a Programmatic Oil Shale/Tar Sands Leasing EIS; and 3) to develop a leasing program.
- On August 25, 2006, the BLM published an Advance Notice of Proposed Rulemaking in the Federal Register to solicit public comment on royalty rates, due diligence, and other provisions of the oil shale regulations. On September 26, 2006, the Advance Notice was reopened and extended to October 26, 2006 for additional public comment.
- The states of Colorado, Utah and Wyoming requested an opportunity to provide input on preparation of the oil shale regulations. A listening session was held with these States on December 14, 2006, in Denver to provide this opportunity. Another listening session is scheduled for April 26, 2007, in Salt Lake City.
- The Federal Register Notice of Intent for the EIS was published in the Federal Register on December 13, 2005, and the Draft EIS is currently scheduled for release late in the summer of 2007.
- Finally, Argonne National Laboratory was selected as the contractor to prepare the Programmatic EIS required by Section 369(d) of EPAct.

Conclusion

Mr. Chairman, thank you for the opportunity to testify today. I hope my remarks have illustrated the careful diligence with which Interior and the BLM are engaged in EPAct implementation, and the efforts that we have made to encourage public participation and solicit public input at every turn. This concludes my prepared remarks. I would be happy to respond to questions you may have.



Mr. COSTA. And you are almost speechless at the end of it. How about that?

Mr. HASPEL. I tried to make five minutes.

Mr. COSTA. Why don't you have a little water and take a little rest up there? We do appreciate your testimony. Our next witness is Ann Morgan, Vice President of Public Lands Campaign for The Wilderness Society, and a person who has both had an opportunity to engage in public service in Colorado with the Bureau of Land Management as well as in the private sector. So would you please begin your testimony, Ms. Morgan?

STATEMENT OF ANN MORGAN, FORMER STATE DIRECTOR, COLORADO, BUREAU OF LAND MANAGEMENT, VICE PRESIDENT FOR PUBLIC LANDS, THE WILDERNESS SOCIETY

Ms. MORGAN. Thank you. Chairman Costa, members of the Subcommittee, thank you for inviting me to testify about the onshore Oil and Gas Provisions of the Energy Policy Act of 2005 and how the implementation of this Act has affected western lands and resources. While I am currently the Vice President of the Public Lands Campaign at The Wilderness Society, between 1994 and 2002 I served as a Bureau of Land Management State Director, including five years in Colorado.

It was part of my responsibility to manage the BLM lands and resources to achieve a balance between conservation and development. I believe that it is possible to have a vibrant oil and gas program and at the same time protect the public's other important resources such as wildlife, clean air, clean water, places to hunt, fish, recreate and enjoy wilderness. In fact, in the five years that I was State Director in Colorado, the number of acres sold annually oil and gas lease sales doubled.

Everyone you will hear from today agrees that oil and gas development is a legitimate and important use of the public lands. The problem is that over the last six and a half years oil and gas development has become the predominant use of the public lands where those oil and gas resources exist. Unfortunately key aspects of Title III of the Energy Policy Act of 2005 have exacerbated that problem.

The Federal Land Policy and Management Act directs the BLM to manage for multiple resources including oil and gas but also wildlife, fisheries, recreation, cultural and wilderness resources. However, in recent years the BLM policies have facilitated the extraction of oil and gas resources to the virtual exclusion of many of these other resources.

This policy has been predicated on the fallacious notion that too many restrictions have impeded energy development on the west public lands. The fact of the matter is that most BLM public lands in the five Rocky Mountain states containing substantial natural gas resources are available for development and have been for a long time.

At the same time that the BLM is rolling out a multi-million dollar healthy lands initiative designed to restore lands and habitat impacted by oil and gas development, they are also routinely waiving permit conditions designed to protect wildlife and healthy lands. They are inadequately funding their inspection enforcement program, unable to meet their commitments to monitor wildlife and air quality impacts, opening more sensitive lands to leasing, and they are estimating that over a million acres will be graded, drilled, built upon or disturbed by currently planned new oil and gas development.

BLM indicates that whole over 36 million acres of the Federal mineral estate are under lease, only 12 million are under production. Why are they continuing to rush to new leases? This committee has an opportunity to redress the imbalances in the BLM's oil and gas program. It is possible to have an oil and gas program that provides for oil and gas to be made available to the American people while protecting the last remaining wild places in

the American west, the wildlife that inhabit these lands, the quality of the west air and water, and the property rights of ranchers and farmers.

I commend to your attention the western energy agenda attached to my statement. This is a proposal of a series of recommendations endorsed by a host of local and national organizations. Among these recommendations are to eliminate the pilot project offices and require oil and gas operators to fully cover the administrative costs of their program, repeal Sections 390 of the Energy Policy Act to eliminate new categorical exclusions of NEPA, review and repeal Section 366 because it only serves to pressure the BLM to take quick action within artificial timeframes, to fully fund the BLM's inspection and enforcement program and ensure that inspector's time is spent on inspection and enforcement activities not on permitting new wells, to require reclamation bonds that fully cover the cost of restoring damage to the public lands and resources from oil and gas development. The BLM's current reclamation bonding requirements have not changed in decades.

To require the BLM to develop and require adherence to best management practices designed to minimize damage from oil and gas activities, and finally given the amount of leases already in place and the damage to public lands that has already occurred, Congress should consider limiting the Department of Interior's ability to continue issuing leases in areas that have been proposed for protection, identified as having wilderness characteristics or are included in the Forest Service roadless areas, allowing the Department to take a breath and reassess its approach.

Thank you very much for the opportunity to testify and to share our concerns about the extreme pace of development and the inability of the BLM to balance oil and gas development with its obligations to also manage the west's wildlife, clean air, clean water, recreation, wilderness, and other resources. I would also be glad to respond to Representative Pearce's comments and questions. If I do not have the information for that list of questions now, I would be glad to get that information back to you within 10 days.

[The prepared statement of Ms. Morgan follows:]

Statement of Ann J. Morgan, Vice President of the Public Lands Campaign, The Wilderness Society

Chairman Costa, members of the Subcommittee, thank you for inviting me to address this Subcommittee and to testify about the onshore oil and gas provisions of the Energy Policy Act of 2005 and how the implementation of this act has affected Western lands and resources.

While I am currently the Vice President of the Public Lands Campaign at The Wilderness Society, between 1994 and 2002 I served as a Bureau of Land Management (BLM) State Director, including five years in Colorado. It was a part of my responsibility to manage the BLM lands and resources to achieve a balance between conservation and development. In the five years I was State Director in Colorado, the number of acres sold annually at oil and gas lease sales doubled. I believe that it is possible to have a vibrant oil and gas program and at the same time protect the public's other important resources such as wildlife, clean air, clean water, and places to hunt, fish, recreate and enjoy wilderness.

Everyone you will be hearing from today agrees that oil and gas development is a legitimate and important use of the public lands. The problem is that over the past 6 1/2 years oil and gas development has become the predominant use of the public lands where oil and gas resources exist. In fact the current policy being pursued by the BLM is so out of balance that there is a rising chorus of concern among growing numbers of state and local elected officials, game and fish departments,

hunters, anglers, ranchers, farmers, and other residents of the rural West. Unfortunately, key aspects of Title III of the Energy Policy Act of 2005 (EPAct) have exacerbated the imbalances that were present prior to EPAct's enactment. My statement today traces the history of the current policies, and their impacts on other public land values, and makes some suggestions for areas of EPAct that should be revisited by this Committee.

The Federal Land Policy and Management Act (FLPMA) provides that the 261 million acres of public lands managed by the Bureau of Land Management 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" (43 U.S.C. 1701 (a)(8)). The law also provides that the public lands be managed in a manner that "recognizes the Nation's need for domestic sources of minerals..." (43 U.S.C. 1701 (a)(12)). However, in recent years it has become the policy of the BLM to facilitate the extraction of federal oil and gas resources, where these resources exist, to the virtual exclusion of all other resource values. My testimony will focus on this disturbing transformation of BLM's policy in connection with development of conventional oil and gas resources on our public lands.

I understand that you will be hearing from other Westerners regarding their concerns with the renewed commitment to experimenting with oil shale development and their experiences in having energy developers, aided and abetted by the BLM, trample their rights as private property owners. Many of our collective concerns (and proposals for remedying them) are set out in a document entitled the Western Energy Agenda, which I've included with my testimony (attached). This document not only identifies the important values at stake, but also sets out a path to ensure that our national energy policies achieve the appropriate balance between oil and gas development and economically viable Western communities.

Current BLM oil and gas policies can be traced directly to Vice-President Cheney's secretive National Energy Policy task force report in May of 2001. The Vice-President's report recommended, among other things, opening up the Arctic National Wildlife Refuge to oil and gas development, opening up the few protected areas within the National Petroleum Reserve—Alaska, and a review of so-called "impediments" to onshore development on federal public lands. These so-called impediments are the lease conditions put in place to safeguard the public's natural resources while the mineral resource is being developed.

The task force report erroneously characterized 40% of federal onshore oil and gas resources in the lower 48 states as being "off-limits" to development (National Energy Policy, May 2001, p. 5-10). This early misinformation about 40% of the lands being off limits created the appearance of dire restrictions and problems with BLM's land use plans and fiduciary management of the oil and gas program. In fact, subsequent studies by the BLM indicated that fully 88% of natural gas resources were available for development (EPCA I report, p. xv) and the data presented in BLM's more recent assessment (EPCA II) shows that close to 80% of BLM acreage is available for development. Amazingly, the results of these recent studies have not changed the BLM's push to increase access even further.

The new energy policy was accompanied by two Executive Orders. Executive Order 13212 directed the federal agencies to "expedite energy-related projects," including by expediting permit review and taking other actions to "accelerate completion" of these projects. Executive Order 13211 required agencies to prepare a "statement of energy effects" for any action that could adversely affect energy supply and distribution, detailing not only potential effects but also alternatives to avoid those effects. Taken in conjunction with the energy policy, these orders effectively mandated oil and gas development as the most important consideration in land management and characterized all other resources as impediments.

Subsequent policies developed and practiced by the BLM to reduce environmental protection for the public lands, and encourage more oil and especially natural gas development with fewer environmental safeguards, have been predicated on this erroneous assumption.

The BLM issues its policies and directives to its field offices in the form of Instruction Memoranda (IM) and IMs issued since the directed move away from balanced management reflect the agency's commitment to managing the public lands primarily to support oil and gas development. For example, Instruction Memoranda Nos. 2003-233 and 2003-234 were issued in July 8, 2003, for the stated purposes of reaffirming BLM's "commitment to not unduly restrict access to the public lands for energy exploration and development" and of implementing the Administration's goal for federal agencies to "expedite their review of permits or take

other actions necessary to accelerate the completion of [energy-related projects]" including through reassessment and modification of so-called "constraints" to federal oil and gas leasing. IM 2003-233 also established seven priority areas (Powder River Basin, Green River Basin, Montana Thrust Belt, Piceance Basin, Uintah Basin, Ferron Coal Trend and San Juan Basin) for applying this approach. IM 2003-234 required a review of all existing lease stipulations to determine if they were still "necessary and effective" and to direct that, if "lease stipulations are no longer necessary or effective, the BLM must consider granting waivers, exceptions, or modifications."

IM 2004-110 was issued to direct land managers to proceed with leasing even while applicable land use plans were being revised, even if those plans were considering protecting the natural values of the same lands, and to require that any deferrals of leasing be supported by detailed explanations and documentation, submitted to the state and national directors of the BLM. This change in policy also required a change to the BLM's Land Use Planning Handbook, which had historically directed the agency not to take actions like leasing during the revision of a resource management plan, but in 2005 was revised to direct land managers to proceed with leasing.

IM 2005-247, issued in the wake of the Energy Policy Act of 2005 (which I'll discuss in more detail later in my testimony) to address "NEPA compliance" in light of the new leasing priorities, recommends that BLM develop an alternative of higher well density and development beyond that actually proposed by the operator and provides direction as to how to make the maximum number of projects fit into categorical exclusions to avoid NEPA altogether.

BLM's budget priorities also reflect this imbalance between the oil and gas resource and all of the other biological, cultural, recreational and other resources it is mandated to manage and protect. The BLM's oil and gas budget since FY 2000 has more than doubled—from $57 million in FY 2000 to $121 million in FY 2008, while funding for other important programs have remained stagnant or declined, for example the BLM's magnificent National Landscape Conservations System. Ironically, Congress has prohibited the BLM from helping to cover its administrative costs via the prohibition on cost recovery fees in Sec. 365 (i) of the Energy Policy Act of 2005, a provision which to its credit the House is on record of repealing in H.R. 6, passed earlier this year.

In addition to these substantial policy changes, BLM's land use planning initiative was hijacked to make more lands available for oil and gas development. In 2000, the BLM presented Congress with a request to substantially increase the amount of funding for its land use planning program, in order to update BLM land use plans that were severely out of date. Though the BLM's Report to the Congress—Land Use Planning for Sustainable Resource Decisions (February 2000) presented a compelling array of issues that needed to be addressed in new land use plans—including managing for threatened and endangered species, recreation, protected lands (such as the national monuments, national conservation areas, and wild and scenic river corridors that were specifically mentioned by Secretary Babbitt in connection with this budget request), OHVs, wildland/urban interface and energy development—the Bush Administration hijacked this initiative to focus on having new plans designed primarily to make more BLM lands available for development (despite the fact that most BLM lands in the five-state Rocky Mountain region were already available for development).

In February, 2002, the funding for the planning initiative originally designed to address the special values and competing uses of the public lands was officially prioritized for 21 "Time Sensitive Plans," which would be completed on expedited schedules. 11 of these 21 plans were included for the express purpose of addressing the oil and gas development potential of the lands. The remaining 10 were plans that BLM was required to complete as part of lawsuit settlements or the establishment of new units in the National Landscape Conservation System.

An analysis of the BLM's planning documents completed by The Wilderness Society in January, 2006, found that 95% of lands addressed in the 11 energy-related time sensitive plans would be open to oil and gas development, leading to a 200% increase (or more than tripling) in the amount of wells projected on these public lands (attached).

The prioritization of private development of the oil and gas resource over the management and preservation of other natural resources pervades BLM's land management, even beyond the time sensitive plans. In the Little Snake resource area of Colorado, 93% of the planning area is open to oil and gas development in the Draft Resource Management Plan. Every management alternative presented in the recently released Draft Resource Management Plan for the Pocatello, Idaho field office opened 98% of the planning area to leasing; even though there is very little

potential for oil and gas development in the area, the BLM has focused on preserving opportunities for oil and gas drilling at the expense of wise management of the other natural values of these lands.

A subsequent, preliminary analysis of BLM and Forest Service major land use planning and energy project decisions completed by The Wilderness Society in October, 2006, found that more than 118,000 new wells were approved, or in the process of approval, in just Colorado, Montana, New Mexico, Utah and Wyoming, which would triple the amount of producing wells nationwide over the next 15 to 20 years (attached).

The impacts from this type of development would truly be staggering—the average amount of land actually graded, drilled, built upon or disturbed as estimated by the BLM would likely exceed 1,000,000 acres. This does not even take into account additional serious and frequently severe impacts like fragmentation of wildlife habitat into smaller pieces that eventually cannot sustain viable wildlife populations. All of this new development must be considered against the backdrop of the existing 63,000 producing wells, the over 10,000 shut-in wells, the over 100,000 orphaned wells and the approximately 24,000,000 acres of leased acreage not yet in development that the industry already has under lease.

It is clear that sensitive resources, such as wildlife and wildlife habitat and wilderness-quality lands, are at risk from current policies. Oil and gas companies frequently request that the conditions in their leases, which are designed to protect public values such as wildlife, clean air and clean water, be put aside in favor of removing restrictions on oil and gas development activities. For example, the Rawlins, Wyoming Field Office granted 72% of the requests to waive lease conditions, known as stipulations, which were received between October 1, 2005 and September 30, 2006. The Pinedale, Wyoming Field Office granted 88% of the requests for wildlife exceptions received from October 2006 through February 2007. The Pinedale Field Office has a history in recent years of granting such requests, granting 90% of requests for exceptions from stipulations applied to protect sage grouse during the winter of 2002-2003 and granting 88% of requests for exceptions from big game winter range stipulations.

According to the Wyoming Game and Fish Department, "As densities of wells, roads, and facilities increase, the effectiveness of adjacent habitats can decrease until most animals no longer use the habitat." The damage caused by such oil and gas drilling is dramatic: studies have shown that road densities of two miles per square mile causes a 50% reduction in elk populations, while six miles of roads per square mile drives almost 100% of the elk from the area. A recent study in the Pinedale area showed a 46% decline in mule deer during the first four years of gas development. Pronghorn are even more sensitive to disturbance, with BLM documents indicating that pronghorn are adversely affected at road densities of one mile per square mile. A study of the potential impacts of coalbed methane development in the Powder River Basin on sage grouse, which was commissioned by the BLM, found that areas in which methane wells are being drilled did not have the same strong population growth recorded elsewhere in the basin in 2004 and 2005—with bird population in 2005 at only 12% of what it was in 2000, in comparison to closer to 70% in areas outside development.

In Utah and Colorado, the BLM has issued new oil and gas leases on more than 200,000 acres of lands that have been the subject of Congressional attempts to designate them as wilderness. Lands proposed for wilderness protection in Wyoming and New Mexico have also been leased.

The BLM's exclusive focus on oil and gas development has led to hurried leasing and negligent land management; the agency is not fulfilling its obligations under FLPMA or under the Federal Oil and Gas Royalty Management Act. FLPMA requires the BLM to manage the multitude of resources on the public lands for their many uses and values. By focusing only on development of oil and gas, and acknowledging the other natural resources of our public lands only as "impediments" to development, the BLM has, inevitably, allowed serious damage to occur. The Federal Oil and Gas Royalty Management Act of 1982 requires the BLM to inspect oil and gas operations to ensure compliance with lease conditions, including those stipulations designed to protect the environment.

The rush to open public lands to drilling is evidenced by the leased lands and drilling permits held unused by the oil and gas industry. BLM data indicates that while over 36 million acres of the federal mineral estate are under lease, only 12 million are under production. Does it really make sense for the BLM to rush parcels to auction when this kind of asset-hoarding is going on by the oil and gas industry? The BLM also predicts that it will receive requests for more than 10,000 applications for permit to drill (APDs) this year. In its rush to permit drilling, the BLM has consistently issued more permits than the industry can drill. For instance, in

Fiscal Year 2004, industry requested and received approval to drill 6,052 wells, but drilled just 2,702, resulting in a surplus of more than 3,000 permits. Nevertheless, the BLM continues to prioritize processing APDs above all other management obligations.

The BLM's lack of due care for our public lands can be seen in its approach to applying and enforcing lease stipulations and conditions of approval for APDs. Stipulations are lease conditions that describe actions that the oil and gas operator must take to protect wildlife habitat, air, water and other important values while developing the oil and gas resource. Special stipulations may limit activities during certain time periods (such as prohibiting activities in raptor nesting areas or big game winter range during crucial times of year) or prohibit use of the land surface altogether (such as within 1/4 mile of sage grouse leks). However, these lease terms can only be effective if they are applied. As I've noted previously, the BLM's guidance requires an ongoing assessment of whether lease stipulations should even be retained—characterizing them as "impediments" to development. Also, when asked, the BLM will generally agree to give operators relief from complying with those that remain a part of the lease.

Conditions of approval are imposed when an oil and gas operator applies for a permit to drill a well and can impose limitations on the way in which an operator will drill a well, such as setting out specific requirements to restore healthy plant populations and prevent erosion. So-called "best management practices" (such as reclamation of unused well pad areas) are applied as conditions of approval for an APD, but their application is at the discretion of the agency—as is their content. The BLM does not make best management practices mandatory in its land use plans, even though the agency touts its best management practices initiative.

The Government Accountability Office (GAO) issued a report in June 2005 entitled "Oil and Gas Development—Increased Drilling Permit Activity Has Lessened BLM's Ability to Meet Its Environmental Protection Responsibilities" (GAO-05-418). As the title indicates, the GAO found that the increased volume of APDs, and the mandates to focus on processing them, has resulted in more BLM staff resources devoted to issuing permits—with less attention being paid to monitoring and enforcing compliance with environmental standards that apply to the activities conducted under the permits.

A May, 2006, internal BLM assessment provided confirmation on a large scale of the GAO's findings. The report found that the Pinedale Field Office had failed miserably in fulfilling the many commitments made in land use plans, resource assessments (and in permitting oil and gas drilling), to monitor and limit harm to wildlife and air quality from natural gas drilling in western Wyoming. The report stated that there is often "no evaluation, analysis or compiling" of data tracking the environmental consequences of drilling. For example, the report details six years of failures by the BLM in Pinedale to honor its commitments to track pollution that affects air quality and lake acidification in nearby wilderness areas.

The BLM's rush to lease and to prioritize leasing over all other considerations has resulted in the agency including absolutely inappropriate parcels in lease sales, raising the ire of local municipalities and causing the BLM to remove parcels from lease sales after publicizing their availability. The following examples, from just 6 months of last year in Colorado, illustrate the depth of this problem:

1. The February 9, 2006 Colorado lease sale included about 11,000 acres in Palisade's watershed, and 600 acres in Grand Junction's watershed, according to the BLM. Those watersheds provide drinking water to the municipalities. Both municipalities protested the lease sale, based on risks to the water supply and inadequate protections in lease stipulations. [Land Letter, 2/2/06; Grand Junction Daily Sentinel, 1/19/06]. This same lease sale was also supposed to include parcels along the San Miguel River, which is listed on American Rivers' "Outstanding Rivers" list and, under BLM guidance, should not have been leased until the agency completed a study of its wild and scenic eligibility. A number of protests were filed. Ultimately, the BLM acknowledged their errors and removed nine parcels, totaling approximately 7,300 acres along the San Miguel River from the lease sale.
2. The May 11, 2006 Colorado lease sale was slated to include the minerals under a property owned by the City of Craig, where the city was planning to build a picnic area, boat ramps and other facilities on a city-owned parcel of land on the eastern edge of Elkhead Reservoir. Again, protests were filed and the city expressed its shock. The BLM again acknowledged its error and removed the parcel from the lease sale.
3. The August 8, 2006 Colorado lease sale was slated to include the minerals underlying three parcels in two Colorado State Wildlife Areas (the Piceance Creek

and Browns Park State Wildlife Areas). Again, protests were filed and BLM decided to remove these parcels from the sale.

The ecological condition of the public lands has become so dire that the Administration has started a new program, known as the "Healthy Lands Initiative," to fund "restoration of habitat, weed management, and improvement of riparian areas" on a "landscape scale." For areas heavily impacted by oil and gas development the activities needed to maintain the health of our public lands should have been a mandatory condition of developing them, but, as I've outlined already, the BLM has either not required or not enforced the necessary protective measures. And, even now, the Administration will not make the health of our public lands a priority on the same level as permitting oil and gas development. Funding for this initiative is expected to come not only from taxpayers, but also from cooperative agreements with private parties, incentives for industry and other "non-traditional" approaches to get assistance from those who care about these lands.

Provisions of Title III of EPAct further institutionalized the imbalance in the BLM's management of public lands. The Energy Policy Act of 2005 will only exacerbate BLM's continued focus on permitting oil and gas development at the expense of environmental protection. For example, though in several years prior to enactment of EPAct the BLM issued thousands more drilling permits than were used by operators, in Sec. 366 Congress imposed a 30-day timeframe for APD issuance based on arguments by industry representatives that the BLM was negligent in timely responses to submission of drilling permit applications. This provision further ensures that the BLM will do an inadequate job fulfilling its multiple use mandates. Conducting a complete environmental analysis of the direct, indirect, residual and cumulative impacts on resources as diverse as air, water, wildlife, cultural resources, and recreation is complicated and deserves to be done well and in conjunction with interested parties including landowners, communities and state fish and game agencies. The artificial timeframes in EPAct pressures the agency to essentially rush to judgment on permits, issuing them without sufficient review and contributing to the resulting damage of the public lands that I've described and the BLM (in its Healthy Lands Initiative) has now acknowledged.

Likewise, apparently due to complaints from industry representatives regarding the alleged onerous burden of complying with the National Environmental Policy Act (NEPA), Congress provided a series of mandatory "categorical exclusions" from NEPA compliance for certain activities in Sec. 390 of EPAct. These exclusions would mean that the BLM would no longer need to analyze and disclose the environmental impacts of certain activities, such as an oil and gas operator disturbing 5 acres at a time of a lease up to a total of 150 acres per lease, drilling new wells in a "developed field" and drilling on a site where drilling has previously occurred even if that drilling was just a water well. To those who own land nearby and to hunters, fishers, and others who care about our Western landscapes, the lack of environmental analysis, review of alternatives and public involvement is disturbing. The nation's natural resources are being subjugated to the development of the oil and gas resources without even the pretense of balance.

The "Pilot Projects" authorized in Sec. 365 of EPAct simply signal that oil and gas development is the highest priority activity in the BLM Field Offices where the program is authorized. These offices continue to issue more APDs than industry can drill, are unable to keep up with their inspection and enforcement obligations, no longer manage for multiple uses, and fail to mitigate the impacts of drilling (despite their promises to the public).

In conclusion, this Committee has an opportunity to redress the imbalances in the BLM's oil and gas program. To reiterate: our view is the oil and gas development is a legitimate use of the public lands—but not everywhere on the public lands, and not in a manner that impairs other resource values. It is possible to have an oil and gas program that provides for oil and gas to be made available to the American people, while protecting the last remaining wild places in the American West, the wildlife that inhabit these lands, the quality of the West's air and water, and the property rights of ranchers and farmers. Our specific recommendations include:

1. Instead of dedicating income from lease rentals to perpetuate the imbalance in management in the Pilot Project Offices, Congress should eliminate this program altogether, and instead require the oil and gas operators to fully cover the administrative costs of the program that provides such great benefits to them.
2. Repeal Section 390 of the EPAct to eliminate new categorical exclusions from NEPA review, requiring the BLM to consider the impacts of additional oil and gas developments on public lands and to permit public review and comment.

3. Repeal Section 366 of EPAct, because it only serves to pressure the BLM to take quick action within artificial timeframes on permits and hamstrings the agency's ability to thoroughly review permits and protect other resources.
4. Fully fund the BLM's Inspection and Enforcement Program and ensure that inspectors' time is spent on inspection and enforcement activities, not on permitting more wells.
5. Require reclamation bonds that fully cover the cost of restoring damage to public lands and resources from oil and gas development. The BLM's current reclamation bonding requirements have not been changed in decades. Damage done to the public's lands from oil and gas activities should be avoided, and bonding levels should be set to cover the full costs of restoration.
6. Require the BLM to develop and require adherence to Best Management Practices designed to minimize the damage to public land values from oil and gas activities.
7. Given the amount of leases already in place and the damage to public lands that has already occurred, Congress should consider limiting the Department of Interior's ability to continue issuing leases in areas that have been proposed for protection, identified as having wilderness characteristics by the BLM or are included in Forest Service roadless areas—allowing the Department to "take a breath" and reassess its approach to oil and gas development on our public lands.

We commend to the Committee's attention the "Western Energy Agenda" attached to my statement. This series of modest proposals endorsed by a host of local and national organizations, if enacted, will begin to restore the balance so badly needed in the management of our public lands. I invite the Committee to hear from other Westerners who are experiencing first hand the impacts of the current development boom on their farms, ranches, favorite hunting grounds, and communities. We look forward to working with the Committee to restore balance to the management of our nation's public lands in the weeks to come.

Amigos Bravos • Biodiversity Conservation Alliance • Californians for Western Wilderness • Coalition for the Valle Vidal • Colorado Environmental Coalition • Colorado Wildlife Federation • Earthjustice • Environment Colorado • Forest Guardians • Idaho Wildlife Federation • Montana Wildlife Federation • National Wildlife Federation • Natural Resources Defense Council • Nevada Wildlife Federation • New Mexico Wildlife Federation • New Mexico Wilderness Alliance • Northern Plains Resource Council • Oil and Gas Accountability Project • Powder River Basin Resource Council • Sagebrush Sea Campaign • San Juan Citizens Alliance • Sierra Club • Southern Utah Wilderness Alliance • Southwest Environmental Center • Sustainable Obtainable Solutions • The Wilderness Society • Western Colorado Congress • Upper Green River Valley Coalition • Western Organization of Resource Councils • Western Resource Advocates • Wilderness Workshop • Wyoming Outdoor Council

2007 Western Energy AGENDA

The American West is blessed with enough clean, renewable energy potential to meet a substantial portion of our nation's energy demand. But as the Rocky Mountain states look to the future, a dramatic increase in drilling for oil and natural gas is placing unprecedented pressures on water, ranches, wildlife, landscapes and communities across the Rocky Mountain West. The inclusion of Western energy issues in the recently announced House Natural Resources Committee oversight agenda is an important first step toward responsible energy development in the region. We also encourage Congress to aggressively pursue a clean energy agenda, an outline of which is available at www.saveourenvironment.org/2007__Energy__Platform.pdf.

In order to ensure that our national energy policies achieve the appropriate balance between oil and gas development and economically viable western communities, Congress should take the following steps:

Protect the West's Water

The West's water is the region's most important natural resource and should be protected from the contamination and degradation that is frequently caused by irresponsible oil and gas drilling.

- Repeal Section 323 of the Energy Policy Act of 2005 (EPAct), which exempts oil and gas construction activities from the Clean Water Act's stormwater permit requirement.

- Repeal Section 322 of EPAct, which exempts hydraulic fracturing from the Safe Drinking Water Act. Hydraulic fracturing involves the high-pressure injection of water, sand, and toxic fluids into a rock or coal formation to enhance oil and gas production.
- Allocate funds for the National Academy of Sciences study on the effect of coal-bed methane production on water resources as required by Section 1811(d) of EPAct. Funds should be allocated from the BLM oil and gas program in the FY 2008 Department of Interior Appropriations bill.

Safeguard The West's Special Places

The vast majority of public lands under lease across the West—approximately 24 million acres of 36 million acres under lease—have not been put into production, yet the BLM continues to fast-track leases on millions of acres of public lands each year and is moving forward with creating transmission corridors that could harm our environment.

- Support protection of New Mexico's Otero Mesa, Colorado's Roan Plateau, Wyoming's Red Desert, and Utah's Redrock Wilderness from oil and gas development.
- Revise Section 368 of EPAct, regarding energy transmission corridors, to avoid sensitive lands, eliminate the application of categorical exclusions, and limit the width of designated corridors.

Conserve America's Wildlife Heritage

The American West has many of the world's last remaining big game herds, with hundreds of thousands of elk, mule deer and pronghorn following ancient migration corridors to calving and fawning areas and critical winter habitat they need to survive, as well as critical habitat for declining species such as sage grouse.

- Require BLM to use Best Management Practices. Every company authorized to operate on federal lands should use practices that will avoid and minimize habitat fragmentation and degradation, such as directional drilling, well clustering, maximizing spacing between wells and well clusters, phased development, unitization and complete concurrent restoration.

Defend Western Ranches and Private Lands

Ranchers and other landowners who don't own the mineral rights beneath their property have little say over whether and how the federal minerals under their lands are developed, and little recourse from the impacts this development can have on their health, drinking water, livelihoods and quality of life.

- Support legislation like Congressman Udall's H.R. 2064 Western Waters and Farm Lands Protection Act that requires surface use agreements, adequate notification of surface owners, adequate bonding, regulation of water impacts, the clean up of orphaned, abandoned and idled wells, and stronger reclamation standards.

Restore Public Participation and Balance

The BLM's highest priority over the past six years has been to issue as many oil and gas leases in as short a time as possible.

- Amend Section 366 of EPAct to eliminate the 30-day permit deadline. Pressuring the BLM to take quick action on permits hamstrings its ability to thoroughly review permits and protect other resources.
- Repeal Section 390 of the EPAct to eliminate new categorical exclusions from NEPA review. Requiring BLM to consider the impacts of additional oil and gas development on public lands and to permit public review and comment will lead to more careful decision-making.
- Support the Bush Administration's proposal to eliminate dedicated funding for the Permit Coordination Pilot Project established in Section 365 of EPAct and repeal of the cost recovery fee prohibition. BLM field offices have issued permits at a breakneck pace, often ignoring their commitment to other environmental resources and the public.
- Fully fund BLM's Inspection and Enforcement Program and ensure that inspectors' time is spent on inspection and enforcement activities, not permitting of other activities.

Look Before We Leap on Oil Shale

The Energy Policy Act put the BLM on a path to seek commercial leasing for oil shale as early as 2008—despite the fact that there still is no economically viable extraction technology and the long list of environmental and social impacts cannot be fully understood by then.

- Prohibit commercial lease sales, promulgation of regulations, and environmental analysis for commercial leasing until current Research Development and Demonstration projects have proven they are economically viable without taxpayer subsidies, will comply with all existing environmental protections, and have acceptable environmental and social impacts.

Conclusions

The Rocky Mountain West deserves a balanced energy policy that helps provide for our nation's needs by maximizing energy efficiency, promoting renewable energy resources, and ensuring protections for the region's communities, wildlife, water supplies and landscapes. Oil and gas is a part of our nation's energy portfolio but it must be developed in a manner that is socially and environmentally sustainable. We urge Congress to help achieve this balance through consideration and adoption of this Western Energy Agenda.

Time Sensitive Plan (TSP) Oil and Gas Development Analysis - January 2006

Time Sensitive Plan	State	Months Delayed? (as of 12/05)	Total Area of Plan (Sub-surface Acreage)	Change in Wells Expected to Be Drilled	% Available for Leasing in New Plans	Total Acres Available for Drilling in New Plans
National Petroleum Reserve - Alaska (Northwest)	AK	2	8,800,000	No % avail, 0 wells to 581 wells	100.0%	8,800,000
Roan Plateau	CO	25 so far	73,602	54.9% increase (855 wells to 1,324 wells) federal only	100.0%	73,602
Powder River/Billings	MT	10	3,185,016	656.0% increase (2,645 wells to 19,995 wells)	99.9%	3,181,804
Farmington	NM	13	3,020,693	125.9% increase (4,421 wells to 9,942 wells)	96.3%	2,909,545
Price	UT	24 so far	2,800,000	25.0% increase (1,200 wells to 1,500 wells)	79.1%	2,216,000
Vernal	UT	21 so far	1,914,000	50.0% increase (5,858 wells to 8,787 wells)	96.7%	1,850,161
Jack Morrow Hills	WY	37 so far	574,830	7.2% decrease (221 wells to 205 wells)	68.7%	395,030
Powder River	WY	7	4,326,061	No % avail, 0 wells to 25,654 wells	99.3%	4,295,861
Snake River	WY	10	15,123	No % avail, 0 wells to 0 wells	0%	0
Pinedale*	WY	14 so far	1,200,000	Data not yet available (original RFD was 3,759 wells over 15-20 year life of the plan)	Data not yet available	Data not yet available
Rawlins	WY	14 so far	4,672,160	1.4% decrease (8,945 wells to 8,822 wells)	98.5%	4,605,070

*** Due to the fact that Pinedale has not released a Draft RMP, Pinedale is not included in any calculation**

Total Subsurface Acreage of TSPs (NPR-A Excluded): 20,581,485

Total Subsurface Acreage of TSPs (NPR-A Included): 29,381,485

Total Subsurface Acreage of TSPs (NPR-A and Pinedale included): 30,581,485

Total Rollup (#1) - Does not include NPR-A

Old RFD (wells)	New RFD (wells)	New Wells	% Increase New Wells
24,145	76,229	52,084	215.7%

Total Rollup (#2) - Including NPR-A

Old RFD (wells)	New RFD (wells)	New Wells	% Increase New Wells
24,145	76,810	52,665	218.1%

Total Rollup (#3) - Does not include NPR-A

Average % Open on New Plans (Using Percent Open Calculations)	Total % Open on New Plans (Using Sub-surface Acreage Calculations)
82.1%	94.9%

Total Rollup (#4) - Including NPR-A

Average % Open on New Plans (Using Percent Open Calculations)	Total % Open on New Plans (Using Sub-surface Acreage Calculations)
83.9%	96.4%

Contact:
Nada Culver, 303-650-5818 x117
Heath Nero, 303-650-5818x116

Preliminary Analysis of Current Federal Actions Authorizing Drilling of New Wells (October 2006)

Analysis Completed by The Wilderness Society's BLM Action Center

Contact: Nada Culver, 303-650-5818 x117
Heath Nero, 303-650-5818 x116

In October 2006, The Wilderness Society's BLM Action Center conducted a preliminary analysis of land use plans and large-scale projects approved or in the process of approval in the states of Colorado, Montana, New Mexico, Utah and Wyoming in order to estimate the number of new oil and gas wells likely to be approved for drilling over the next 15 to 20 years. This document lists the names of the plans and projects analyzed, the number of new wells expected, and the sources the BLM Action Center used in its analysis. Over 118,000 new wells are expected in the five-state region from the 28 federal actions analyzed.

Summary

Total New Wells in Colorado:	**22,802**
Total New Wells in Montana:	**26,095**
Total New Wells in New Mexico:	**11,273**
Total New Wells in Utah:	**8,502**
Total New Wells in Wyoming:	**50,058**
TOTAL:	**118,730**

Colorado

Agency	Field Office/ Forest	Plan/Project Status	New Wells	Source	Date of New Well Figure
BLM	Glenwood Springs Field Office	Roan Plateau Proposed RMP/Final EIS published 9/7/06	1,570	Proposed Plan, pg S-10	Aug-06
BLM	Little Snake Field Office	Little Snake RMP - Draft in process	2,806	RFD, Pgs 4 and 578	Aug-05
BLM	Little Snake Field Office (CO), Rock Springs Field Office (WY)	Hiawatha Regional Energy Development Project (EIS)	4,208	Scoping Notice of Intent - Federal Register	Sep-06
BLM	White River Field Office	White River RMP Oil and Gas Amendment - Draft in process	13,000	Scoping Notice of Intent - Federal Register	Jun-06
BLM	White River Field Office	Exxon Mobile/Piceance Development Project, comments on EA due 11/03/06	1,080	Environmental Assessment, Pg 14	Sep-06
USFS/BLM	San Juan National Forest	Northern San Juan Basin Coal Bed Methane Project (HD Mountains)	138	Final EIS, Pg 2-14	Aug-06

Total New Wells in Colorado: 22,802

Montana

Agency	Field Office/Forest	Plan/Project Status	New Wells	Source	Date of New Well Figure
BLM	Billings Field Office and Southern Portion of Miles City Field Office	Powder River/Billings RMP Record of Decision	19,995	Final Environmental Impact Statement, Proposed RMP - Pg-2-25. Alternative E chosen in Record of Decision	Apr-03
BLM	Dillon Field Office	Dillon RMP Record of Decision	10	Final Environmental Impact Statement, Proposed RMP - Pg 160, Proposed Plan chosen in Record of Decision	Feb-06
BLM	Lewistown Field Office	Upper Missouri River Breaks National Monument Draft RMP	34	Draft Environmental Impact Statement, Draft RMP - Pg xii	Sep-05
BLM	Miles City Field Office	Miles City Field Office RMP - Draft in process	6,056	Miles City RFD - Pg 6-2	Sep-05

Total New Wells in Montana: 26,095

New Mexico

Agency	Field Office/Forest	Plan/Project Status	New Wells	Source	Date of New Well Figure
BLM	Farmington	Farmington Record of Decision	9,942	Record of Decision - Pg 3	Dec-03
BLM	Las Cruces	RMP Amendment for Federal Fluid Minerals Leasing and Leasing and Development in Sierra and Otero Counties Record of Decision	141	Record of Decision - Pg 6	Jan-05
USFS	Carson National Forest	Surface Management of Gas Leasing and Development, Jicarilla Ranger District, Carson National Forest	800	Draft Environmental Impact Statement - Pg 1 or Purpose and Need	Sep-03
USFS	Carson National Forest	Oil and Gas Resource Development Potential for the Eastern Unit of Valle Vidal	390	RFD, Pg vii	Jul-04

Total New Wells in New Mexico: 11,273

Utah

Agency	Field Office/Forest	Plan/Project Status	New Wells	Source	Date of New Well Figure
BLM	Monticello	Monticello RMP - Draft in process	195	RFD - Pg 1 and 12	Jul-05
BLM	Price	Price Draft RMP - Final in process	1,500	Draft RMP, Exec Summary, confirmed in RFD pg 7	Jul-04
BLM	Moab	Moab RMP - Draft in process	390	RFD - Pg 19	Aug-05
BLM	Kanab	Kanab RMP - Draft in process	75	RFD - Pg 73	Mar-06
BLM	Vernal	Vernal Draft RMP - Final in process	6,342	Draft Environmental Impact Statement, Pg 4-101	Jan-05

: **Total New Wells in Utah: 8,502**

Wyoming

Agency	Field Office/Forest	Plan/Project Status	New Wells	Source	Date of New Well Figure
BLM	Buffalo	Powder River Basin Oil and Gas Project Record of Decision Published 2003	25,654	Preferred Alternative, Proposed SEIS, Pg 2-73	Apr-03
BLM	Casper	Casper RMP - Draft RMP Published 7/21/06	1,813	Preferred Alternative, Draft RMP, Pg 4-38	Jul-06
BLM	Kemmerer	Kemmerer RMP - Draft in process	1,010	Preferred Alternative, RFD, Pg 8-23	Aug-06
BLM	Pinedale	Jonah Infill Drilling Project Record of Decision	3,100	Record of Decision, Pg 1	Mar-06
BLM	Pinedale	Pinedale-Anticline Gas Field Infill SEIS - Draft in process	6,891	Scoping Notice of Intent	Oct-06
BLM	Rawlins	Desolation Flats Natural Gas Development Record of Decision	385	Record of Decision, Pg 1	Aug-04
BLM	Rawlins	Continental Divide - Creston EIS - Draft in process	8,950	Notice of Intent, Pg 4	Mar-06
BLM	Rawlins	Atlantic Rim Natural Gas Development Project EIS - Final in process	2,000	Draft EIS, Pg 2-6	Dec-05
BLM	Rock Springs	Jack Morrow Hills CAP Record of Decision	255	Jack Morrow Hills ROD, Pg ROD-7	Jul-06

Total New Wells in Wyoming: 50,058

Mr. COSTA. Very good. Well I can assure you that Mr. Pearce is very good at asking his questions, and he will get an opportunity to do just that in terms of the points you raised. I would like to defer at this point to Congressman Udall who has another hearing that he would like to attend, and I know that part of his focus was on the second panel but I would be happy to give you five minutes, an opportunity to focus on your area of interest.

Mr. UDALL. Thank you, Mr. Chairman.

Mr. COSTA. The gentleman from Colorado.

Mr. UDALL. Thank you, Mr. Chairman. I will always be in your debt. Thank you for holding the hearing. If I might, I would ask unanimous consent my entire statement be included in the record.

Mr. COSTA. With no objection, unanimous consent is approved.

[The prepared statement of Mr. Udall follows:]

Statement of The Honorable Mark Udall, a Representative in Congress from the State of Colorado

Thank you, Mr. Chairman, and thank you for holding this hearing on subjects of great importance, especially regarding oil shale.

Oil shale has great potential as an energy source, so it's an important part of our energy policy.

And it's important to the taxpayers, who own most of it. They have an interest in what return they will get for this resource. But it's particularly important for Colorado.

Our state has some of the most important deposits of oil shale, and Coloradans—particularly those on the Western Slope—will be directly affected by its development.

Back in 2005, a report from the RAND Corporation spelled out the great benefits that can come from developing oil shale. But it also made clear it's important for the development to happen in the right way.

The report said oil shale development will have significant effects, not just on the land but also on air quality and on both the quality and quantity of our very limited water supplies.

And it says what Coloradans know already—large-scale oil shale development will bring significant population growth and is likely to put stress on the ability of local communities to provide needed services.

In short, the report reminded us how much Colorado and our neighbors had at stake when Congress debated the oil shale provisions of the 2005 Energy Policy Act.

The current law requires the Interior Department to prepare a programmatic environmental impact statement (EIS) on oil shale.

That's the right thing to do. Work has started on that EIS, and Coloradans look forward to reading it. But the law also tells BLM to proceed promptly toward commercial leasing, regardless of what the EIS says—and, even before we know the outcome of the ongoing research and development work that Shell Oil and others are doing on R&D leases.

I have been concerned that this risks a rush to commercial development before the Interior Department knows enough to do it right and before Colorado's communities have a chance to prepare for what will follow.

So, I note that today the RAND Corporation's witness will testify that "the economic, technical, and environmental feasibility of oil shale development is not adequate to support the formulation of a commercial leasing program on the timescale mandated" by the 2005 law and that "the fundamental approach the Department of the Interior is currently taking may be counterproductive if the goal is to keep open the option for a sustainable domestic oil shale industry."

The RAND witness will also testify that additional legislation may be needed. I think that is right, and I want to work with you, Mr. Chairman, to address this very point as we develop legislation.

Thank you again for holding this hearing, and I look forward to hearing from the witnesses.

Mr. UDALL. Mr. Chairman, the importance of this hearing is not lost particularly on Coloradans given that we are the epicenter for

the potential oil shale development. I think former Director Morgan outlined the concerns that many of us have in Colorado. My good friend from New Mexico talked about the EPAct legislation we passed, and I wanted to remind everybody here and for the record that in that law we required the Interior Department to prepare a programmatic environmental impact statement on oil shale, and that is the right thing to do.

Work started on that EIS but the law also told the BLM to proceed promptly toward commercial leasing, regardless of what the EIS says, and even before we know the outcome of the ongoing research and development work that Shell Oil and others are doing on the R & D leases that have already been issued. And so I share a concern I think that many Coloradans share that this risks a rush to commercial development before the Interior Department knows enough to do it right and before Colorado's communities have a chance to prepare for what will follow.

And in that spirit I wanted to note that the RAND Corporation's witness—and I commend to everybody the RAND Corporation report—will testify that, "The economic, technical and environmental feasibility of oil shale development is not adequate to support the formulation of a commercial leasing program on the time scale mandated by the 2005 law, and that the fundamental approach the Department of Interior is currently taking may be counterproductive if the goal is to keep open the option for a sustainable domestic oil shale industry."

The RAND witness, as I understand it, may also testify that additional legislation may be needed, and Mr. Chairman, I think that is the right course of action, and I would like to work with you to address this point as we move forward. I did—before I direct some questions at the panel—want to acknowledge someone who will testify in the second panel, and that is former Representative and more important present rancher and farmer, Kathleen Sullivan Kelley, who has come all the way here to talk about her experiences in the late 1970s and early 1980s, and I hope we will really listen to her stories because she represents the people in that part of our great state. So it is great to see her representing.

Mr. COSTA. The constituent?

Mr. UDALL. She is not a constituent but she is on the doorstep of every member of the Colorado delegation.

Mr. COSTA. OK. It is just as good.

Mr. UDALL. So she is well known for her passion and articulate approach to explaining what the opportunities are but also the challenges. With that, I wanted to direct a question to Director Morgan, and you spoke to this I think but I heard my colleague from New Mexico suggest that somehow your testimony is at odds with your experience as the State BLM Director in Colorado. Do you agree with that?

Ms. MORGAN. No, Representative Udall, I do not. My years as State Director for BLM in Colorado we did do a lot of oil and gas leasing but we were also very cautious about where we offered those leases. We looked carefully at roadless and wilderness potential lands. We looked at wildlife habitat. I believe——

Mr. COSTA. Bring that mike a little closer, please and make sure it is on. Go ahead.

Ms. MORGAN. Should I repeat that? During my years as BLM State Director in Colorado, I believe we were able to issue oil and gas leases but also take a look at where we were issuing them to make sure that we were staying out of areas of sensitive habitat and staying out of roadless and wilderness quality lands.

Mr. UDALL. Thank you. I want to turn to Mr. Haspel. As I mentioned, the witness from the RAND Corporation suggests that not all is well with the oil shale program. Would you like to comment on that observation?

Mr. HASPEL. Yes, I would. Congress directed, as the Chairman pointed out, the Department to establish a leasing program, commercial leasing program within 180 days after the publication of the programmatic EIS. It did not direct the Secretary, however, to lease. It says that the Secretary may lease if there is, in fact, interest on the part of states and others to do so.

We still would have to make a finding that it would be appropriate to use the leasing program that was constructed within the timeframe that Congress told us, and if the information was such that it was appropriate to do so that he might choose to do so, and if not, he would not. But that is all going to be informed by what we learn from the RD & D leases and what we learn from the public as we go through completing the programmatic EIS, and as we go through the development of the regulations which as I pointed out in my testimony the states of Colorado, Utah and Wyoming have all asked to participate in.

Mr. UDALL. Mr. Chairman, I see my time has expired. If I might, I would like to ask a question for the record of Ms. Morgan.

Mr. COSTA. Yes. I interrupted you and the witnesses in their answers. So quickly.

Mr. UDALL. Mr. Haspel, I would note that it does still say "may" in the legislation, which still leaves the option to the Interior Secretary, and it does have the potential to accelerate the pace of development in ways that I think are unwise. Director Morgan, you have had a chance I think to review the RAND Corporation, and I would appreciate if you would comment for the record at your convenience in that regard, and I know that in your testimony you suggest that there are problems, and is it your understanding it would be up to Congress to fix those problems?

Ms. MORGAN. Yes. I think one of the main concerns we have is that we believe it makes sense to take the information that we gather, that the agency gathers from the project pilots and the R & D projects to form and develop a full commercial leasing program, and the way it is currently set up those are almost concurrent. We are not able to do that.

Mr. UDALL. Thanks again, Mr. Chairman. Thanks to the witnesses.

Mr. COSTA. I thank the gentleman from Colorado, and I think as it relates to the question that was asked last, you can elaborate in your written testimony. I suspect the gentleman from Colorado will ask you that in a formal submitted question. The Chair will now recognize the gentleman from New Mexico.

Mr. PEARCE. Thank you, Chairman. Ms. Morgan, I am reading the statement in Dow Jones, January 20, 2003, by Mr. Peter Morton of The Wilderness Society. He stated that if you bid on a lease

on public land you can expect environmental litigation regardless of the merits. Was he speaking for The Wilderness Society?

Ms. MORGAN. I am not aware of a position of The Wilderness Society along those lines, no.

Mr. PEARCE. OK. That is interesting. Thank you. Mr. Haspel, it has been characterized already in the testimony that the Administration is kind of systematically shortchanging the NEPA policy. You are a career servant so you are not really a political appointee. Do you find any evidence that this Administration or any other Administration has systematically shortchanged NEPA under the processes?

Mr. HASPEL. No. The Bureau of Land Management is following the same process they followed before. I would point out that the number of——

Mr. PEARCE. Is your microphone on?

Mr. HASPEL. Yes, it is.

Mr. PEARCE. OK. Just pull it up close.

Mr. COSTA. A little closer please. We really want to hear you.

Mr. HASPEL. The Bureau of Land Management is following the same processes that they have before. They have been issuing instructional memorandums. I would note that they issue about 250 a year dealing with all the various land use issues they deal with, and somewhere between 10 to 25 over the last four years have been dealing with oil and gas.

The NEPA compliance aspects, they do the resource management plans. They follow through with EAs on site specific. The issue, of course, has been whether or not the categorical exclusions are somehow not an appropriate use. I would tell you that we believe they are. We are making use of the existing NEPA work that has been done, and we are making sure that it is being used in an effective and an efficient way.

Mr. PEARCE. Thank you. Again Ms. Morgan's testimony appeared to criticize the Administration for failing to inspect oil and gas operations to ensure compliance with lease conditions. Again, can you give me your reflection on what the Interior Department does as far as holding people to their lease agreements?

Mr. HASPEL. Prior to issuing APDs, there is a site inspection. After drilling occurs or as drilling occurs and during the process of operations, there are inspections. The number of inspections have increased by more than a third over the last three years where we are now doing just under 17,000 a year. There is sort of a triage process. We go and look at those where we have experience or lack of experience with the operator, where we are in sensitive areas and so on so that we are hitting the high priority inspections given the resources we have made available to us for the purpose of inspection and enforcement.

Mr. PEARCE. All right. Has the Department of the Interior issued any R & D oil shale leases in Utah, and if they have not, why not?

Mr. HASPEL. No, we have not yet. The documentation necessary to do that is now into review in the Washington office, and I do not at this point know when they plan to act on it.

Mr. PEARCE. OK. Ms. Morgan, you have a background with BLM. Are you opposed to using BLM land or Federal lands for generating wind energy?

Ms. MORGAN. Not if it is properly sited.

Mr. PEARCE. Yes. It is curious because they have a much larger footprint than oil and gas. We have some of the largest wind farms in New Mexico. They extend throughout the northern and eastern side of the district and many more are expanding, and they require a larger footprint than oil and gas and produce only very, very small increments. That is curious.

Let us say that we do end up limiting access to Federal lands, which I think is probably the direction we are heading but if we do that, should the Federal government be required to compensate those states? In other words, New Mexico about a billion dollars a year comes just in the form of taxes, and let us say that oil and gas on Federal lands is just limited severely. Should the Federal government pick up and give the people of New Mexico some sort of compensation for that restriction?

Ms. MORGAN. Well it seems to me that that is rather hypothetical, Representative, because right now the vast majority of the lands and resources in Federal lands for natural gas and oil are currently available.

Mr. PEARCE. Yes. Hypotheticals have a way of happening because if you look at the Rocky Mountains, you will find oil and gas footprints currently exist but the agencies are unwilling to lease more land where it already exists. In other words, they are saying we have already drilled here. It is not pristine. We cannot say it is pristine, and yet we limit it.

And so that hypothetical is actually far more close to the truth than a hypothetical, and again if you would like to answer, fine, if you do not want to answer, that is fine too. But I do wonder if you think states should be compensated when we shut off their ability to produce revenue from their states because the Federal government involuntarily took their land. They own 30 percent of New Mexico. They own 30 to 40 percent in Nevada, Utah, all across the west. We do not have the capability to make a living.

Ms. MORGAN. The natural gas resource that has been coming off of the Federal lands has increased steadily over time. So that is the way I see it continuing. As I said, I do not want to——

Mr. PEARCE. I appreciate it. I look back to New Mexico used to have 22 lumber mills, timber mills and, when we got the spotted owl, we were down to two. So I do believe that American jobs are at stake. I think we are going to outsource the oil and gas production, and I would have liked to have had your opinion on the record but I can understand why you did not. Thank you very much, Mr. Chairman.

Mr. COSTA. Yes. We need to try to get a little closer back on time here. I have been trying to be very generous both to the gentleman from Colorado and New Mexico. I guess I will be advised not to be so generous in the future with my colleagues from western states. I will try to see if I can stay to the five minutes.

You know however you slice and dice it, and I know there is a great debate and we are having part of it take place here on the use of public lands for domestic oil and natural gas production, if you look at the snapshot in the last 10 years, as I have tried to do, both during the Clinton Administration and during the current Administration, it is clear that the application of permits to drill

have increased, and it is clear that the amount of production that has taken place both as it relates to oil and gas has increased.

Now, we can argue as we I think want to as to whether or not this is good or bad policy. It is obviously an attempt to try to reduce our dependence but at the same time it has impacts, and some of those impacts are positive, and some of them are adverse. Dr. Haspel, the Western Governors' Association has recommended a repeal of Section 390 and to create a new category of exclusions for environment review and public comment for some new permits to drill on BLM lands.

Has the Department had an opportunity to reflect on the position on Section 390, and what would be your response to the Western Governors' recommendation?

Mr. HASPEL. The Department has, and I would characterize our consideration the following way. We believe there has been a misunderstanding in terms of what 390 implies. We do not believe——

Mr. COSTA. A little closer to the mike please. There has been a misunderstanding. I got that part.

Mr. HASPEL. In terms of what 390 allows or does not allow, we believe that the categorical exclusions in 390 are interpreted to mean there will be no public involvement. That there will be no coordination with state game and fish agencies. There will be no consideration with regard to other environmental concerns such as endangered species or national historic preservation. All these are incorrect. Those will all continue.

What this does is basically say that there has been environmental work done. Use that first, and then when we come back to site specific work we will do more. The BLM will continue to have to provide information on pending oil and gas wells to state game and fish agencies. APDs will be posted for public review for 30 days. All the other environmental statutes and regulations continue to apply.

Mr. COSTA. OK. So my time does not expire here, I would like you to submit in detail the answer to that question that you I think began and were just about to conclude with but let me move on. Your testimony also talks about the number of inspections of oil and gas activities completed, and you talked about I think some positive effort the increase from 12,785 wells in 2001 to over 16,967. I guess how many opportunities does BLM have to inspect nationwide or put another way, what percentage of the BLM's inspection obligations is the agency meeting with roughly 17,000 I am told inspections a year?

Mr. HASPEL. Let me find out.

Mr. COSTA. This does not count against me, please, gentlemen. If you do not have the answer, you can submit it.

Mr. HASPEL. I am told that it is about 80 percent.

Mr. COSTA. Eighty percent. If you can provide more detail later on, I would appreciate that. Ms. Morgan, I would like to move to you with the time remaining. Your testimony mentions the BLM's rush to lease lands for oil and gas development has resulted in the agency including some inappropriate parcels and lease sales. From your point of view or The Wilderness Society, what are some of the areas that you consider most inappropriate that have been leased or most in jeopardy?

Ms. MORGAN. My written testimony gave three examples from about a six-month period just in Colorado last year. Those included leases in municipal watersheds, potential lease underneath a city park, and a potential lease under state wildlife lands. The last two were brought to the attention of the BLM because they were protested, and they withdrew those.

Mr. COSTA. My time is expiring here so we can ask in greater detail. You talked about the 30-day timeframe in your testimony and that is being inappropriate. Do you think any deadlines are appropriate?

Ms. MORGAN. I think the problem with the 30-day timeframe is the incredible volume of work that the BLM is facing.

Mr. COSTA. OK. I get that but do you think any timelines are appropriate?

Ms. MORGAN. I did not come today with a particular timeframe in mind. I think you probably could come up with a timeframe as appropriate.

Mr. COSTA. My last question before the time expires. What planning occurred when you were BLM Director that does not occur now? It is done. You can submit that in written testimony.

Ms. MORGAN. All right.

Mr. COSTA. No. I want to make sure. I cannot admonish my colleagues and then extend beyond the time.

Mr. UDALL. Mr. Chairman?

Mr. COSTA. Yes?

Mr. UDALL. I would be happy to yield some of Mr. Pearce's upcoming time either to get the question asked or——

Mr. PEARCE. Mr. Chairman, we both will give you 40 seconds apiece, Mr. Chairman.

Mr. UDALL. Time we do not have.

Mr. COSTA. You can answer that question if you can do that in 40 seconds.

Ms. MORGAN. The same kinds of planning occurred when I was State Director is occurring now. That is through resource management plans and other kinds of plans. The difference is that we took a look at the parcels that were proposed for leasing and made a decision whether they were appropriate or not.

Mr. COSTA. OK. Thank you very much. I now yield back to the gentleman from New Mexico.

Mr. PEARCE. I thank the Chairman. Ms. Morgan, if I were to follow-up on that question, I would ask as I look at these three parcels and they were all submitted and then they were withdrawn during the comment period, is that not correct?

Ms. MORGAN. Two of the three were, Representative. The lease under the municipal watershed did go ahead.

Mr. PEARCE. But is that not the process that we raise things up and elevate them, let people come and comment, and if comments are proved to be detrimental that there is not a probable or good lease site that we should withdraw? I mean that to me is the process working, and yet you use it to describe that this Administration has some rush to lease. You worked in the Clinton Administration. Did you all ever put leases up that were eventually withdrawn? Any kind of lease ever?

Ms. MORGAN. Yes, I am sure we did.

Mr. PEARCE. Yes. So the process worked OK there but I do not know. I just find your observations to be curious. Now you were mentioning in your testimony that 12 million acres of BLM land is dedicated—is that not the word—that that is the figure you used, 12 million is dedicated to oil and gas production?

Ms. MORGAN. No, sir.

Mr. PEARCE. I wrote down the 12. What was the 12 million that you commented about in your verbal testimony because it is about 12 million oil and gas production?

Ms. MORGAN. I believe I said that 36 million acres are under lease, and 12 million are in production.

Mr. PEARCE. Twelve million is in production. You described that as a predominant amount yet when I do the math, 12 divided by 269 I come up with kind of a small number and not a dominant number. Would you like to say that that is inaccurate or how did you come up with the idea that this is an overwhelming percent?

Again that chart there kind of lays it out. The 12 million is a little, little bitty sliver that looks like just an edge of that line but that to me puts it in perspective when I look at the full circle of all the BLM lands and see how little 12 million actually is. I find the number 12 million to my ear sounds very big but 12 million as a percent sounds very small. I mean you are welcome to give the other side of that observation.

Ms. MORGAN. The 12 million are the amount of leased acres that are currently being produced so that means that there is additional lease acres that supposedly will go into production. The larger number is the amount of lands, BLM lands that are available to be leased through the resource management planning process.

Mr. PEARCE. Yes, that 36 million or whatever number, that is the larger. That is the small pie. The bulk, the rest of the 92 or 3 or 4 percent of BLM lands are not leased or even available for lease, and so again I find that to be underwhelming myself but whatever observation that you would care to have. You are proposing that the wilderness projects that you referred to in the opening part of your statement that you represent suggest that 50 percent of North America be designated as wilderness and treated as de facto wilderness, in which case energy and mineral resources would have to be curtailed drastically.

What are we supposed to do to really heat and cool the country and to drive our automobiles if we move to that exclusion that begins to narrow down that small percent that we have so far?

Ms. MORGAN. I am not sure where that figure comes from, Representative. That was not in my testimony.

Mr. PEARCE. Yes. The signatories to the western energy agenda. That is where it comes from. The wildlands conservation planning project. I think it is off the web page but it is the wildlands project, and it appears to be part of your organization's——

Ms. MORGAN. No, sir, that is not.

Mr. PEARCE. You are certain that this is not part of The Wilderness?

Ms. MORGAN. Yes, sir.

Mr. PEARCE. OK. All right. Thanks. Appreciate that. Mr. Chairman, I will yield back the 46 seconds and help you there.

Mr. UDALL. [Presiding.] I thank the gentleman for yielding back, and I want to thank the witnesses for their valuable testimony and the members for their questions. We are going to proceed to the second panel. Members of the Subcommittee may have additional questions for the witnesses, and we would ask you to respond in writing, and the hearing record will be held open for 10 days for the responses. Thanks again, Dr. Haspel and Director Morgan.

[Pause.]

Mr. UDALL. I would like to recognize the second panel of witnesses. We have joining us Senator Curtis Bramble, the Majority Leader of the Utah State Senate; Mr. Jim Bartis, the Senior Policy Researcher at the RAND Corporation; Ms. Kathleen Kelley, a former State Representative from Colorado who I mentioned earlier; and Mr. Oscar Simpson, Public Lands Community Organizer of the National Wildlife Federation; and Mr. Paul Cicio, President, Industrial Energy Consumers of America. At this point I am going to turn the hearing back over to the Chairman, and thank you again for being here today.

Mr. COSTA. [Presiding.] You have done a marvelous job. All right. We have the first witness before us, which is State Senator Curtis Bramble. Good to have you here.

STATEMENT OF SENATOR CURTIS BRAMBLE, MAJORITY LEADER, UTAH STATE SENATE

Mr. BRAMBLE. Thank you, Mr. Chairman. That is senator with a small S.

Mr. COSTA. You know I was a State Senator for eight years, and it is a lovely title, and I do not think you have to explain it. Everybody knows what a senator is. When I was an assembly member, I always had to explain it. People asked me what I assembled, and so I would stick with that title. It stead me well.

Mr. BRAMBLE. Well thank you, Mr. Chairman, and members of the Subcommittee for allowing me to share Utah's perspective on the Energy and Policy Act of 2005. I am testifying as the Utah Senate Majority Leader but also as a member of the American Legislative Exchange Council known as ALEC. They have more than 2,400 legislative members from all 50 states, and over 90 Members of Congress are members of ALEC. It is an honor to be here today.

Utah developed a state energy policy in the 2006 general session. In that statute, it references adequate, reliable, affordable, sustainable clean energy resources. The statute mandates that we pursue energy conservation, energy efficiency, and environmental quality. It is a bit of a concern if the intent of this Congress would be to lock up, to repeal the 2005 Act and lock up Federal lands.

Our state policy is to promote development of nonrenewable energy sources, such as natural gas, coal, oil, oil shale and tar sands and renewable energy resources including geothermal, solar, wind, biomass, biodiesel and ethanol. You know it is interesting in the recent past Utah's Lieutenant Governor, Gary Herbert, in a committee meeting with Senator Domenici and Senator Salazar firmly stated on public record that Utah supports the development of sustainable oil shale and tar sand resources in Utah.

Guiding principles for sustainable development are to promote economic prosperity, encourage responsible environmental protec-

tion, enhance the quality of life by addressing social and cultural needs of the people of Utah. Utah applauds this Act and encourages its implementation. Yesterday, today and tomorrow the Utah's Governor Huntsman, the Governor of Wyoming, Montana and I believe Nevada, as well as business, academia, conservation and environmental groups are meeting in Salt Lake City on an energy summit to address the challenges that we face.

America has a tremendous resource in the Green River formation of Utah, Colorado and Wyoming. It is estimated over two trillion barrels of oil are tied up or locked up in the oil shale and tar sands. That is enough to meet the U.S. demands for over 400 years if we can find a way to develop it.

I would like to address one issue that came up about Federal lands though. Utah and the west have a unique economic landscape. In Utah, over 70 percent of our land mass is owned by government. Over two-thirds of the State of Utah is owned by the Federal government. We have less than 30 percent of our state is held by private interests. What that does economically, Mr. Chair, our cost of government, the taxes Utahans pay is seventh highest in the nation, we have the lowest per pupil spending in the nation. We have one of the highest percentages of our state budget allocated to public education. In fact, all of our income taxes, both corporate and individual, go to education.

Our economy depends on the effective and efficient and responsible development of these resources. Critics and skeptics would say that this type of development is a boom/bust. I am a CPA. I have been practicing for over 30 years. Virtually ever sector of our economy has economic cycles. You could call it boom and bust. Whether it is automobile, high tech, housing, steel, semiconductor chip manufacturing, they all have economic cycles.

The real challenge is to moderate the impact of those cycles and to find ways to make it sustainable. Utah is committed to responsible use of land. Mining now is much different than it was in the 1890s. The challenges that we need to overcome are environmental, technical and economic but I would like to make one point very clear, and I say this speaking not only from our statutorily adopted energy policy but having spoken with legislative leadership and the Governor.

Extracting natural resources and developing natural resources and maintaining responsible stewardship of the land are not mutually exclusive. I would be happy to respond to any questions.

[The prepared statement of Mr. Bramble follows:]

Statement of Curtis S. Bramble,
Utah State Senate Majority Leader, Utah State Senate

UTAH'S APPROACH TO ENERGY AND ECONOMIC DEVELOPMENT

Thank you, Mr. Chairman and Members of the Subcommittee, for allowing me to share Utah's perspective on the Energy Policy Act of 2005. I am testifying as the Utah Senate Majority Leader and as a member of the American Legislative Exchange Council (ALEC). ALEC has over 2,400 legislator members from all fifty states and over 90 members in the Congress. It is an honor to serve and to testify today.

Utah State's energy policy mandates that we develop

"...Adequate, reliable, affordable, sustainable, clean energy resources."

That we

> Promote the development of nonrenewable energy resources (such as natural gas, coal, oil, oil shale, and tar sands), AND renewable energy resources (including geothermal, solar, wind, biomass, biodiesel, and ethanol).

Utah has three objectives. To

> "...pursue energy conservation, energy efficiency, and environmental quality."

Our policy states we will

> Promote the development of resources and infrastructure sufficient to meet our demand AND contribute to the regional and national energy supply, to reduce dependence on international energy sources.

We believe

> "...economic prosperity is linked to the availability, reliability and affordability of consumer energy supplies..."

[Source: Utah Code 63-53b-301, enacted in 2006.]

OIL SHALE, SPECIFICALLY

I want to talk about oil shale, specifically.

America has a tremendous resource in the Green River Formation. It's a layer of rock 40 to 60 feet thick under parts of Utah, Colorado and Wyoming. In White River, Utah, it lies about a thousand feet below the surface.

This layer of rock is sedimentary stone but 18 percent of its weight is ancient organic material. Heat it up and you can extract shale oil (and high BTU gas). Refine it and you get premium transportation fuel.

Some people estimate the Green River Formation holds 2 trillion barrels of recoverable oil. 2 trillion barrels of oil is enough to meet current U.S. demands for the next 400 years.

The total recoverable crude oil ON EARTH is estimated at about 1 trillion, over half of that in the Middle East. The U.S. has about five percent. In contrast, the U.S. has about 73 percent of the total recoverable oil shale reserves.

Our nation's demand for oil is increasing. At the same time, increased global demand, skyrocketing energy prices, geopolitical instability, concerns about peak oil production and supplies make the situation problematic. We will not be able to conserve our way out of this dilemma. All these factors make oil shale an attractive resource to help to solve our country's dependency problems.

There are a number of state initiatives in Utah to assist with energy development. One of these, the Utah Science Technology & Research Initiative (USTAR), provides money to research institutions to develop economically viable programs in all areas of science, including energy.

The Utah State University Vernal Campus, located in the Uintah basin, in cooperation with USTAR is developing an Energy Research Center which will work with the BLM, and the oil and gas industry on emerging energy resources such as oil shale and tar sands. USTAR is one way local communities are working to promote energy development in rural Utah.

Successful development of oil shale will help to solve our nation's energy dilemma and also bring millions and eventually billions of dollars to Utah and the Uintah Basin in royalties, mineral lease monies, and other economic benefits.

Utah's White River Mine operation, run by the Oil Shale Exploration Company (OSEC) will be one of our nation's flagship ventures into this alternate fuel.

OSEC is ready to move forward, but are still waiting for the BLM to approve the lease. While we don't begrudge federal agencies' caution, we would like to see good, safe, environmentally sound projects roll forward more expeditiously.

RESPONSIBLE USE OF THE LAND

Today's mining techniques are much different than the mining of the 1890s. We can find what we need in the earth without undue impact to the landscape. Most parties are committed minimizing impact to the land.

The footprints of these new mining operations tend to be limited to necessary infrastructure, plus entry and exit points in the earth. We are not comfortable with the strip-mining model of oil shale extraction.

In Colorado, Shell Oil is developing an in situ conversion process drawing the usable material directly from the rock where it lies. Colorado shale is closer to the surface, while Utah's shale is 1000 feet underground—we'll have to tunnel down and bring it out, using the room-and-pillar mining methods. The mined shale will then be crushed and pryo-processed in a retort to produce shale oil.

There will be many challenges to overcome before we produce oil shale commercially. These include: productive use of the spent shale, mitigating greenhouse gases, finding enough water to facilitate the process; and, the high cost to private companies.

If the private sector makes all the investments, we are looking at the year 2025 before you get your first tank of gas from oil shale. Government has an opportunity to really help jump-start this emerging unconventional fuel.

We would request that government at all levels look at appropriate incentives to speed this process. Last year, Utah provided a severance tax exemption to encourage developing oil shale technologies.

Until we figure out how to commercially produce this resource, we are at the mercy of Venezuela, Saudi Arabia, and other oil producing countries.

Utah is a beautiful state and we want to keep it that way. We believe we can pursue resource extraction in a way that is sustainable and environmentally responsible.

ECONOMIC AND COMMUNITY LANDSCAPE OF THE WEST

The landscape of the American West is a constellation of small communities surrounded by vast stretches of federal land, and dotted here and there with larger towns and cities. We enjoy stunning vistas and unbelievable recreational opportunities, but those same vistas can constrict economic opportunity. In Utah, less than 30 percent of our land is privately held. The federal government owns and controls over 70 percent. That creates unique challenges in meeting the needs of a growing population.

The revenue from oil, gas and other mining helps make up for the inability to derive revenue such as property taxes from federal lands.

In the budgeting process at the Utah State Legislature, we treat volatile income streams such as severance tax revenue as one-time income. We don't initiate ongoing programs with that money, but we can build roads, bridges, buildings, and infrastructure that is vital to our rural communities.

Skeptics warn of a boomtown economy. They have a point, but, there are natural cycles in every sector of our economy. If forced to make the choice, we'd rather have a boom and bust, than just constant bust. However, I believe there are alternatives that can moderate those cycles.

The small communities in eastern Utah and Western Colorado were devastated by Black Sunday 1982, when oil prices plummeted to $12 a barrel. The Colony oil shale project in Western Colorado locked its gates and overnight, thousands of workers found themselves without a job, the local economies were immediately thrown into a recession.

The politics and economics are much different now than they were in the 1970s. However, we still need to proceed in a careful, deliberate manner that will help avert the tragic social and economic dynamics of the past.

We are grateful to live in a land that is so beautiful and offers so much opportunity for the nation.

We invite each level of government to do what it can to facilitate responsible energy development. The opportunities to do so are completely within our grasp.

We do not believe that extracting natural resources and good stewardship of the land are mutually exclusive. Our economy depends on our ability to use these resources.

Let's get ourselves out of the energy impasse.

As a state, we believe we need to

- Pay attention to the opportunity for jobs in our rural areas;
- Work to provide energy for a growing region and hungry nation;
- Continue to explore non-traditional, alternative energy sources;
- Provide royalty, or tax incentives to encourage development of new technologies;
- Develop these resources deliberately and responsibly, so our western landscape will always be majestic and functional as a natural community; and so the boom and bust cycles of the past do not repeat themselves to the detriment of our local communities.

The current policy of the United States is that

(1) United States oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports;

(2) the development of oil shale, tar sands, and other strategic unconventional fuels, for research and commercial development, should be conducted in an environmentally sound manner, using practices that minimize impacts; and

(3) development of those strategic unconventional fuels should occur, with an emphasis on sustainability, to benefit the United States while taking into account affected States and communities.

[Source: TITLE 42. THE PUBLIC HEALTH AND WELFARE, CHAPTER 149. ENERGY POLICY, 2005—OIL AND GAS ACCESS TO FEDERAL

LANDS (42 USCS § 15927: Oil shale, tar sands, and other strategic unconventional fuels)]

That policy makes a lot of sense to us.

This is an important committee. I am grateful for the opportunity to speak to you this afternoon. If you have questions, I would be happy to respond.

Mr. COSTA. Thank you, Senator. Did I hear you correctly? Did you say in the 1890s?

Mr. BRAMBLE. I said mining is different now than the 1890s.

Mr. COSTA. OK.

Mr. BRAMBLE. If you look at what has happened in Colorado, Utah——

Mr. COSTA. I thought you were making reference to your own involvement, and I said you look for too young to be involved.

Mr. BRAMBLE. Well my grandchildren would appreciate that.

Mr. COSTA. Anyway our next witness is Mr. James Bartis from the RAND Corporation whose publication has been referenced on prospects and policy issues regarding oil shale development in the United States, and we are looking forward to your testimony. Thank you, Mr. Bartis.

STATEMENT OF JIM BARTIS, SENIOR POLICY RESEARCHER, RAND CORPORATION

Mr. BARTIS. Mr. Chairman and distinguished members, thank you for inviting me to testify and express my concern that the oil shale provisions of the Energy Policy Act of 2005 fall short of what is needed to ensure that the strategic potential of this unique resource can be realized. My remarks today are based on research conducted by RAND and sponsored by the National Energy Technology Laboratory.

The public wealth embedded in oil shale lands owned by the Federal government is staggering. Many of the leased tracts in the Piceance Basin each hold over six billion barrels of oil. The public share of the anticipated revenues from just a single lease is in the tens of billions of dollars, and if we look at the entire Green River formation, the public share is in the trillions of dollars but none of this potential wealth can be realized without proper stewardship of the Federal oil shale lands.

Our research indicates that the state of technology development and the state of our knowledge of environmental conditions within the Green River formation are not sufficient to support a Federal decision to go forward with a large scale commercial development of oil shale. In particular, the programmatic environmental impact statement for commercial leasing is drawing on technical information that is either out of date or highly speculative.

Moreover, there is an important new issue that was not examined as part of oil shale development in the early 1980s, namely greenhouse gas emissions. For example, extensive development of oil shale may require sequestration of carbon dioxide. My greatest concern, however, centers on the adverse consequences of on the one hand not moving forward at all or on the other hand moving forward so quickly that the Federal government squanders the opportunity of capturing the public share of the wealth held in the oil shale lands or discounts the environmental impacts of development or precludes the possibility of large scale development.

The best oil shale deposits occur in a very small area of Colorado and Utah. Without careful planning by the government, the air and water quality impacts, the provisions taken to meet water demands, and the infrastructure associated with just the first few commercial plants may stop all further development. The result will be an oil shale industry unable to make a significant contribution to the nation's energy security.

Considering the dangers of moving forward prematurely with oil shale, I suggest the following for consideration by the committee. One, rescind the requirement to prepare a programmatic EIS for commercial leasing. Instead require a phased EIS effort for establishing an oil shale leasing and development strategy for the Federal government.

Two, rescind the requirement to establish final regulations for a commercial leasing program. Within the next few years adequate information will simply not be available. Three, require that the Departments of Energy and the Interior and the Environmental Protection Agency cooperatively develop an oil shale leasing strategy. The near term objectives of this strategy should focus on obtaining information required for determining when, how, where and how much oil shale development should occur on Federal lands, and I left out the states. They have to participate there. So I apologize.

Four, require that these same three agencies investigate and report on alternative approaches to providing early access to Federal lands for a small number of first of a kind commercial production facilities. Five, require that the Department of Interior conduct a second round of leasing of very small areas for conducting oil shale research. Additional leasing for research is very much in the national interests because a broader set of participants will encourage competition and innovation.

And sixth and finally, require that the Departments of Interior and Energy conduct critical environmental and ecological research, conduct high payoff process improvement research, assess carbon management options, and evaluate the viability of a large scale demonstration of carbon dioxide sequestration in the vicinity of the Piceance Basin.

In closing, I note that each of these six recommendations support the overall measured approach described in the RAND National Energy Technology Laboratory report. This measured approach involves proceeding at a slow enough pace to enable evaluation and course correction along the way, but fast enough to advance understanding and preparation for a possible large scale commercial production so that we are in a much better position to weigh both benefits and costs.

The current framework established by EPAct to rush forward with commercial leasing is clearly not a measured approach. Thank you.

[The prepared statement of Mr. Bartis follows:]

Statement of James T. Bartis, [1] THE RAND CORPORATION

Chairman and distinguished Members: Thank you for inviting me to speak on the development of our nation's oil shale resources. I am a Senior Policy Researcher at the RAND Corporation with over 25 years of experience in analyzing and assessing energy technology and policy issues. I am also the principal author of a RAND report that addresses the prospects and policy issues of oil shale development in the United States. [2] This work was sponsored and funded by the National Energy Technology Laboratory (NETL) of the U.S. Department of Energy. Since that work was published in the summer of 2005, I have continued to follow the industrial progress and government activities associated with oil shale development in Colorado and Utah.

The Energy Policy Act of 2005 (EPACT) established the framework the federal government is currently using to move forward in developing the domestic oil shale industry. In some areas, such as in the awarding of small lease tracts for research and development (R&D), significant progress has occurred. But in other areas, such as in preparing for early commercial leasing, I am concerned that the EPACT oil shale provisions fall short of what is needed to ensure that the strategic potential of this unique resource could be realized.

Today, I will discuss the key problems and policy issues associated with developing the domestic oil shale industry and the approaches Congress can take to address these issues. My key conclusions are as follows: (1) the knowledge base about the economic, technical, and environmental feasibility of oil shale development is not adequate to support the formulation of a commercial leasing program on the timescale mandated by EPACT; (2) the fundamental approach the Department of the Interior is currently taking may be counterproductive if the goal is to keep open the option for a sustainable domestic oil shale industry; (3) meanwhile, important opportunities for early action are not being addressed; and (4) additional legislation may be appropriate to ensure that federal actions are most effectively directed at the sustainable development of oil shale at a level commensurate with its importance to our national security and economic well-being.

The Importance and Value of Oil Shale

The potential public wealth embedded in our oil shale lands is staggering. Many, if not most, of the potential lease tracts in Colorado will contain over 2 million barrels of oil per surface acre. That means that a single 5,760-acre lease tract holds nearly 6 billion barrels. Assuming a modest recovery of the total oil within a lease tract, the potential public value of a single lease is clearly in the tens of billions of dollars. The potential public value of the total oil in place in oil shale deposits in the Green River Formation is in the trillions of dollars. However, realizing this potential depends on making further technical progress and on developing a regulatory and land management framework that ensures environmentally sustainable oil shale production.

As part of RAND's examination of oil shale development, our research addressed the strategic benefits of having in place a mature oil shale industry producing millions of barrels of oil per day. Such a level of production would yield considerable economic and national security benefits, primarily by causing world oil prices to be lower than what would be the case in the absence of oil shale development. As a result, consumers would pay tens of billions of dollars less for oil. Lower world oil prices would also cause a decrease in revenues to oil exporting nations, some of which are governed by regimes that are not supportive of U.S. foreign policy objectives. These benefits associated with lower world oil prices accrue to our nation as a whole; however, they are not captured by the private firms that would invest in oil shale development.

If shale-derived oil can be produced at prices well below world oil prices, then the private firms that do invest in oil shale development could garner economic profits above and beyond what is considered as a normal return on their investments. Through lease bonus payments, royalties, and taxes on these profits, we estimate

[1] The opinions and conclusions expressed in this testimony are the author's alone and should not be interpreted as representing those of RAND or any of the sponsors of its research. This product is part of the RAND Corporation testimony series. RAND testimonies record testimony presented by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

[2] Oil Shale Development in the United States: Prospects and Policy Issues, Santa Monica, CA: RAND MG-414-NETL, 2005.

that roughly half of these economic profits could go to federal, state, and local governments and, thereby, broadly benefit the public.

While the prospects of major economic and national security benefits motivate the development of oil shale, federal actions need to be tempered by the need to address the adverse environmental impacts and risks that accompany such development. Moreover, with the growing realization of the role of carbon dioxide in promoting climate change, these adverse impacts are not just local and regional, but also global.

The Current Commercial Leasing Schedule

At present, a number of firms are making appreciable investments in research directed at furthering the development of technologies required to produce liquid fuels from oil shale. However, to my knowledge, none of these firms has gathered technical information adequate to warrant a decision to invest hundreds of millions, if not billions, of dollars on first-of-a-kind commercial oil shale plants. These firms continue to focus on process development, improvement, and evaluation, but they have not yet conducted the front-end engineering and design work needed to establish the economic viability, oil recovery potential, and environmental performance of the approaches under consideration.

The fact that industry is years away from establishing commercial viability and environmental performance calls into question the analytic basis of the current, legislatively imposed schedule for establishing regulations for commercial leasing. The programmatic Environmental Impact Statement (EIS) for commercial leasing is being prepared with very limited information on the environmental performance of important new processes, especially the in-situ extraction methods that offer to reduce significantly the environmental impacts of oil shale development. There is limited information on the response of local vegetation and wildlife to ecosystem loss or damage, on the eventual options for habitat restoration, or on how carbon dioxide emissions will be managed, including the feasibility of geological sequestration.

A reasonable alternative is to eliminate the legislative requirement to fast-track the promulgation of regulations for a commercial leasing program. Instead, the federal government could focus its efforts on the critical steps required for developing oil shale, as further discussed in this testimony.

The Challenge of Oil Shale Leasing

For several reasons, the federal approach to oil shale leasing cannot be based on the approach used to lease other energy resources—such as coal, petroleum, and natural gas—that occur on federal lands. First, as discussed above, there is no prior commercial experience that is relevant to the development of the rich U.S. oil shale resources. The government lacks important information about the costs and risks of development. It thus runs the risk of either being too lenient about lease bonus and royalty payments, allowing firms to have access without adequate compensation to the public, or too zealous, causing a loss of private-sector interest in oil shale development, especially for initial commercial plants.

Second, because of the vast size and geographic concentration of the highest-value oil shale resources and the need to perform extensive on-site processing, leasing decisions made by the federal government may have a profound impact on the residents of northwestern quarter of Colorado and the northeastern quarter of Utah. In particular, large-scale development of oil shale will cause federal lands to be diverted from their current uses, will almost certainly have adverse ecological impacts, and will likely be accompanied by socioeconomic impacts that could be particularly severe, especially within the northwestern quarter of Colorado.

Finally, and most important, the impacts on air and water quality, the provisions taken to meet demands for water, and the infrastructure associated with the initial round of commercial plants may impede, if not fully preclude, the development of oil shale to a level commensurate with its potential economic and national security value to the nation. As with the previous issue, this problem derives from the geographic concentration of all high-value oil shale resources to the very small area encompassed by the Piceance Basin of Colorado and within a small portion of the Uinta Basin within Utah. As an example of this problem, estimates made in the early 1980s predicted that shale-derived oil production could not exceed a few hundred thousand barrels per day, based on considerations of how just a few plants located in the Piceance Basin would degrade regional air quality.

The Critical Path for Oil Shale Development

In my judgment, establishing a broad-based commercial leasing program within the next five years is not necessary and, in fact, may be detrimental to oil shale development. Since the publication of the 2005 RAND report sponsored by NETL on the prospects and policy issues of oil shale development, important technical

progress has taken place. A number of highly reputable firms have announced their interest in pursuing oil shale. Some of these firms are participating in the Research, Development, and Demonstration (RD&D) lease program being administered by the Bureau of Land Management (BLM). Others are interested in participating, if a second round of RD&D leases becomes available. However, based on our knowledge of where these firms are in technology development and evaluation, none—with the possible exception of Shell Oil—will be prepared to make a financial commitment to a pioneer commercial-scale oil shale facility for at least five and, in some cases, as many as ten years.

Given this judgment about corporate preparedness to move forward with oil shale, I suggest the federal government direct its efforts at the list of "early actions" listed in the RAND oil shale report, viewing those actions as priority measures for developing oil shale as a strategic resource for the United States.

Conducting critical ecological and environmental research: This includes developing and implementing a research plan directed at establishing options for mitigating damage to plants and wildlife, conducting mathematical modeling and monitoring of the subsurface environment, and conducting research directed at identifying options for long-term spent shale disposal.

Developing a federal oil shale leasing strategy: The overall goal of this strategy should be preserving the option of the sustainable, and publicly acceptable, large-scale development of oil shale within the Green River Formation. While developing information and analyzing options for eventual commercial leasing should be an important component of this strategy, the near-term objectives should focus on obtaining information required for determining when, how, where, and how much development should occur on federal lands within the Green River Formation. Beyond the above-mentioned ecological and environmental research, critical information needs include process performance, infrastructure demands (especially, water, power, processing facilities, and pipelines), options for protecting regional and local air and water quality, analysis of the feasibility of multi-mineral development, and options for carbon sequestration.

Fostering technology development: By providing small RD&D leases within the Piceance Basin to three firms, the BLM has made important progress in moving oil shale technology forward. However, this should not be a one-time program. In preparing for a second round of RD&D leases, the BLM should review the continued appropriateness of provisions that may not be consistent with a strategic plan for large-scale oil shale development. Examples of questionable provisions include requiring multi-mineral development and granting preference rights to future commercial leases. Other firms that appear to be highly qualified to invest in oil shale development are interested in obtaining small lease tracts suitable for RD&D. Encouraging their participation is in the national interest, because a broader set of participants will promote greater innovation and competition. We also suggest that the federal government consider sponsoring high-risk, high-payoff research directed at improving the yield and environmental performance of oil shale technologies. To the extent that this research is conducted at universities and national laboratories, it offers the important benefit of educating and maintaining a cadre of scientists and engineers that are highly knowledgeable of oil shale development.

Providing land access to early commercial plants: While a commercial leasing program is premature, a mechanism is required for providing access to federal oil shale lands to those firms prepared and able to finance, construct, and operate pioneer commercial oil shale production facilities. Given that production from a single lease may have a public value of tens of billions of dollars—once oil shale technology is commercial and competitive leasing is possible—we suggest that the government refrain from attempting to establish the regulatory parameters for the full exploitation of a lease site that would occur after expansion of the pioneer facility. An alternative approach is for the government to provide land access and possibly other assistance in the context of a cooperative agreement with the industrial proponent of the project. Such an agreement would be project-specific and would include provisions covering the schedule and duration of the project, environmental performance, environmental monitoring, and payments to the government, all of which would be consistent with the government's overall leasing strategy. Most important, the initial cooperative agreements should not prejudice how lease agreements might be done in the mature phase of an oil shale industry.

Fostering early commercial experience: In building first-of-a-kind plants, a private firm will take on considerable technical risks, as well as the market risks associated with fluctuating world oil prices. Considering the economic and national security benefits associated with achieving large-scale oil shale production, it is appropriate for the government to share in these risks. This is a policy area that RAND is currently examining. At this time, I can say that we are considering a number of op-

tions, such as allowing capital investments in pioneer plants to be expensed and deferring lease bonus and royalty payments until the production facility is operating at a profit. The efficacy and economic and fiscal impacts of these options require further analysis.

However, based on my own professional experience and judgment, I caution against the use of federal loan guarantees. Firms with the technical and management wherewithal to build and operate first-of-a-kind oil shale plants—and then move forward with subsequent plants—generally have access to needed financial resources. Loan guarantees can induce the participation of less-capable firms, while shielding the project developer from the risks associated with cost overruns and shortfalls in plant performance. The public then ends up with the bill if the project fails.

Dealing with the impact of oil shale development on global climate change: Most process concepts for producing liquid fuels from oil shale cause carbon dioxide emissions in excess of those associated with refining conventional crude oils. Since most of these emissions will come from large stationary sources, such as power plants providing electricity to oil shale facilities and plants for processing shale-derived oil, it may be feasible to capture this excess carbon dioxide. For initial commercial shale processing plants, an option is to use this captured carbon dioxide for enhanced oil recovery in nearby oil production areas.

But the extensive development of oil shale would likely produce carbon dioxide at levels beyond the capacity of the enhanced oil recovery market. In this case, the captured carbon dioxide may need to be geologically sequestered. At present, however, the technical feasibility of geological sequestration has not been demonstrated. Thus, a critical issue in developing oil shale may be successfully demonstrating geological sequestration in the general vicinity of the Piceance Basin. Toward this end, planning for oil shale development should include assessing the potential use of co-produced carbon dioxide for enhanced oil recovery and the viability of geological sequestration, including a large-scale demonstration.

Options for Legislative Action

Congress has the opportunity to address a number of existing legislative constraints and mandates that may not be in the best long-term interest of the nation, if oil shale development is to remain a viable option. There are also a few areas where Congress may need to assert its will, such as including the U.S. Environmental Protection Agency in federal planning for oil shale development. I suggest the following for consideration by the Committee.

1. Rescind the requirement to prepare a programmatic EIS for a commercial leasing program within 18 months. Instead, require that the programmatic EIS be a phased effort for establishing an oil shale leasing and development strategy for the federal government. The initial phase of this effort should be directed at establishing critical information needs so that appropriate research programs can be formulated and carried out.
2. Rescind the requirement to establish final regulations for a commercial leasing program within six months of completing the programmatic EIS. As discussed above, within the next few years, it is unlikely that adequate technical, economic, and environmental information will be available to formulate fair and equitable leasing regulations.
3. Require that the Department of Energy, the Department of the Interior, and the Environmental Protection Agency cooperatively develop a federal oil shale leasing strategy.
4. Require that the Department of Energy, the Department of the Interior, and the Environmental Protection Agency investigate and report on alternative approaches to providing access to federal lands for early first-of-a-kind commercial facilities.
5. Require that the Department of the Interior make available for leasing additional lands for the purpose of conducting RD&D activities.
6. Require that the Department of the Interior and the Department of Energy prepare plans for conducting critical environmental and ecological research; high-risk, high-payoff process improvement research; an assessment of carbon management options; and a large-scale demonstration of carbon dioxide sequestration in the general vicinity of the Piceance Basin.

In closing, I commend the Committee for addressing the important topic of moving forward with oil shale development. In much of the policy debate on oil shale development, I see two sides. On the one hand, there are the boosters who overestimate the benefits and urgency of moving forward and often dismiss the serious environmental and policy issues that need to be addressed. They advocate using the development of oil sands in Alberta, Canada, as a model for the development of U.S.

oil shale. Anyone familiar with the heavy subsidization of early oil sands production and the environmental degradation that continues to be associated with Canadian oil sands extraction knows that the "Alberta model" is a nonstarter for development in the Green River Formation. On the other hand, there are the naysayers, who in their concern for environmental protection appear to dismiss the economic costs of importing high-priced oil and the national security consequences of continued wealth transfers to certain oil exporting nations.

At RAND, our research has identified a course that addresses both the environmental concerns and the national benefits that accrue from large-scale production. We often refer to the RAND approach as a "measured approach" in that it involves gathering information and proceeding at a slow enough pace to enable evaluation and course correction along the way but fast enough to advance understanding and preparation for possible large-scale commercial production so that in a decade we are in much better position to weigh both benefits and costs. The current framework established by EPACT to rush forward with commercial leasing is clearly not a measured approach.

The United States has before it many opportunities—including oil shale and coal, renewables, improved energy efficiency, and fiscal and regulatory actions—that can promote greater energy security. Oil shale can be an important part of that portfolio. And it will be as long as we proceed with a strong commitment to take a well-informed path, recognizing that we have important environmental, economic, and national security issues at stake.

Mr. COSTA. Thank you very much for your testimony. Our next witness is another senator, a former State Senator from Colorado. She has a family farm. Kathleen Sullivan Kelley, an Irish lassie.

STATEMENT OF KATHLEEN KELLEY, FORMER STATE REPRESENTATIVE, COLORADO

Ms. KELLEY. Very Irish. Thank you, Chairman Costa. Just a minor correction here. I was a State Representative and not a State Senator.

Mr. COSTA. I am sorry. You never assembled anything?

Ms. KELLEY. I assembled lots of stuff.

Mr. COSTA. I am sorry. I stand corrected—former State Representative Kathleen Sullivan Kelley.

Ms. KELLEY. Thank you. It is an honor to speak with you today about oil shale which has so profoundly affected and changed the course of my life. Our ranch, Josephine Basin, is approximately 25 miles northeast of Royal Dutch Shell's oil shale research and development site. In 1980, I was elected to the Colorado legislature representing House District 57. I affectionately called my House District Aspen, Vail and oil shale.

I believe I was elected because of the concern that oil shale development was proceeding much too quickly with far too little vision and care. Subsidies were rampant through the synthetic fuels corporation with 80 plus billion dollars allocated and now 26 years later not one single commercial barrel of oil produced from shale.

Those were very tough economic times, and many people coming to northwestern Colorado looking for jobs in oil shale were refugees from a collapsing auto and manufacturing industries. They clogged Rifle, Parachute, Meeker looking for jobs, driving property prices as much as 10 times higher than the real value, scrambling to rent or buy anything they could for shelters.

As a last resort, many retreated to cars and lived in tents. One of the most poignant calls I ever received came from a fellow rancher who driving cattle down from a public lands permit ran into one such tent city and narrowly avoided trampling the tents only to

find moments later that a seven-month pregnant woman and her children were housed in one of the tents.

Just as I was swept into the legislature on the rising tide of concern over oil shale development, I was swept out on the bust, losing my reelection bid by 13 votes. On May 2, 1982, I received a call from the public relations department at Exxon relaying news that their board of directors had taken a vote to close the Colony Project. Losing my reelection a few months later did not even begin to compare the trauma of the labor force. They were met at the front gate of Colony with security guards and shotguns.

So forgive me if I view this latest oil shale rush as overblown hyperbole, with more to do about posturing than production. The only true commercial production of oil shale I know of from the Piceance Creek Basin rests on my desk at home as a polished paperweight and penholder.

More telling is the Colony Project itself which after 25 years sits mothballed and unreclaimed. I am concerned with that with this rush over so-called commercial oil shale development in a few short years we will have even more projects sitting mothballed and unreclaimed. That is why it is absolutely essential that the crucial research and development phase must be respected for what it is and not prematurely escalated with the gift of cheap public lands under the guise of commercial leasing.

I could not agree more with Mr. Bartis on his comments. Wait for commercial leasing until we have a proven, viable extraction technology. In 2005, Congress included provisions in Section 369 of the Energy Policy Act that concerned oil shale. A commercial lease sale requires BLM to complete four tasks. It must issue research and development leases. It must complete a regional environmental review. It must adopt new leasing regulations. It must consult with state and local governments and the public.

BLM has only completed one of the required tasks. It has issued research and development leases. All I ask is that BLM proceed intelligently, thoughtfully and cautiously as Section 369 of the Energy Policy Act entreat us to do. And again, I would also reiterate what Mr. Bartis said. Rescind the requirement for the programmatic EIS timeframe and rescind the requirement to establish the final regulations for the commercial leasing program on that timeframe as well.

And finally, I have with me a letter that is written by and signed by 21 elected officials in northwestern Colorado asking that we again emphasize the research and development phase and go slow. Thank you, Mr. Chairman.

[The prepared statement of Ms. Kelley follows:]

Statement of Kathleen Sullivan Kelley

Good morning Chairman Costa and Members of the Energy and Minerals Subcommittee.

My name is Kathleen Sullivan Kelley. It is an honor and privilege to speak with you today about oil shale which has so profoundly affected and changed the course of my life.

I am a fourth generation Coloradan, born in Northwestern Colorado, growing up on a ranching and farming operation near the small town of Meeker. Our ranch, Josephine Basin, is approximately twenty-five miles northeast of Royal Dutch Shell's oil shale research and development site. Boulders loaded with tar lay scattered in the alluvial valleys of our land having tumbled down from the crest of the

Little Hills a range which is the eastern border of the Piceance Creek Basin. My husband Reed, and I still own and operate this ranch. It is a private land only operation, abutting BLM lands to the west.

It is the love of this land which compelled me to seek elective office, for this raw country, of centuries-old pinyon and twisted juniper challenged by frequent droughts and harsh winters, is as brittle as it is beautiful. It is more wild than some lands with federal Wilderness designation, for this is not a pretty postcard land where hikers like to go. Until now, it was rarely touched by human traffic, save for the few rugged men and women who survive by scratching out a living from mostly cattle and sometimes sheep. This place is haunted by a deceptive sun drenched landscape, often parched, but rich in wildlife, deer, elk, bear, cougar, bald eagles, accipiters and falcons to name just a few. Our ranch has been the wintering ground for deer migrating from the Piceance and just this winter we wrestled in a losing battle with nearly a thousand head of elk descending from the Basin in search of winter feed.

In 1980, when Exxon released what commonly became known as "The White Paper," which outlined their oil shale plans and the mind-boggling impacts they'd have on the communities and water resources of the region, I was elected to the Colorado Legislature, representing House District 57. I affectionately called my House District, "Aspen Vail and Oil Shale." I believe I was elected because of the concern that oil shale development was proceeding much too quickly with far too little vision and care. Subsidies were rampant through the Synthetic Fuels Corporation, with $80 billion dollars allocated and now, twenty six years later, not one single commercial barrel of oil produced from shale. The second week after I was elected to the legislature I was flown by Occidental Petroleum by helicopter to the Logan Wash oil shale in-situ development site with two newly elected county commissioners. One of them was terrified of heights and the other was claustrophobic. It was during this flight, I discovered elective office was not all glory and fortunately, not everything makes the headlines.

Those were very tough economic times and many people coming to Northwestern Colorado looking for jobs in oil shale were refugees from a collapsing auto and manufacturing industries. Most were suffocating under double digit interest rates on loans they couldn't repay. They clogged Rifle, Parachute and Meeker looking for jobs, driving property prices as much as ten times higher than real value, scrambling to rent or buy anything they could for shelter. As a last resort many retreated to cars and lived in tents.

One of the most poignant calls I received as a legislator came from a fellow rancher the fall of 1981, who, driving cattle down from a public lands permit, suddenly discovered a camp with several families in the path of his cattle. He turned his cows and calves just in time, missing a tent housing a 7 month pregnant woman and her small children. This burly, tough rancher's voice quivered when he relayed this encounter.

Because I was concerned about the burgeoning impacts of subsidy fueled, speculative oil shale development, I authored and introduced legislation which placed a severance tax on the "projected" production from federal oil shale lease sites. I felt at the time, it might be the only way to get enough substantive impact assistance if Exxon's growth and impact estimates in their "White Paper" were even 10% accurate. It was also an attempted wake-up call, to let energy companies know that development must not proceed without adequate funding for the infrastructure to support it. Needless to say, it didn't pass.

Just as I was swept into the legislature on the rising tide of concern over oil shale development, I was swept out on the bust, losing my re-election bid by 13 votes. On May 2, 1982, I received a call from the Public Relations Director for Exxon, relaying news that their Board of Directors had just taken a vote in Houston, and the Colony project near Parachute Colorado was one of several global development projects Exxon would be immediately closing. Losing my re-election a few months later didn't even begin to compare to the trauma the labor force experienced as a result of the closure. That day, over 2,000 workers—most of them my constituents—were put out of work. While I got a courtesy call from Exxon's PR department, the workers were met at the Colony entry gate the following morning by security guards toting shot guns.

I had a ranch where I could return to lick my wounds, but many of the people who worked in the oil shale industry at the time, had come to Colorado with their car as their only possession and left in that same car. Sure oil prices would never collapse again, one man I knew invested everything he owned on that energy boom, deliberately drove his jeep into a high mountain lake as his last destination.

So forgive me if I view this latest oil shale rush as overblown hyperbole, with more to do about posturing than production. The only truly commercial production

of oil shale I know of, from the Piceance Creek Basin, rests on my desk at home as a polished paper weight and pen holder.

More telling is the Colony project itself, which, after twenty five years, sits "mothballed" and unreclaimed. I am concerned that with this rush over so-called commercial oil shale development, in a few short years we'll have even more projects sitting mothballed and unreclaimed.

I give you this verbal snapshot of my personal experience because I want you to understand this experience that brings me before you, and this history that informs my opinions about current actions by the BLM with regard to oil shale. Petroleum is a commodity. As a raw commodity producer, I have experienced the volatility and hysteria of commodity markets first hand. Commodities markets are historically boom and bust. As a mineral owner, I know how much speculative ventures drive this industry. And as a resident of this oil shale laden country, I know speculation has always been oil shale's primary value.

I understand this crunch we are in as a nation. I appreciate and hold dear the concept that we must be resource independent, sovereign if you will, to be secure in increasingly threatening global conditions. Three dollar plus diesel prices have destroyed a much needed profit margin in my industry and I am ready, as are other Americans, for a leveling of fuel prices. But extracting oil from shale is more problematic, more difficult, more technologically intensive and far more expensive than extracting salt from seawater. It will never be, in my opinion, even a partial answer to our energy needs. Our oil shale country is too vast and the shale is too deeply imbedded for practical, economically viable extraction of even a portion of it—with what we have in proven technology today.

That is why it is absolutely essential that the crucial research and development phase must be respected for what it is and not prematurely escalated with the gift of cheap public lands under the guise of "commercial" leasing. Wait for commercial leasing until we have a proven, viable, extraction technology. Once that technology exists, and all the costs of the development are known, both intrinsic and extrinsic, and society has determined it is willing to bear those costs, only then might it be appropriate to open those lands to a competitive bid process for commercial development. But not before.

* * *

In 2005, Congress included provisions in Section 369 the Energy Policy Act that concerned oil shale. The Act told the Bureau of Land Management to make federal lands available for oil shale research and development, and it outlined steps the BLM was required to take before it considered offering commercial leases for federal oil shale resources.

1. BLM was directed to prepare a regional analysis of the environmental and social impacts that might result from commercial oil shale development, and;
2. It was then to adopt new regulations that would set the ground rules for any commercial lease sale.

Importantly, after these two steps were completed, the Act directed the BLM to consult with state and local government officials, Indian tribes, and members of the public to determine the level of support for and interest in a commercial lease sale. Only if the BLM found sufficient support and interest was the BLM then authorized to hold the first commercial sale of federal oil shale.

A commercial lease sale, then, requires the BLM to complete four complex tasks:

1. It must issue research and development leases.
2. It must complete a regional environmental review.
3. It must adopt new leasing regulations.
4. It must consult with state and local governments and the public.

I am dismayed that the BLM has apparently decided to move aggressively forward with a full-scale commercial leasing program, even though it has completed only one of the required tasks—it has issued research and development leases. Even that step is incomplete, though, since we won't even get a chance to learn from their results for several years. The BLM is misinterpreting the oil shale provisions in the Energy Policy Act in its stampede toward commercial leasing, saying to the public and to Congress itself that it plans to hold a commercial lease sale in 2008. This is not only contrary to the Energy Policy Act, but certainly ignores a hundred years of unkind history for this resource—environmentally, socially and economically.

Why rush, when for the first time in the history of this resource, we can smartly proceed with an important research phase which has the potential to give us, once and for all, the answers we need for viable commercial development, including, whether or not it is even possible.

All I ask is that the BLM proceed intelligently, thoughtfully, and cautiously as Section 369 of the Energy Policy Act entreats it to do.

BLM issued five "Research, Development and Demonstration" leases to three companies in November of 2006.

1. Chevron and EGL Resources each got one 160-acre lease.
2. Royal Dutch Shell got three 160-acre leases.

Though the leases were issued last November, it will take time before any of the companies begin development. The BLM's leasing decisions said that the lessees must submit a detailed Plan of Development and obtain all required state and federal permits before they could start construction on these federal RD&D leases.

So far, only Shell has applied for any of its state permits, and it has said that it expects state permitting to take up to one year to complete. In fact, the State of Colorado in February of this year rejected Shell's mined land reclamation permit due to missing and inconsistent information, further delaying the start of construction on Shell's RD&D site. Neither of the other two companies has yet submitted applications for the necessary state permits, meaning that construction on their sites is likely well over a year off.

I am in contact with Royal Dutch Shell's public relations officials and some of their project engineers. I have been repeatedly told that Shell has experienced many set-backs on its technology, and while its had some encouraging success, it still can't say whether its technology works at a commercial scale or that it is environmentally sound. They want it to be, but wanting it to be, does not make it so. They have told me there are far too many questions needing answers. They still don't know with any degree of certainty, for example, whether a keystone of their in-situ process—the freeze wall technology—works to prevent the mixing of groundwater with their produced hydrocarbons and hazardous byproducts.

As I ride out on the ranch to check our cattle and the rumbling, guttural blasts of fracing from natural gas exploration from miles away vibrate through the brush and grass, I'm not just wondering if the freeze wall technology works, particularly in energy development conditions of massive gas exploration and extraction near the R&D sites, I want a rock-solid guarantee it works. The water quality of the region depends upon it.

The most open and vocal of the companies involved in speculative oil shale processing, Shell has stated publically that they are a long ways away from commercial development. During the ramp-up to the Energy Policy Act, Shell said repeatedly that it would make a decision by the end of this decade and I was told it may be much later than that as to whether its technology could be scaled up to commercial production. In testimony before the Senate Energy Committee in June 2006, Shell CEO Stephen Mut said:

"For years, we've been meeting neighbors, informing them of what our progress is on our research, and though we're years from making a commercial decision in the near-term, it's going to be time for us to begin talking about and opening a dialogue about what the impacts of the commercial development could be."

In response to questions from Colorado's Senator Salazar about the timing of Shell's commercial determination, Shell's CEO responded, "Shell hopes to make the decision whether to commercialize oil shale production around the end of this decade." Nonetheless, the BLM has repeatedly represented to the public and the media that it intends to hold a commercial lease sale in 2008.

This is why I am disturbed by the BLM's aggressive and headlong rush toward large-scale commercial leasing of federal oil shale. It's a simple and undeniable fact—the technology isn't ready. Even the company that's furthest along—the company that's invested millions of its own dollars on oil shale research—says that it can't be sure if it works on a commercial scale.

* * *

Because of my experience in State Government in the last oil shale boom, I am deeply troubled that the BLM is ignoring Congressional direction to take into account the views of affected state and local governments. The Energy Policy Act said the BLM must consult with officials from the state and local government officials to assess support for and interest in a commercial lease sale. Yet in budget documents submitted to Congress by the Department of Interior, it appears that the BLM has determined that it will hold a lease sale without going through the required consultation.

According to the Interior Department's budget justification,

BLM plans to spend $4.4 million within the Oil and Gas program on Oil Shale activities in 2007. This amount is retained in the 2008 request in order to finalize the programmatic EIS, manage the ongoing RD&D leases, prepare the commercial leasing rule and to perform site-specific NEPA analyses required to offer commercial leases by the end of 2008.

Nowhere in this budget document does the BLM mention its obligation to consult with the Governor of Colorado, representatives of local governments, Indian tribes, or members of the public before making a decision whether to move forward with a commercial lease sale.

I have here a letter from several elected officials in western Colorado who are quite upset that the BLM has not taken the consultation mandated in the Energy Policy Act seriously. These officials—several of whom lived through the last oil shale bust like me—are upset that the BLM has decided to hold a commercial lease sale before it has sought local feedback on whether it's appropriate and before research has shown that the technology is viable. Commercial-scale oil shale development is not something to rush into lightly, and local elected officials want us to GO SLOW.

Frankly, Honorable Members, our government from local to state is vastly unprepared and unduly restricted from developing the infrastructure necessary to support commercial scale oil shale. Not only are local and state budgets extremely tight, they teeter precariously on the edge of deficits. Funding for infrastructure wisely needs to be predictable and stable. Expecting a community to bond itself to fund infrastructure based upon speculative development is a poor practice. But when that is the only viable option, it means we bear the costs which should rightly belong to those who generate them: The Energy Companies. Currently, our area is pressured by the cumulative impacts of extremely aggressive energy development and our communities have been reduced to begging for additional assistance for key infrastructure items.

The most recent examples are donations to our hospital and community college. These donations are most certainly appreciated and welcomed. Unfortunately, we need them. But a tincup approach to funding infrastructure is far from adequate and in fact, can be quite dangerous. Such dependency can have a dampening affect on communities insisting on regulations necessary for sound development and their own self protection.

* * *

BLM's proposed 2008 commercial lease sale would occur long before the results from the current oil shale research and development program can be known and only fuels speculative mania. Particularly in these times of $60+ per barrel of oil.

Again, none of the projects on federal R&D leases will even have been built by the time BLM holds a commercial sale in 2008. None will have produced any meaningful results as to their impacts, technical viability, or energy and personnel needs. Each of the five in-situ projects being tested is the first of its kind, and nowhere on the planet has large-scale oil shale development occurred.

At this point, what we don't know about a modern oil shale industry far outweighs what we do know. The U.S. oil shale industry is in its infancy, and neither the government, the industry, nor the public can possibly know the full range of environmental and social impacts of the development until the R&D projects are completed.

Everyone agrees that commercial development of the West's oil shale resources is more than a decade away, and so a measured approach is warranted. We need to know that the technology works, and that it will not result in unacceptable impacts to the land or western Colorado communities. Let me say it one more time: we need to GO SLOW and proceed smartly on oil shale. And what does this mean? I strongly encourage the members of this committee to prohibit steps leading to a commercial lease sale until research and development has proven that oil shale is economically viable without taxpayer subsidies, will comply with all existing environmental protections, and will not result in unacceptable environmental and social impacts.

Rather than rush headlong into commercial leasing, the BLM should let research and development occur and prove that the technology works before it takes steps towards conveying large chunks of oil shale land.

Thank you Chairman Costa and the rest of the members of the subcommittee for your time.

Mr. COSTA. Thank you, Ms. Kelley, for your testimony and for staying within the five-minute rule. I appreciate that very much. Our next witness is a Conservation and Policy Chair for the New Mexico Wildlife Federation. From Albuquerque, New Mexico, Mr. Oscar Simpson.

STATEMENT OF OSCAR SIMPSON, PUBLIC LANDS COMMUNITY ORGANIZER, NATIONAL WILDLIFE FEDERATION

Mr. SIMPSON. Thank you.

Mr. COSTA. Turn that on, and make sure you are speaking closely into that.

Mr. SIMPSON. Thank you. Testing.

Mr. COSTA. That works better.

Mr. SIMPSON. Yes. Thank you, Chairman Costa, and members of the committee. My name is Oscar Simpson. I am the former President of the New Mexico Wildlife Federation. I am the Conservation Policy Chair for the New Mexico Wildlife Federation, and I work for the National Wildlife Federation representing the hunters and anglers of New Mexico. I am a native New Mexican, a Republican and an avid sportsman who has hunted and fished the majority of my 59 years.

From 1980 to 1998 I was involved in the public lands wildlife policy on a volunteer basis. My primary focus during this time was on public land management and its effects on hunting and fishing. So I feel especially fortunate to sit before you today and share some of my personal experiences.

I also have over 30 years of professional experience with water resource management and regulation. I worked in the private sector for eight years, for the State of New Mexico for 17 years. As a state employee I dealt with regulation of oil and gas development for four years, and then with public water supplies for 14 years. For the past nine years I have primarily dealt with Federal and state management of water, habitat and wildlife resources and impacts from oil and gas development.

I learned to hunt and fish. I learned to fish in Pecos, New Mexico, at the age of two, and I was taught by my father and grandfather to hunt and fish. My favorite places to hunt are throughout New Mexico and southwest Colorado where I hunt elk, deer, antelope and quail.

For the past 30 years, I have seen tremendous changes to New Mexico and across the west. Over the past seven years the rapid pace of irresponsible—and I stress irresponsible—oil and gas development leads me to conclude that Congress needs to take immediate steps to fix the way the Bureau of Land Management regulates the oil and gas industry.

I am here today with a simple message. The Energy Policy Act of 2005 is nothing short of an assault on our western culture and our way of life. I would like to thank the Republicans. I would like to think that Republicans have always supported the values of common sense conservation, and that has been done in the past. Hunting and angling is a treasured recreational activity handed down through the generations and a way of life in the west.

I want sportsmen to be able to pass our treasured legacy on public lands down to the next generation. In regards to Title III of the Energy Policy Act of 2005, sportsmen and our organization have expressed concern over its impacts to wildlife and the western way of life. We support the following changes to oil and gas permitting and implementation.

Number one, Congress should require that development occur with the smallest footprint possible with a minimum effect to fish

and wildlife resources. Congress should mandate the use of best management practice such as directional drilling, well clustering, low surface occupancy standards, maximizing spacing between wells and well clusters, phased development and restoration of sites impacted by energy development including eradication of evasive species.

Number two, where state and wildlife agencies have adopted policies or guidelines with respect to energy development and sensitive wildlife habitats, BLM should make these requirements a mandatory minimum level of protection. Item number three, the practice of Federal agencies waiving permit stipulations has contributed to the public controversy over oil and gas leasing and to the perception that environmental concerns are less important than extraction of industry. Existing fish and wildlife stipulations must be upheld and not waived.

Item number four, too many areas that are of vital importance to fish and wildlife and water resources are leased for energy development. Congress should mandate that BLM and the Forest Service develop agency specific policy directives that prohibit new leasing in fragile but unprotected areas. And finally number five, BLM routinely diverts biologists away from their primary duties to assist in processing drilling permits of inspection and monitoring funding for permitting and leasing activities.

I briefly highlighted how the BLM should manage energy development and protect our wildlife in the public lands. Unless Congress takes immediate legislative action to reform the oil and gas provisions of Title III of the Energy Policy Act of 2005, nothing will change. Other witnesses will follow and they have already followed, and they will give specific changes to my consideration. Now that happened in the first policy. Now I would like to turn your attention to a few slides up there that we have highlighted.

Mr. COSTA. Quickly.

Mr. SIMPSON. The first slide illustrates the Permian Basin. The dots from your distance are basically well pads, and it shows the density. You know they have been drilling in the Permian Basin for a long time. My grandfather started in the oil and gas industry on the Permian Basin just across from the Texas side, and I have had lots of information from him before he died about how development occurred and what happened.

Next slide. This shows a closer picture of the true impacts over time and what really happens on the surface—huge, high density from 18 or so levels of production all reflected on the surface of the land. Next slide. And it shows an oblique angle of the same circumstances. That shows it is not small impacts. This has developed over years of drilling and activity. So that really shows you what the impacts truly are.

Next slide. And this is the San Juan Basin. I have hunted and fished there, and over time especially in the last 17 or actually since the 1980s tremendous increase, and it shows. It is just now showing what is going to happen. Basically what will happen now in the increase of activities going to happen in the Permian Basin.

Next slide. And this shows a side angle of basically what the big, long, wide strip is. It is where a pipeline was put in. So you can see the impacts to the roads, the drill pads, the infrastructure

basically. It is a death of a thousand cuts because the more in field drilling and the more drilling—pretty soon you have loss of wildlife, loss of habitat and impacts to the groundwater and surface water resources. Thank you very much.

[The prepared statement of Mr. Simpson follows:]

Statement of Oscar Simpson, National Wildlife Federation, Public Lands Organizer, Conservation and Policy Chair, New Mexico Wildlife Federation, Albuquerque, New Mexico

Chairman Jim Costa, Ranking Member Steven Pearce and members of the Committee, thank you for inviting me to address this committee and for the opportunity to express my experience and views on the Implementation of Title III, Oil and Gas Provisions, of the Energy Policy Act 2005.

My name is Oscar Simpson and I am the former President of the New Mexico Wildlife Federation, a sportsmen and conservation organization that was founded in 1914 by Aldo Leopold. I am the Conservation Policy Chair for the New Mexico Wildlife Federation and work for the National Wildlife Federation representing the hunters and anglers of New Mexico. The National Wildlife Federation is the largest mainstream conservation organization in the United States representing approximately 4 million members and supporters in the U.S. and nearly 25,000 members and supporters in New Mexico. I am a native New Mexican and an avid sportsman who has hunted and fished for the majority of my 59 years. I have had the good fortune to recreate in many areas throughout the western United States enjoying our public lands majestic landscapes and abundant wildlife. From 1980 to 1998, I was involved in public land and wildlife policy on a volunteer basis. My primary focus during this time was on public land management and its effects on hunting and fishing, so I feel especially fortunate to sit before you today and share some of my personal experiences.

I also have over 30 years of professional experience with water resource management and regulation. I worked in the private sector for eight years and for the State of New Mexico for 17 years. As a state employee I dealt with the regulation of oil and gas development for four years and then with public water supplies for 14 years. For the past nine years, I have primarily dealt with federal and state management of water, habitat and wildlife resources and impacts from oil & gas development.

I am here today with a simple message, the Energy Policy Act of 2005 is nothing short of an assault on our western culture and way of life. Hunting and angling is a treasured recreation activity handed down through the generations and a way of life in the West. I want sportsmen to be able to pass our treasured legacy on public lands down to the next generation. The impacts from this law have affected hunters and anglers from all walks of life. It has diminished the quality and quantity of our hunting experiences in the Rocky Mountain West. We have been locked out of the decision making process and denied our birthright.

Not only is hunting and angling a key aspect of Rocky Mountain culture, it is a key aspect of our economy. According to the Sonoran Institute there are over 38 million hunters and anglers in the United States, generating $70 billion to the economy per year. In New Mexico, a combined 351,000 hunters and anglers generated $14 million in fees alone in 2000.

I have seen with my own eyes that energy development in the Rocky Mountain West can affect fish and wildlife habitat and hunting and angling opportunities in profound ways. While we sportsman are pragmatic in our approach and realize that energy development is a legitimate use of public lands, we also believe that it should occur in a manner that minimizes habitat fragmentation and water quality degradation. Every oil and gas project on public lands should specifically be designed to avoid and minimize impacts to fish and wildlife habitat and water resources.

According to the Department of the Interior's January, 2003 Energy Policy and Conservation Act ("EPCA") study, 85 percent of federally owned oil resources and 88 percent of federally owned gas resources in the Rocky Mountain states are available for exploration and drilling. Over the past seven years there has been an exponential rate of oil & gas development on these land in the Rocky Mountain West. In 2004, the BLM issued a record number of 6,130 drilling permits on BLM lands. Unfortunately administrative streamlining and Congressional legislation have forced the federal Bureau of Land Management (BLM) to promote oil & gas development of our public lands with little regard for that development's impact on water, wildlife and the ecosystem. In short, the Bush administration has clearly elevated

oil and gas development as the dominant use on our public lands and I have witnessed it first hand.

In my experience, the effect of oil and gas development on wildlife and habitat are severe and wide-ranging, and are not limited to the direct areas that are disturbed for various phases of oil and gas development (drill pads, roads, pipelines, power lines, compressor stations, road traffic, etc).

For instance, the Pinedale Anticline in Wyoming and the Powder River Basin in Montana and Wyoming are case studies that directly highlight the damage that misguided oil and gas development causes for wildlife. For example, a multi-year study in the Pinedale Anticline has documented a 46% decline in mule deer use of prime habitats during the first four years of gas development. Since 2002, the mule deer population in the Anticline has fallen from 5,228 to only 2,818 in 2005, in other words this much beloved game species has declined by half in just three years. The study found no evidence of a similar decline in the nearby "control area" on the Wind River Front, where no drilling is occurring. This study clearly shows what those of us who see the on the ground impacts of oil and gas on a daily basis have known for a long time, when oil and gas development is done without specific regard for wildlife conservation, it leads to direct detrimental impacts on game and fish species (Sawyer, et al. 2006).

A BLM commissioned study which analyzed the potential impacts of coalbed methane development on sage grouse in the Powder River Basin of Montana and Wyoming, found that areas where methane wells are being drilled did not have the same strong population growth recorded elsewhere in the basin. The study found bird populations in 2005 were at only 12% of what they were in 2000. Populations that were outside the area impacted by development were closer to 70% of their previous numbers (Naugle, et al. 2006).

Oftentimes I hear the argument that the impacts of oil and gas to wildlife are minimal because there is a small surface area that is directly disturbed by development. However, it is well documented that the damage to wildlife habitat from oil and gas development extends well beyond the areas where wells, roads and other supporting facilities are placed. Oil and gas development leads to substantial fragmentation of wildlife habitat, which in turn leads to avoidance of large areas of the affected landscape due to behavioral responses of wildlife and game species. This results in a significant reduction of viable habitat and the chance of survival for wildlife.

According to the Wyoming Game and Fish Department (WGFD), "As densities of wells, roads, and facilities increase, the effectiveness of adjacent habitats can decrease until most animals no longer use the habitat." WGFD also notes that while "direct loss or removal of habitat is always a concern," there are additional problems because "oil and gas developments are typically configured as point and linear disturbances scattered throughout broader areas." WGFD specifically discusses how an apparently low percentage of direct disturbance on the land can cause substantial problems for wildlife; the report states:

> "Collectively, the amount of disturbance may encompass just 5-10% of the land. However, avoidance and stress responses by wildlife extend the influence of each well pad, road, and facility to surrounding habitats."

The damage caused by such oil and gas drilling is dramatic: studies have shown that road densities of two miles per square mile causes a 50% reduction in elk populations, while six miles of roads per square mile drives almost 100% of the elk from the area (Lyon 1983).

Pronghorn are even more sensitive to disturbance. The BLM stated in 1999 Draft EIS for development of the Pinedale Anticline that pronghorn are adversely affected at road densities of one mile per square mile (BLM 1999).

The National Wildlife Federation is not opposed to energy development on public lands, however, we expect our public lands to be developed in a responsible manner that embraces multiple use, and minimizes the impacts of oil and gas development to the other uses of these lands. The BLM can avoid or at least limit the damage from oil and gas development by controlling the amount of development (and resulting surface disturbance and destruction) that occurs and by requiring that oil and gas operators develop federal resources with maximum efforts to minimize damage.

In regards to Title III of the Energy Policy Act of 2005, sportsmen in our organization have expressed concern over its impacts to wildlife and the western way of life. We support the following changes to oil and gas permitting and implementation.

- Congress should require that development occur with the smallest footprint possible and with the minimum effect to fish and wildlife resources. Congress should mandate the use of Best Management Practices such as directional drilling, well clustering, no surface occupancy standards, maximizing spacing be-

tween wells and well clusters, phased development, and restoration of sites impacted by energy development including eradication of invasive species.

- Where state wildlife agencies have adopted policies or guidelines with respect to energy development in sensitive wildlife habitats, BLM should make these requirements a mandatory minimum level of protection. In addition, Congress should require the Forest Service and BLM to maintain viable populations of native wildlife in natural patterns of abundance and distribution.
- The practice of federal agencies waiving permit stipulations has contributed to the public controversy over oil and gas leasing and to the perception that environmental concerns are less important than extraction of energy. Existing fish and wildlife stipulations must be upheld. If changes are proposed, they should take place with public scrutiny and environmental review. Congress should enact a requirement that energy company and federal agency proposals to waive protective measures for fish and wildlife are conditioned on public involvement and environmental analyses. In addition, BLM and the Forest Service should place sensitive fish and wildlife habitats under irrevocable no surface occupancy stipulations.
- Too many areas that are of vital importance to fish, wildlife, and water resources are leased for energy development. Congress should mandate that BLM and the Forest Service develop agency-specific policy directives that prohibit new leasing in fragile but unprotected areas, such as proposed Wilderness areas, national conservation areas, National Forest roadless areas, BLM areas of critical environmental concern, eligible wild and scenic river areas, and state designated fisheries of significance (for example, blue ribbon/gold medal trout streams). Lands in these categories have special fish, wildlife, hunting, and angling resource values that are incompatible with oil and gas development.
- BLM routinely diverts biologists away from their primary duties to assist in processing drilling permits. In addition, funding intended for wildlife conservation programs is diverted toward energy development programs. The result is that crucial fish and wildlife management activities and monitoring of energy development impacts on fish and wildlife are falling behind with potentially deleterious effects on hunting and angling. Congress should prohibit the diversion of inspection and monitoring funding for permitting and leasing activities.

Instruction Memorandum No. 2003-234, issued by this Administration, required BLM staff to review all existing lease stipulations to determine if they were still "necessary and effective" and directed that, if "lease stipulations are no longer necessary or effective, the BLM must consider granting waivers, exceptions, or modifications." Now, the agency should be directed to undertake a review on a similar scale to add lease stipulations and strictly limit opportunities for waiver, exceptions and modification, and also to add conditions of approval (COAs) for drilling permits, that will protect wildlife habitat and other natural resources.

I have briefly highlighted how the BLM should manage energy development and protect our wildlife and public lands. Unless Congress takes immediate legislative action to reform the oil and gas provisions of Title III of the Energy Policy Act of 2005 nothing will change. Other witnesses will follow that will recommend specific changes for your consideration.

Citations:

Naugle, David E., K. Doherty and B. Walker. "Sage-Grouse Winter Habitat Selection and Energy Development in the Powder River Basin: Completion Report." Wildlife Biology Program, College of Forestry and Conservation, University of Montana, Missoula, Montana (2006). Available on-line at: http://www.voiceforthewild.org/SageGrouseStudies/Winter_habitat_report.pdf

Sawyer, H., R. Nielson, F. Lindzey, and L. McDonald. "Winter habitat selection of mule deer before and during development of a natural gas field." Journal of Wildlife Management 70(2006):396-403. Available online at: http://www.west-inc.com/reports/big_game/Sawyer%20et%20al%202006.pdf

Bureau of Land Management. 1999. Draft EIS for the Pinedale Anticline Oil and Gas Exploration and Development Project, Sublette County, WY. U.S. Department of the Interior, Bureau of Land Management, Pinedale Field Office, Pinedale, WY.

Lyon, L.J. 1983. Road density models describing habitat effectiveness for elk. Journal of Forestry 81: 592-596.

New Mexico Department of Game and Fish, Conservation Services Division. 2005. Habitat Fragmentation and the Effects of Roads on Wildlife and Habitats. This document is available on NMGF's website at: http://www.wildlife.state.nm.us/conservation/habitat_handbook/EffectsofRoads.htm

Wyoming Game and Fish Department. 2004. Minimum Recommendations for Development of Oil and Gas Resources Within Crucial and Important Wildlife Habitats

on BLM Lands. This document is available on WGFD's website at: http://gf.state.wy.us/habitat/index.asp.

Backcountry Bounty: Hunters, Anglers and Prosperity in the American West, 2006. See www.sonoran.org/programs/socioeconomics/backcountry__bounty.html.

Summary of best management practices recommendations:

- Directional drilling to permit oil and gas development while reducing surface impacts to important areas;
- Closed loop drilling to protect water and soil from toxic chemicals;
- Clustered development based upon best available technology to minimize surface area development and impacts, and to reduce noise and dust caused by traffic to and from drill sites;
- Use of existing roads to the maximum degree possible and minimization of the length and environmental impact of new roads constructed to service well locations;
- Formally consult with State divisions of wildlife and other agencies before setting the number of active drill pads within an area to identify important fish and wildlife habitats;
- Maximize surface spacing and minimize surface disturbance and habitat fragmentation;
- Shorten the duration of ongoing disturbance by prohibiting intermittent drilling;
- Require interim reclamation and immediate, complete post-drilling restoration of land, including rigorous control of noxious weeds, such that any land not in use or needed for ongoing operations will be reclaimed;
- Require operators to apply best available control technology to reduce noise, water and air pollutants;
- Ensure that wildlife corridors are left undeveloped to allow for wildlife movement;
- Increase bonding to a level and form that is sufficient to cover all reclamation.
- Designating areas off limits to future oil and gas leasing pursuant to BLM or Forest Service land use plans.

[NOTE: Pictures submitted for the record by Mr. Simpson have been retained in the Committee's official files.]

Mr. COSTA. Thank you very much. You exceed your time but we will allow that. The next witness is Mr. Paul Cicio. Am I pronouncing that properly?

Mr. CICIO. Yes, sir. Thank you.

Mr. COSTA. OK. Thank you, Mr. Cicio, representing the Industrial Energy Consumers of America. Please proceed on your testimony.

STATEMENT OF PAUL CICIO, PRESIDENT, INDUSTRIAL ENERGY CONSUMERS OF AMERICA

Mr. CICIO. Thank you, Chairman Costa and Ranking Member Pearce for this opportunity. Unfortunately the U.S. remains in a serious natural gas crisis. It started in the mid 2000 time period, and we do appreciate the efforts by Congress and the Administration to accelerate the production of natural gas, and in particular the more efficient processing of permits to drill and greater access to Federal lands.

While U.S. prices of natural gas have been on average the highest in the world since 2000, we believe that the combined actions by Congress and the Administration have averted much higher prices. Use of public lands for production of natural gas is essential given the increasing demand for this high quality fuel. For example, it would be impossible for the United States to reduce greenhouse gas emissions without increased use of natural gas by all sectors.

The U.S. Geological Survey says that less than 5 percent of our Federal lands are used for oil and gas production. It is in the interest of the public that such Federal lands are used, and we believe that you can increase supply of natural gas without compromising the environment. The only reason that we are currently not rationing natural gas today is because of the shutdown to manufacturing plants throughout the United States which resulted in the loss of three million high paying manufacturing jobs.

These plant shutdowns reduced the manufacturing sectors natural gas consumption by 23.4 percent which freed up 1.5 million trillion cubic feet of natural gas, and it freed it up for other consumers. As a result, the U.S. is balancing its supply of natural gas on the backs of good manufacturing jobs.

According to the Energy Information Administration, natural gas prices for homeowners, farmers and manufacturers have increased an average of 77 percent since year 2000. For every $1 per million btu increase in the price of natural gas, consumers will pay $22 billion more per year. In year 2006, consumers paid a staggering $75.7 billion more for their natural gas than they did in year 2000. High natural gas prices directly increase the cost of home heating and cooling, fertilizer and crop drying for farmers and the competitiveness of manufacturing.

As significant as these costs are, the total cost of high natural gas prices is actually much greater. Electricity produced from natural gas is now setting the marginal price for electricity in a growing portion of the United States which means as natural gas prices have gone up so has electricity prices. Electricity prices have increased by 19 and a half percent since year 2000. Consumers will pay $65 billion more per year for electricity in 2006 than they did in 2000, and the rate is accelerating.

Besides the above mentioned costs, it is essential that we add the cost associated with the loss of the three million high paying manufacturing jobs or 18 percent—and I repeat that—18 percent of our total manufacturing employment since 2000. High U.S. natural gas prices are completely unnecessary since the U.S. is blessed with an abundant 100 year plus supply of natural gas, most of which is off limits.

Our country's natural gas supply is fragile. From year 2001 to 2006, natural gas production has fallen by 5.8 percent despite the fact that the number of producing wells have increased by 34 percent, and that is according to the EIA. There is essentially no reserve production capacity. Many believe it will take up to five years before we see material production from the areas of the Gulf of Mexico just opened for leasing. The Alaska natural gas pipeline is no closer to startup. Canadian supply has fallen by 4.9 percent since 2001, and that trend is expected to continue.

LNG supply continues to be unreliable and major natural gas producing countries are meeting with the intention of creating a cartel similar to that of OPEC. Thank you for the opportunity to speak with you.

[The prepared statement of Mr. Cicio follows:]

Statement of Paul Cicio, Industrial Energy Consumers of America

Good afternoon. I am Paul Cicio, President of the Industrial Energy Consumers of America (IECA). I would like to thank Chairman Costa and Ranking Member Pearce and the Committee for the opportunity to share our views on this important topic. We look forward to working with you.

The U.S. remains in a serious natural gas crisis that started in mid 2000 and we appreciate the efforts by Congress and the Administration to accelerate production of natural gas and in particular, the more efficient processing of permits to drill, greater access to federal lands and the reduction of unnecessary duplicative environmental evaluation. While U.S. prices of natural gas have been, on average, the highest in the world since year 2000, we believe the combined actions by Congress and the Administration have averted much higher prices.

Use of public lands for production of natural gas is essential given the increasing demand for this high quality fuel. For example, it would be impossible for the U.S. to reduce greenhouse gas emissions without increased use of natural gas by all sectors. The U.S. Geological Service (USGS) says that less than 5 percent of our federal lands are used for oil and gas production. In our view, it is in the public interest that such federal lands are used. We believe that the U.S. can increase supply of natural gas without compromising our environment.

In our view, the only reason the U.S. is not rationing natural gas today is because high natural gas prices since year 2000 have significantly contributed to the shutdown of manufacturing plants thru out the country, resulting in the loss of 3.0 million high paying jobs. These plant shutdowns reduced the manufacturing sectors' natural gas consumption by 23.4 percent since year 2000 which freed up over 1.5 trillion cubic feet of natural gas for other consuming sectors. As a result, the U.S. is balancing its supply of natural gas on the backs of good manufacturing jobs. This is neither good energy, economic nor employment policy. Unfortunately, this trend will continue so long as high relative natural gas prices exist.

According to the Energy Information Administration (EIA), natural gas prices for homeowners, farmers and manufacturers have increased by an average of about 77 percent since year 2000. For every $1.00 per mm Btu increase in the price of natural gas, U.S. consumers will pay $22 billion more each year. In year 2006, consumers paid a staggering $75.7 billion more for their natural gas than they did in year 2000. High natural gas prices directly increase the cost of home heating and cooling; fertilizer and crop drying costs for farmers; and the competitiveness of the manufacturing sector. As significant as these costs are, the total cost impact of high natural gas prices is much greater.

Electricity produced from natural gas is setting the marginal price for electricity in a growing portion of the US, which means, as natural gas prices have gone up, so has electricity prices. Electricity prices have increased by 19.5 percent since year 2000. Consumers will pay $65 billion more per year for electricity than they did in year 2000 and the rate of increase has accelerated. It is unknown what portion of this increase is directly attributable to the higher price of natural gas. Because of higher natural gas and electricity prices, Congress will spend another $2 billion for Low Income Home Energy Assistance Program (LIHEAP) this year.

Besides the above mentioned costs it is essential we add the costs associated with the loss of 3.0 million high paying manufacturing jobs or 18 percent of our total manufacturing employment since year 2000. And, despite three years of robust U.S. economic growth, manufacturing employment has not risen. The high price of U.S. natural gas versus other parts of the world is a deterrent to building new grass root plants here.

High U.S. natural gas prices are completely un-necessary since the U.S. is blessed with an abundant 100 year supply of natural gas, most of which is off-limits to exploration. IECA encourages the Congress to increase domestic production of natural gas by continuing to expand access to federal onshore lands and the outer continental shelf, and provide stable energy and investment policies that reflect the long lead times and financial risk necessary to ensure E&P companies will invest in the United States versus a foreign country. (This is a serious concern since E&P capital and jack-up rigs can easily move to other parts of the world.) Doing so is our best hope for greater supply, reliability and lower natural gas prices for all consumers. The increased supply of natural gas will also be needed to reduce greenhouse gas emissions.

In our view, our country's natural gas supply is fragile. From year 2001 to 2006 natural gas production has fallen by 5.8 percent despite the fact that the number of producing wells increased by 34 percent, according to the EIA. In fact, the E&P industry recently set a 21 year high mark for wells completed. Reinvestment of 100

percent of cash flow by the E&P industry is largely responsible for a small near-term production up-tick.

There is essentially no reserve production capacity like we had in the 1990s and average production per well continues to drop precipitously. Many believe it will take up to five years before we see material production from areas of the Gulf of Mexico recently opened to leasing. The Alaska Natural Gas Pipeline is no closer to startup. Canadian supply has fallen by 4.9 percent since 2001 and represents about 16 percent of our supply. Canadian officials forecast slowing exports to the US.

LNG supply continues to be unreliable and major natural gas producing countries continue to meet with the intention of creating a cartel similar to that of OPEC for crude oil. Three countries, Russia, Iran and Qatar control 58.3 percent of the world reserves and are positioned to control price and terms.

Countries like China and India are investing billions of dollars in oil and gas resources around the world, securing energy for their economic growth. Resource rich countries continue to consolidate state control over their oil and natural gas resources. The majority of these countries is not democratic governments and not considered friendly to the United States.

For all of these reasons, we believe the U.S. remains in the throngs of a serious natural gas crisis that have energy and economic security implications for every American. The Industrial Energy Consumers of America sincerely looks forward to working with the Committee on these important matters.

* * *

IECA is a nonprofit organization created to promote the interests of manufacturing companies for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets. Corporate board members are top energy procurement managers who are leaders in their industry, technical experts, strongly committed to energy efficiency and environmental progress. Membership companies are from diverse industries which include: paper, steel, chemicals, plastics, food processing, industrial gases, brick, aluminum, cement, brewing, construction products, glass, fertilizer, pharmaceutical.

A letter submitted for the record by Mr. Cicio follows:

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The Voice of Industrial Energy Consumer

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May 8, 2007

The Honorable Jim Costa
Chairman
Subcommittee on Energy and Mineral Resources
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Costa:

Thank you for the opportunity to testify before your committee on April 17, 2007 and for your vote in support of the Energy Policy Act of 2005 and it's provisions that are helping to increase supply of natural gas; and the Deep Ocean Energy Resources Act of 2006. The purpose of this letter is to do two things:

- reinforce IECA's strong belief that your subcommittee and the Congress have the ability to support and encourage continued improvement in our supply of domestic natural gas, or undermine that progress by discouraging or impeding the investments we must have; and,

- to clarify my remarks regarding the drop in natural gas production that has occurred nationally and remains of great concern because prices of natural gas and electricity continue to rise at alarming rates.

My points are against a background realization that any Congressional mandate to reduce greenhouse gas emissions will result in even greater demand for natural gas in general and increased movement by the electric utility industry away from coal towards natural gas. Given the downward slope of natural gas supply, increased demand means much higher natural gas and electricity prices.

Consumers paid a staggering $75.7 billion more for natural gas and $65 billion more for electricity in 2006 than in 2000. Even though natural gas is used to produce only 20 percent of the electricity, it accounts for 55 percent of the industry's entire fuel expense ($50 billion out of $91 billion) according to the Electric Power Research Institute.

And, while residential, commercial and industrial consumers have responded to these high prices by using -13%; -8% and -19% less natural gas respectively, consumption by the power sector rose by 20 percent since 2000. Actions taken by consumers to improve energy efficiency and conservation that could have resulted in lower natural gas prices were wiped out by higher demand for power. EIA forecasts continue to show increasing demand for natural gas by the electric power sector. And now, unprecedented demand is occurring from the production of ethanol.

A recent report from Raymond James & Associates indicates there are 116 ethanol distilleries with 78 plants under construction and 7 undergoing expansion. Up to 95% of these plants will use natural gas boilers. The report forecasts an increase in natural gas demand by 1 percent of total U.S. demand. Unfortunately, supply is decreasing, not increasing.

During my testimony I said that U.S. production of natural gas had fallen by 5.8 percent between 2001 and 2006 according to the Energy Information Administration (EIA). This number represents all production whether on federal land or not.

To clarify the numbers, we have compiled the following data that compares natural gas production between 2000 and 2006 for both federal onshore and offshore production and U.S. total. Onshore production from federal lands increased from 4.3 to 4.4 trillion cubic feet and offshore production fell from 5.0 to 2.9 trillion cubic feet for a combined drop in production of 27 percent, according to the Minerals Management Service. Total U.S. natural gas production fell from 19.2 to 18.4 trillion cubic feet or 4 percent.

U.S. natural gas supply will remain fragile for the next several years because: production is down; Canadian production is struggling and they plan to use more internally; we do not anticipate any significant production from increased access to the Gulf of Mexico over the next five years; the Alaska Natural Gas Pipeline has not begun and would take ten years to complete; and while major LNG supplier countries are planning a cartel, new and expanded re-gasification facilities continue to encounter firm local resistance.

Your leadership and that of the subcommittee is essential to the welfare of this country's supply and price of natural gas and electricity. We are counting on you and we look forward to working with you.

Sincerely,

Paul N. Cicio
President

cc: U.S. House of Representatives

Mr. COSTA. Thank you very much, and thank you for your testimony. All right. We are now at that point of questioning, and I would like to begin. Mr. Bramble, Senator Bramble excuse me, the testimony you gave I thought was valuable. I am wondering though given the history of the boom and bust cycle of oil shale if you have concerns with regards to the technologies that are being considered, whether or not we do not set ourselves up for another boom and bust cycle until the suitable research and development has taken place prior to, as we would say in the farm, putting the cart before the horse, as it relates to where we go. I mean the potential reserves are vast but are we there yet?

Mr. BRAMBLE. The answer is no, I do not think we are there yet. In Utah we have initiated what is called the USTAR, Utah Science and Technology Research. We have established an energy research center in the Uintah Basin. One of the real questions is if you expect to have the significant resources necessary to develop the technology to efficiently and effectively utilize oil shale but then you restrict the ability to leases I think that makes it very, very difficult from a financial perspective to say spend all the money to do the research to see if you can do it sustainably but then you do not issue the leases.

Mr. COSTA. I understand. I mean, I hear you, although there was testimony back in the 1980s by some of the major energy companies that had made commitments only to later see those commitments withdrawn. Mr. Bartis, I am interested in the publication that you have done. First of all, I would like to understand a little more about the potential of oil shale. In part of my district we have vast oil resources, and we have grades and qualities of the grades. We have some very sweet oil that is used for different purposes and has a higher value, and we have other types of oil that we have that is high viscosity count and obviously gets a lower price and is more costly to extract. Where does oil shale fall in this category?

Mr. BARTIS. Well it is one of the more expensive resources to develop. For example, I can give you an analogy with the tar sands and the heavy oils. As you increase the heaviness though the oil becomes more expensive to extract, and if you go to Canada and look at the tar sands that are in Canada, and you picked that up in your hand, it will be sticky. It will be tarry, and to get that out of the sand you have to raise the temperature to about the temperature of boiling water. The get oil shale out of rock, you have to raise the temperature much higher.

Mr. COSTA. Yes. I guess. In page 11 of your book, you talk about mining and crushing and then retorting, and then spin oil shale on deposit, and then oil upgrading. Is that oil upgrading that level where does that get into the level of the quality of the oils?

Mr. BARTIS. When you upgrade it. All the evidence we have is that you can produce very high quality oils from oil sale. It is a matter of cost. What is it going to cost you to produce that very high quality?

Mr. COSTA. In light of that, are you advocating a more measured approach prior to commercial development, given your knowledge of what state of the technology that we are at now?

Mr. BARTIS. Right now we do not have anyone to our knowledge that is ready to go forward with a commercial plant. There is nobody out there that is credible that is ready to go forward with a real commercial plant at this time. They need to do some preliminary testing. So we will not have any ready for some years.

Mr. COSTA. So when Shell Oil testified in western Colorado in a hearing in 2006 and said they would be ready to go with commercial development by the end of the decade and then two months ago I believe there was a suggestion that commercial development was probably several years off than that, what is your best guess to the commercial viability in terms of a timeline?

Mr. BARTIS. Well Shell is certainly the farthest along from what we can tell but I heard them give a talk actually this morning at Governor Mansion's conference, and they said they would be in a position at the earliest within the early part of the next decade.

Mr. COSTA. The next decade. All right. Ms. Kelley, as a rancher—you and your family—what are some of the most significant concerns about the impact of this effort on oil shale in terms of the livelihood and the local economy? You already testified about the expectation game and how it impacted folks but do you believe it is compatible with your current ranching operations?

Ms. KELLEY. Not at the present time, no. I think to have large-scale commercial development of oil shale without appropriate re-

search and development technology in place, where it is just expanding at a rapid level, would greatly impact the diversity of our economy. The most sustainable economies that we have in that region at the present time are ranching and farming and hunting and fishing, the recreational economy. So it could have a debilitating effect, yes.

Mr. COSTA. All right. My time is expired. The gentleman from New Mexico is recognized.

Mr. PEARCE. Thank you, Mr. Chairman. Mr. Cicio, if you got the question how much oil is available for production the U.S., how would you go about answering that?

Mr. CICIO. I do not really know.

Mr. PEARCE. If I were to tell you that it depends on the price, would that mean anything?

Mr. CICIO. Well most certainly.

Mr. PEARCE. In New Mexico, at $6 oil which we saw in the late 1990s, very little production occurred. At $7, an increment more. When we got to $20, then oil was pretty well accessible in that region, and so when I hear about the boom and the bust, about the highest we got in the 1980s was around $30. Economically is there a different model when you hit $70 oil?

Mr. CICIO. Most certainly. I mean the point is that—and it is the same point for natural gas—if you have higher base prices for crude oil then it allows for greater expenditure of technology to allow for projects to go forward.

Mr. PEARCE. Absolutely. The tar sands are at some point whether it is $20, $40, $60, $80, $1,000, some point they become economically viable. Is that more or less correct?

Mr. CICIO. That is correct.

Mr. PEARCE. And so when I hear Ms. Kelley say that the boom-bust cycle was a deep problem and she does not want to see that happen again, can we overlay the boom-bust cycle of the 1980s with now? Did we ever reach $70 oil or the equivalent of $70 oil?

Mr. CICIO. No, I do not believe we have.

Mr. PEARCE. Yes. So the economics of that time. Just like the ranchers, the price of cows went up to $1.10 per pounds. You can get sorrier ranchers that are able to ranch at $1.10 than you can at 70 cents which a lot of times the price was at 70 cents. So economics really play a large part in the decision.

Mr. Simpson, you had a quote that says you believe that the Energy Policy Act of 2005 is nothing short of an assault on our western culture and our way of life. Do you believe that the two U.S. Senators from New Mexico want to protect the western culture and our way of life? Are you aware that they were two of the four people in the room? Any one of the four could delete any policy.

In other words, one hand raises and they could make a line. They could draw a line through any piece of the Energy Policy Act. Does this surprise you that both Senators, a Republican and a Democrat, from New Mexico signed every single provision? They did not object to the provisions that are in there. In other words, that was the conference committee. The conference committee, their rule was any one of the four of you raise your hand, Mr. Dingell, Mr. Barton, Mr. Bingaman, and Mr. Domenici, and you can

delete a provision. Does that surprise you? Do you think they want to obstruct, they want to assault our western culture and our way of life?

Mr. SIMPSON. My response is basically no, I am not surprised that they signed off on this. They received lots of comments from sportsmen and a wide diversity of the public saying raise the caution to what you are doing. I think basically they are not opposed to the western culture. Based on what we see and what we see continuing, the lack of BLM managing our public lands especially the environmental impacts and the Federal government's GAO report said point blank, BLM cannot live up to its environmental responsibility.

So that is the fact. What we are telling you is we agree with that, and we need to change the status quo or else you are going to have dramatic increases in the problems which will eventually over time——

Mr. PEARCE. Thank you very much. If I could reclaim my time. Senator Bramble, let us say that we are successful. I mean we have a trajectory of hearings that really begin to look like we are going to try to limit the access to public lands for oil and gas production, much as we have limited the timber sales. We have not had a timber sale in New Mexico for over 20 years, and in some of our national forests I think we are headed that direction. If we do that, tell me a little bit about what is going to happen to the royalty revenue and the tax revenue that is going to come into Utah. Tell me a little bit about the impact in your state.

Mr. BRAMBLE. Right now under our current scenario somewhere around $350 to $500 million a year is generated to state and local governments directly from oil and gas. If it is repealed and because Utah has such a significant portion of our land developable, natural resource developable, in other words oil and gas line is owned by the Federal government, it would be devastating. It would take several hundred million dollars out of the economy. There is about 10,500 jobs in the State of Utah—which is significant to our state—that would be lost.

Mr. PEARCE. All right. Thank you, Mr. Chairman. I see my time has expired. I appreciate it.

Mr. COSTA. Thank you. Mr. Simpson, I appreciated listening to your testimony as with the other witnesses. As I indicated on the outset of this hearing, one of the areas that we are trying to determine is what constitutes best management practices. Clearly you indicated from your own background in your career that you have some good thoughts as it relates to management practices.

You talked about directional drilling, well clustering, site restoration in your testimony. The Department of Interior, as you probably noted, in their testimony at the previous panel indicated that they are trying to incorporate such best management practices. Do you think that, in fact, they are—in their efforts to implement the 2005 Act—getting there as it relates to your own testimony?

Mr. SIMPSON. Bottom line is no. That is why I made the statements I have said.

Mr. COSTA. And that is based upon your experience in New Mexico or is that——

Mr. SIMPSON. I have experience in New Mexico. I have looked at southwest Colorado. I have looked at Pinedale Anticline. I have taught some classes to citizens about inspection, how to enforce. I have looked at South Dakota, Wyoming, Colorado, New Mexico. Extensively in New Mexico, and the answer is there is a lot of hot air about best management practices. It sounds good. In practicality, it is not implemented. There is some implementation of it but if industry is too expensive or limited in drilling or rigs or stuff, disbanding that and going forth with what they have.

Otero Mesa is a good example of what they did that. The BLM developed a plan of developing to protect the water resource and the wildlife habitat using directional drilling and existing roads and basically that was scrapped for a——

Mr. COSTA. So you are saying that they are not getting there, and you do not believe they can?

Mr. SIMPSON. They can if you make them. If Congress makes it and requires it in legislation, that is why I am saying legislation needs to be revised, and we need to make BLM accountable, and it needs to be a transparent process where the public can see what is going on.

Mr. COSTA. All right. Thank you. Mr. Cicio, I appreciate your testimony. You used a number, and I have heard it before but you know I am always somewhat trite, bad on when people talk about proven reserves whether we are talking about oil or natural gas, and you talked about 100 years of proven reserves for natural gas. Can you substantiate that based upon what known set of facts of use and availability?

Mr. CICIO. That is a number that I received from the Department of Interior. That is technically recoverable. I believe the number is something like 1,040 trillion cubic feet of natural gas.

Mr. COSTA. You know we talked about in a related subject about only 5 percent of the public lands are available to oil and gas production on public lands yet the areas of public lands which actually have oil and gas reserves are 85 percent currently leased. Of those, it is my understanding that approximately 35 percent are actually in production, and yet as we know in the last 10 years production has increased on public lands both for natural gas and oil. So I am really trying to understand is there a problem as it relates to access, and we know that the application for permits, APDs, have increased dramatically?

Mr. CICIO. Yes. I think the fact is that oil and gas companies need a large inventory of leases available for them because it is taking longer and longer time periods to get through the permitting, all of the permitting process, and equipment is harder to get now, manpower is harder to get now. The process all the way from leasing to production is——

Mr. COSTA. Well I understand in terms of being fiscally prudent and wise investors you want to you know look ahead and you have you know different fluctuations in prices so obviously you want to have reserves available but I think is it really accurate to say that only 5 percent of the public lands are available to oil and gas production? I mean you know I guess it is subject to definition. I do not think we want to drill next to the Washington Monument but there is a lot of public lands that are out there.

Mr. CICIO. Yes. Well that is a number that I believe I took off of the Department of Interior website that said it was either 5 or 6 percent. I used the 5 percent because that is what I took off the——

Mr. COSTA. The bottom line is oil and gas production has dramatically increased in the last 10 years, as has the permits that are available.

Mr. CICIO. Well actually production of natural gas has fallen since 2000.

Mr. COSTA. But on public lands?

Mr. CICIO. I do not know the number——

Mr. COSTA. We should check.

Mr. CICIO.—between public versus private.

Mr. COSTA. I understand.

Mr. CICIO. I am talking about U.S.

Mr. COSTA. I understand. I just want to try to be clear. My time has expired. So Mr. Sali I believe was next.

Mr. SALI. Mr. Chairman, first I would ask unanimous consent that the testimony of Terry O'Connor, written testimony from Shell Exploration and Production Company, be added to the record of the hearing today.

Mr. COSTA. Without objection, yes.

[The statement submitted for the record by Mr. O'Connor follows:]

Statement of Terry O'Connor, Vice President, Communications, Regulatory and Government Affairs, Shell Exploration & Production Company, Unconventional Resources

Good Afternoon, Mr. Chairman and Members of the Committee. On behalf of Shell Exploration & Production Company, I am delighted to appear before you today to provide some perspective on the impacts of the passage of the Energy Policy Act of 2005 insofar as Section 369 is concerned.

As you recall, Section 369 relates specifically to oil shale, tar sands, and other strategic unconventional fuels. My comments today will be limited to Shell's ongoing oil shale research and development activities in northwestern Colorado. This Committee's records will reflect that on June 23, 2005 I previously submitted written as well as oral testimony explaining in some detail the unique nature of Shell's patented in situ conversion process ("ICP") technology, including its potential environmental and technical advantages relative to previous but unsuccessful efforts to develop America's enormous oil shale resources. In a sentence, the ICP technology involves no open pit or underground mining but instead involves drilling holes into the subsurface and inserting electric heaters to heat the oil shale strata to a temperature that will allow hydrocarbon bearing liquids and gas to be recovered through conventional means. The recovered hydrocarbons are then processed into very clean transportation fuels—jet fuel, diesel, and gasoline plus gas. Rather than present unnecessarily redundant information today, I merely wish to reference my 2005 testimony at this time and proceed to the stated purpose of this hearing. Nevertheless, I will be delighted to answer any questions you might have as to the ICP technology.

At the outset Shell would like to take this opportunity generally to thank both the previous as well as the present Congress (and more specifically the Natural Resources Committee and this Subcommittee) for the wisdom and insight you displayed by including the Section 369 provisions into the Energy Bill. When ultimately implemented, those 15 pages of policy, recommendations and directives may very well have the impact of stimulating a new domestic energy industry that over time could strategically contribute to U.S. and regional energy security, especially for liquid transportation fuels.

We would like to complement the Department of Interior for following the Congressional directive contained in Section 369(c) by creating and then executing a framework for an oil shale Research, Development and Demonstration ("RD&D") leasing program. This is a small but vitally important first step toward possible

commercialization of U.S. oil shale. Last December BLM issued five 160-acre RD&D leases in northwestern Colorado. The RD&D program represents an appropriate balance of stimulating cautious, phased oil shale development—in many ways a process much different from the process that resulted in the boom and bust atmosphere that severely impacted Colorado and Utah communities in the late 1970s and early 1980s. In a manner discussed in more detail later in this testimony, the BLM's RD&D program—and the separate but related Section 369(e) commercial leasing program of the Energy Policy Act—will enable the States and the impacted communities to become partners at the table to ensure that their local and regional concerns are addressed up front in the process. Shell believes that this Federal/State/local and industry partnership arrangement at the front end, prior to actual commercial development decisions being made, is critical to the long-term success of any oil shale commercialization plan.

Let us turn now to the various provisions within Section 369 that Shell believes are potentially most impactful for the sustainable development of our Nation's vast oil shale resources. Although a complete list of the potentially beneficial provisions is quite lengthy, in the interests of time and space I will discuss what we believe are the four most important provisions to Shell's ongoing oil shale research:

1) Section 369(b) sets forth a Declaration of Policy that the development of oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce America's growing dependence on foreign oil imports, provided that such development is conducted with an emphasis on sustainability by considering potential impacts to States and communities and using practices to minimize environmental impacts. This Section is in general harmony with a core business principle of Shell of pursuing the development of projects in a sustainable manner—balancing short-term and long-term interests, plus integrating economic, environmental, and social considerations into business decisions.

Past unsuccessful attempts to develop oil shale in the Colorado-Utah region have resulted in a perception—actually more correctly, a mis-perception—by some people that oil shale should never again be considered for commercial development in the United States. We believe it was important that Congress set forth its Declaration of Policy, declaring that if technologies can be developed that will allow for production of liquid transportation fuels plus gas in a sustainable manner that is economically feasible, environmentally responsible, and socially sustainable, such development should be encouraged, not discouraged, by Federal policy makers.

2) Section 369 contains at least 8 provisions [(b)(3), (e), (g)(2)(D) and (E), (h)(2)(D), (i)(2), (k)(1), (M)(2), and (r)] that either encourage or actually mandate that impacted States and communities be treated as partners in the planning process. While the language and scope of each of these provisions varies depending upon the stated objective, their cumulative intent is clear: to wit, that unlike the mistakes in the past, the United States Government must not just communicate with the states and communities, but must collaborate, cooperate, and seek the input of state and local governments in all stages of oil shale planning processes.

Over the course of the past 6 years Shell has met one-on-one and in small groups with well in excess of 1,000 local stakeholders—local government officials, ranchers and farmers, NGOs, business leaders, conservationists, and general public members—who have expressed an interest in our ongoing field research. In addition, we have held no less than 11 community meetings in four local communities (8 such meetings in the past 20 months) plus have jointly participated with BLM in a series of additional public meetings prior to issuance of the RD&D leases. All such meetings were advertised in local and regional newspapers as completely open to the public. We have learned much from those visits and have made many adjustments to our plans in response to what we have learned.

One of the many messages we have heard countless times over the years from a variety of stakeholders is that when attempts were made to develop oil shale in the late 1970s and early 1980s, the Federal Government would come to the communities to tell them what they were going to do but rarely would they seek local advice and input. This perceived one-way communications policy unfortunately fostered more than a bit of resentment and distrust of the Federal Government by local community leaders. Fortunately, over time, and with proper compliance with the partnership and collaboration provisions of Section 369 being addressed both in spirit as well as in fact, joint alignment and trust by and among the various levels of government can be rebuilt.

3) Section 369(j) contains an amendment to the Mineral Leasing Act of 1920 that is of critical importance to Shell. Prior to the passage of the Energy Act of 2005, any individual, company or other entity that held a single federal oil shale lease would have been absolutely barred from acquiring any additional oil shale leases from the federal government. Similar restrictions had originally existed for other

leasable minerals but over the years prior Congresses had addressed this antiquated provision for other minerals but not for oil shale. Had Congress refused to allow companies such as Shell to secure more than one federal lease, the probability of Shell proceeding with plans eventually to develop a commercial oil shale project would have been significantly diminished. But since Congress amended the MLA to allow companies to hold multiple oil shale leases, Shell has been able to advance the scope and dimensions of its R&D planning. Let me provide some specifics:

Shell was successful in securing 3 RD&D leases. On the first lease we have initiated plans to develop a small, integrated pilot project we call OST—short for Oil Shale Test—that could in an optimal sense be a final scale up project before a commercial decision is made, hopefully early in the next decade. But now that we are legally able to secure more than one lease, we are directing our attention to a fascinating new electric heater design we are anxious to test in oil shale. We call it a triad heater. It has been developed in our laboratories in Houston but has yet to be field tested in a potential commercial setting. We are excited to test this technological innovation on our second RD&D lease. The potential significance of the triad heater is that, if successful, it could reduce our power requirements, access lower grade oil shale, improve our energy balance, help oil shale economics, and perhaps even reduce our CO_2 footprint. Without the passage of Section 369(j), we would have had no suitable location to meaningfully test this new heater technology.

The third RD&D lease involves yet another exciting variation of the base OST test, this one being located in a multiple mineral area that encompasses a large portion of the Piceance Basin in which nahcolite (baking soda) is interspersed with the kerogen (the correct geologic name of the hydrocarbon material in the oil shale). This is likely a more complex test involving, not just the recovery of oil shale using the ICP technology, but first recovering the nahcolite using another Shell patented methodology. Once again, this exciting field test would not have been possible without the passage of the Energy Policy Act of 2005.

Let me make it clear: none of these three RD&D tests are a certainty for success. Each carries with it significant technical, environmental and economic challenges. Overcoming these challenges, however, should improve the environmental and economic sustainability of commercial oil shale development. But without the assistance of this Committee, of Congress and of BLM, none of the 3 projects would be the subject of discussion today.

4) Pursuant to the provisions of Section 369(k), the Secretary of Interior is designated as lead Federal agency for the purposes of coordinating all applicable Federal authorizations and environmental reviews—in coordination with applicable State and local agencies. We urge DOI to continue to work toward issuance of regulations to implement this provision at an early date. While Shell is not seeking to have any waivers of environmental protection standards, we do believe it is strategically important to identify and implement procedures to consolidate multiple permitting requirements, to process multiple permitting processes concurrently rather than sequentially, and to seek out mechanisms to minimize and eliminate costly delays of project approvals wherever possible.

In closing, what are additional steps that this Congress and /or the BLM should consider to stimulate responsible oil shale development leading to commercialization? Let us identify three important strategic steps we would recommend:

1. **Secure fair commercial and operating terms (royalty, conversion fee, diligence, buffer zones, etc.) especially for first generation oil shale projects, as BLM develops its commercial oil shale regulatory program in 2007.** Late in 2006 BLM sought comments through an Advanced Notice of Proposed Rulemaking to develop a federal oil shale regulatory program, as required by Section 369(d)(2). How these commercial and operating terms are ultimately finalized may very well be the key determining factor when and even if Shell and the industry are able to achieve future commercial development of oil shale in the United States.
2. **Secure passage of an amendment to the Mineral Leasing Act to allow royalty credits for early infrastructure development investments in and around communities likely to be impacted from commercial oil shale development.** One of the difficult realities of future large scale energy development projects on Federal lands is that, even though the royalty (on the Federal side) and severance tax (on the state side) revenue streams may very well be substantial, these revenue streams do not commence until many years after initial project construction and development commences. Local communities will need expanded/additional schools, improved/new roads and many other public services and facilities long before increased government revenues become available. Congress has a unique opportunity to help mitigate the inevitable infrastructure needs of the surrounding communities by creating an in-

centive for project developers to invest in a variety of local government infrastructure mitigation projects at an early stage. One of the best ways would be to create a credit against subsequent royalty payment obligations if such infrastructure investments were made by the federal oil shale lessee in alignment with the communities. *[We point out that a similar credit structure is being considered by the Alberta Provincial Government to induce early infrastructure development in the Canadian extra heavy oil sands areas.]*

3. **Create a favorable legal and regulatory regime at the Federal level for investment in carbon capture and storage.** Geologic storage of carbon dioxide can be an important tool for managing greenhouse gas emissions from a range of facilities throughout the economy and this tool should be considered for application to oil shale projects. A variety of incentives, both financial and legal, to encourage CO_2 capture and sequestration could provide opportunities for potential oil shale operators to reduce their carbon footprint. We support the Department of Energy's plan to promote large-scale carbon storage pilots through the Regional Sequestration Partnership. These pilots should provide a better scientific framework under which carbon storage, measurement, monitoring and verification take place. The Energy Policy Act contains several provisions encouraging the sequestration of carbon, including Section 354 (enhanced oil recovery ("EOR") from federal leases), Section 503 (carbon sequestration projects on Native American lands), Section 805 (production of hydrogen from fossil fuels), Sections 962-963 (carbon capture for coal-based facilities), and Section 1307 (clean coal investment credit). However, the existing provisions do not address carbon sequestration in the context of oil shale and tar sands production.

There are several regulatory and legal issues that should be clarified to facilitate geologic carbon storage. The Environmental Protection Agency has announced guidelines for pilot underground injection wells for carbon sequestration but has not yet clarified policies for commercial-scale projects. Issues that relate to "pore space" rights plus potential conflicts with other mineral activities as well as surface use should also be addressed. Establishing clarity on the issue of long-term liability for stored carbon dioxide should be a priority since this is a potentially significant obstacle to industry investment. To encourage the location of a clean coal facility in Texas, the legislature adopted a law addressing this issue. Until other states—and more preferably the Federal government—create similar protections, companies will be reluctant to invest in pilots or commercial CO_2 storage activities. Congress should consider expanding its financial incentives for pilot and large-scale CO_2 storage to cover a broader range of carbon sequestration projects.

This completes Shell's testimony.

I will be happy to answer any questions you might have.

Mr. SALI. Thank you, Mr. Chairman.

Mr. COSTA. You may proceed.

Mr. SALI. Representative Kelley, you have concerns about whether we will repeat the boom or bust cycle that we have seen historically. What suggestions do you have that would prevent or minimize that boom-bust cycle while we are allowing the development of oil shale resources on public lands?

Ms. KELLEY. I think it is absolutely essential that we go through the entire course of the research and development phase. I think it is vital. There was a point in Mr. Bartis' testimony that I do not want the committee to miss, and that is if we fail by prematurely generating commercial oil shale development and it closes at this point, it fails at this point, you will never in my opinion because of public sentiment see oil shale development again. It will never happen.

Mr. SALI. When will that development or research phase be through?

Ms. KELLEY. I do not know. I am in close contact with the Shell officials, and have had numerous discussions and research and development is a fluid process. It is not a static timeline process that has direct completion dates. You would like to have it that way but

it does not happen that way. It is a trial and error process, and let us see how it works first.

Mr. SALI. How will we know when that research and development phase is finished?

Ms. KELLEY. I think the companies are the ones that are going to know before we will.

Mr. SALI. So if the companies tell us it is time to move on oil shale production then we should move ahead?

Ms. KELLEY. Not necessarily. They have to prove that the technology works.

Mr. SALI. Well we are going to be asked to make a decision about this, and you are telling us that we should hold up and not move too fast. Is now the time?

Ms. KELLEY. No, now is not the time. Let us go slow.

Mr. SALI. How do you know that it is not the time if you said a few minutes ago you did not know when that time would be?

Ms. KELLEY. Well I think it is a matter of semantics but I think ultimately let us see the research and development phase go through its completion.

Mr. SALI. But you do not know when that time will be done?

Ms. KELLEY. No, I do not.

Mr. SALI. Do you support oil and gas development in the Alaska National Wildlife Refuge or outer continental shelf?

Ms. KELLEY. I do not have any opinion on that, sir.

Mr. SALI. All right. Thank you. Senator Bramble, we have been going through a number of hearings this year with titles such as the evolving west and dealing with I think you know the idea that we ought to curtail at least some of the oil and gas and coal and timber leasing and production in the west. We had one hearing titled the evolving west that we were going to move to you know an economy that was based on tourism. We had another hearing entitled access denied.

I think we are seeing here today some indications that we ought not to proceed with certainly the oil shale development. If oil and gas and coal and timber production on Federal lands was cut off in your state, what would be the revenue impact to your state revenue?

Mr. BRAMBLE. Directly on oil, gas and coal it would be about half a billion dollars. The impact would be far greater when you consider the jobs and the other parts of the economy. I do not have a number for that.

Mr. SALI. Do you have any idea what the impact would be to the Federal government? Let me rephrase that. How much would the Federal government need to appropriate to make your state whole for that lost royalty revenue, severance taxes, those jobs and whatnot? Do you have some kind of a multiplier that——

Mr. BRAMBLE. It would take somewhere—at a 5 percent rate of return—somewhere in the range of $10 billion at just the current revenue from oil, gas and coal. Set aside $10 billion to account for that.

Mr. SALI. All right. Thank you, Mr. Chairman.

Mr. COSTA. I thank the gentleman from Idaho for your questions and for your interest. The questions that I have here, I do not know what the right time is for oil shale. I am certainly intrigued

by the documents and some of the testimony that has been given but I did think, Mr. Bartis, if I heard you correctly, that you said a reasonable expectation was 10 years. Did I hear that correctly or am I——

Mr. BARTIS. Yes. For large scale commercial development, it is at least 10 years away. Those kinds of decisions. That does not mean that companies like Shell or others may need leased lands or lands out there, Federal lands, to do first of a kind commercial plants, and as we recommended, I believe it is very important that Interior work with the Department of Energy, with the Environmental Protection Agency so full size, first of a kind commercial plants can be expeditiously built, and to get a fair and equitable framework for such activities.

But at the present time, there is a big difference between giving them that right and trying to put in place regulations that are fair and equitable to both the taxpayers and industry when we know so little about what the costs of development are. What those processes can do for us. So there is a need to go forward and to be ready to go forward but that does not mean we have to put in place a permanent framework for leasing.

Mr. COSTA. No, no. I think you put it in perspective which is what I am trying to fathom at this point in time given the challenges that the potential energy provides. I am going to reserve the balance of my time to ask witnesses as I desire to submit written answers to my questions, and in the interest of time I would like to defer to the gentleman from Utah, Mr. Bishop.

Mr. BISHOP. Thank you, sir. I am assuming under unanimous consent you have allowed me to join you in today's committee panel.

Mr. COSTA. Yes.

Mr. BISHOP. I just want to make this formal somehow.

Mr. COSTA. Well you are formally welcomed here, and we do have a colleague of yours, the Senator from Utah, whom I suspect you know.

Mr. BISHOP. Yes, and even though I was here all morning, I am feeling like this becomes my office room. I wish you would not hold quite as many of these hearings. I would not have to be here quite as often but I would be remiss if I did not take the opportunity to welcome the distinguished Majority Leader from the State Senate in Utah, Senator Bramble.

I appreciate his efforts on behalf of the constituents of the State of Utah and what they do even though you know it is a Senator, and we understand as a former Speaker of the House in Utah, we understand where the true power should lie but I welcome you here, and I appreciate your efforts on this.

You know one of the things I find somewhat ironic is that as we are piddling around today Governor Huntsman in the State of Utah is finishing off his energy summit which is a broad based approach. If you could just spend a second talking about what the goals of that summit is and what you see as the vision of Utah moving into this particular area, and I have some other specific questions afterwards.

Mr. BRAMBLE. I think the bottom line is Governors of the western states, business leaders, environmental interests are looking to

develop a plan. A plan for a sustainable energy development and moving toward energy independence, responsible development of energy while at the same time recognizing environmental concerns.

Mr. BISHOP. You have spoken to the significant amount of money that comes from royalty payments and severance taxes in the State of Utah. I found it interesting when people were talking about the potential of a boom and bust cycle. Does the fact that you use these as ongoing revenue, I mean as one-time revenue as opposed to ongoing have a significance to try and buffer the state on any of that in the future?

Mr. BRAMBLE. It does. In Utah we look at the revenues from oil and gas—even though technically from a CPA's perspective they would be considered ongoing—because of the volatile nature we appropriate those on a one-time basis.

Mr. BISHOP. There are two ways in which revenue comes from this kind of energy production at the state. One obviously is the royalty payments which you were talking about you do as one time. The other comes from the property taxes that will naturally develop from that. Utah, as an old school teacher, I realize that probably the biggest expense you have—and I am assuming this is correct—is in education in the State of Utah.

Mr. BRAMBLE. It is.

Mr. BISHOP. Well between 50 to 60 percent of your entire budget goes into education?

Mr. BRAMBLE. That is correct.

Mr. BISHOP. And Utah has one of those unique equalization programs for education I understand which simply means that money that is produced in taxes, property taxes, will be equalized throughout the state so that whatever the state legislature sets as the limit, if a county goes over that, it is redistributed amongst the poorer counties, which since the 1980s you have never had to do because no property taxes ever reached the limit. You have subsidized every district.

I do though remember when I was first in the legislature that there was periods of time when we were actually doing some recapturing, and it happened to come from the Uintah Basin, which we were talking about the potential of oil and tar sands. If you draw the magic line between Montana and New Mexico, everything east of that, 4 percent of all the land is owned by the Federal government. Everything west of that, 57 percent is, and that is skewed somewhat because Montana is pretty low, like about 30 percent. California has about 50 percent.

We have the great fortune of having about 70 percent of our land controlled by the Federal government. If you also look about education funding in the nation, 13 of the 15 states that have the slowest growth in education are those western public lands states. Twelve of the 15 states with the largest class size are those western public land states, and in fact the only correlation you can make with the inability of funding public education is with the amount of public land that is controlled by the Federal government.

The only way we are going to actually meet the needs of education in the State of Utah and those kids is to try and somehow generate new kinds of jobs and new type of employment and the

best way of doing that is the recapture program we have in education. If, for example, these counties in that oil shale basin could generate the kind of property tax that we are looking at in the future, that means that kids in my county which is the only county in Utah that has absolutely no resources whatsoever except for gravel, we actually have a chance to fund our public education system, both maintenance and operations as well as capital outlay.

So I urge you forward in your efforts because from my kids' future that is going to be one of the most important things. I am just wondering. I have a few minutes later. Have any of you heard of the program on the panel of conservation and action?

Let me just commend that program to you for one second. Most of the energy production is going to be made by independent petroleum producers, names of companies that no one in this room has ever heard of or ever will. They obviously have an IPAMS which is their organization which works in conjunction with 21 environmental groups including The National Wildlife Foundation for a program called conservation and action which is an effort in all of these areas to enhance the conservation, reclaim the property, and encourage wildlife opportunities for all those particular members.

In May they will be having an event in Wyoming which is Sportsmen for Wyoming Range, which is a specific effort of trying to get the industry as well as the sportsmen populations to work together to create greater opportunities. One of the things we found out in the last hearing we had on this—I see my time is almost up—is that——

Mr. COSTA. Twenty seconds.

Mr. BISHOP.—Crestar, for example, when they started drilling their lands actually had to build roads into those drills, those wells, which added and expanded access for sportsmen. Opportunities they had never had before because all of a sudden roads now existed to get to the areas in which they could hunt and they could fish. I have run out of time but I do want to thank you, Chairman Costa, for allowing me to be here, and I want to especially thank Senator Bramble for coming back here and testifying. I am very proud to have a fellow Utahan here. I do not feel quite so outnumbered right now.

Mr. COSTA. Well thank you, and before you arrived I know that Senator Bramble was waiting in anticipation of your involvement in this subcommittee, and we are pleased that you are here. You are always welcome.

Mr. BISHOP. I bet he was on bated breath but thank you anyway.

Mr. COSTA. All right. I will defer my time because I do want to wind this up, and as I did say, I reserve the balance to submit to you written questions to which we would like to have a response. Back to the gentleman from New Mexico, and then we will close the hearing.

Mr. PEARCE. Thank you, and we promised to be finished by four. So I am tearing back to two questions, and if you could answer very quickly. Ms. Kelley, do you mind or do you find objectionable wind or solar energy production on Federal lands?

Ms. KELLEY. No, sir.

Mr. PEARCE. You understand that the entire research and development phase is not complete? Both are subsidized heavily? That

neither one are productive? Mr. Cicio, again keeping in mind that we are talking about the availability of affordable energy, tell us again one more time—and do it very quickly—the impact of guessing wrong in energy production. How many jobs have we lost, and how many jobs are at stake, and if we begin to drive the cost of natural gas higher? Run through that one more time, and do it very quickly.

Mr. CICIO. Yes. Since the year 2000, since natural gas prices have gone up, we have lost three million manufacturing jobs.

Mr. PEARCE. Outsourced jobs.

Mr. CICIO. Outsourced jobs.

Mr. PEARCE. OK. Three million jobs, and did I understand $75 billion additional because the price of gas has spiked higher and higher?

Mr. CICIO. We are paying $75 billion more in 2006 than in 2007 because of the price of natural gas. That is just the delta increase.

Mr. PEARCE. If we continue in this vein, how many more manufacturing jobs are we going to lose in the next two years?

Mr. CICIO. Well without question manufacturing relies on energy to operate. We will continue to lose jobs so long as the price of natural gas in the United States is much higher than elsewhere in the world.

Mr. PEARCE. Thank you. Thank you, Mr. Chairman. I appreciate it. It was a little over four, but I appreciate it.

Mr. COSTA. All right. Not a problem. I want to thank all of the witnesses, both in this panel and then on the first panel, for your testimony and for your patience with the Subcommittee. I want to thank the members of the Subcommittee and those who are new add-ons for your involvement today, and we will continue to try to accumulate our efforts. We have a hearing Tuesday. Excuse me. Today is Tuesday. Thursday afternoon I believe at two o'clock, and we will look toward the same sort of punctual response and good testimony. Thank you very much. The Subcommittee is now adjourned.

[Whereupon, at 4:02 p.m., the Subcommittee was adjourned.]

[Additional material submitted for the record follows:]

[An article from the Casper Star Tribune entitled "Public comments: Slow development" submitted for the record follows:]

CASPER STAR TRIBUNE
Wyoming's Statewide Newspaper

April 16, 2007

Public comments: Slow development

By WHITNEY ROYSTER Star-Tribune environmental reporter

JACKSON—Public hearings on the Bureau of Land Management's proposal to manage lands around Pinedale found that citizens want the agency to slow energy development and do more to protect wildlife and natural resources.

Last week, BLM officials held open houses in Rock Springs, Jackson, Pinedale and Marbleton, and not one member of the public speaking at the meetings supported the BLM's preferred alternative—a mix of oil and gas development with some areas deemed off-limits or off-limits to surface occupancy.

The biggest turnout was in Pinedale, where a crowd spent several hours speaking into the public record about the proposed plan, which is out for public comment until May 18.

"The reality is that this type of input is exactly what we try to solicit through the planning process," said Steven Hall, spokesman for the BLM in Cheyenne. He

said helpful comments are those that bring to light new information that helps inform the decision-making process.

"It's not useful to view this as a popularity contest on alternatives," Hall said.

Many people said they didn't like any of the four floated proposals because they wouldn't do enough to protect wildlife and natural resources. That even included the alternative designed to be the most environmentally friendly, with more allowances for natural resources.

Gordon Schwabacher, a Pinedale rancher, said in a telephone interview the document doesn't do enough overall to protect wildlife migration corridors and calving areas in the Upper Green River Valley.

Mark Gocke, Star-Tribune correspondent A natural gas drilling derrick and cranes stand silhouetted against a colorful sunset south of Pinedale earlier this year. The Bureau of Land Management is seeking public comment on a plan that, in part, will determine where oil and gas activity takes place in the region.

He said at the Pinedale meeting no one supported eliminating oil and gas drilling, but most believe more study is needed and the overall pace of development needs to slow.

"Everybody felt like this is going way too fast," he said, and the social impacts to Pinedale also need to be considered.

The draft of the Pinedale resource management plan—a document that defines, in part, which of more than 1 million acres of land in the area will be available for oil and gas activity—comes at a time area residents are also faced with several other development documents.

In December, a draft supplemental environmental analysis for the Pinedale Anticline was released. In that document, the BLM proposes allowing about four times more wells—up to about 4,000—on the Anticline but in a concentrated, heavily developed area along the top of the Mesa. And last year, the BLM approved a document allowing 3,100 more wells in the already developed areas of the Jonah Field. Land managers and state officials have acknowledged that area will be a virtual sacrifice zone for wildlife, and off-site habitat improvement was a key component in the approval of that project.

Those areas are also part of the BLM's Pinedale resource management area, and all alternatives in the latest plan indicate they are open for oil and gas development, along with a large area near LaBarge. Big differences in the BLM's preferred alternative and the most environmentally friendly option—Alternative 3—include the Wind River front area east of Cora, and a swath of land west of Pinedale. In the BLM's preferred plan, both those areas are deemed "no surface occupancy," meaning the minerals would have to be tapped by wells drilled off site. In Alternative 3, those areas are deemed off-limits to drilling.

BLM officials said in the Wind River front area, there is a lot of private land, and private landowners may agree to gas development. In the land west of Pinedale, there are already existing leases that have been issued. The two other alternatives include a "no action," which maintains the current plan developed in 1988, and a second alternative that would maximize the production of oil and gas.

In Jackson, Lloyd Dorsey with the Greater Yellowstone Coalition told BLM officials the wildlife it manages in the Pinedale area is "critical to the greater Yellowstone area." He said the agency is "in a critical place" to protect the area's natural resources, including air quality.

"You won't get a second chance at a decision of this magnitude, and neither will we," Dorsey said.

Dorsey said the preferred plan does not do enough to protect air, wildlife and human quality of life, and does not set aside enough habitat free from development.

"Your decision should not relax protected stipulations to assist our sage grouse, mule deer and pronghorn as they struggle to survive," he said. He supported Alternative 3.

Alexandra Fuller also spoke at the Jackson public hearing, saying missing from the BLM's document is any thought from philosophers.

"The question that I think we're failing to ask is what environmental, cultural and social legacies are we leaving not just for our children but for future generations of other species," she said.

Fuller said "mainstream philosophical thought" believes humans can only thrive when government and environment are in balance. She said the BLM can't leave the Pinedale area to extensive development, as future generations will not know the pristine place it once was.

"Some of those philosophical questions can have us talking for perhaps years," she said. "I don't think that's bad. Talk a little bit more, drill a little bit less."

The public comment period on the Pinedale resource management draft plan closes May 18. Then land managers will review the comments and develop a final

plan, expected later this year. The agency hopes to have a final decision in early 2008.

Environmental reporter Whitney Royster can be reached at (307) 734-0260 or at royster@tribcsp.com.

[A letter submitted for the record by Colorado officials, including Hon. Keith Lambert, Mayor of Rifle, Colorado, et al., follows:

The Honorable Nick J. Rahall II
Chairman, House Natural Resources Committee
1324 Longworth House Office Building
Washington, D.C. 20515

April 16, 2007

Dear Chairman Rahall:

We, Northwestern Colorado elected officials, write to inform you of our serious concerns regarding efforts by the Interior Department to fast-track commercial leasing of federal oil shale resources in our region without following the procedures or adopting the safeguards recently set forth in federal law. Please include these comments in the record for your series of hearings on the Energy Policy Act of 2005 (EPACT).

It has come to our attention that the Bureau of Land Management has apparently decided to move aggressively forward with the adoption of a full scale commercial oil shale leasing program, even though they have not completed the programmatic environmental impact statement authorized by Section 369 of the EPACT. Moreover, it appears from budget documents submitted to Congress by the Department of the Interior, that the BLM has reached a foregone conclusion - despite language in Section 369 requiring extensive consultation with elected officials and the interested public before making a decision - that a commercial oil shale lease sale will occur by the end of calendar year 2008. This sale would occur long before the results from the current oil shale research and development program are in. According to the *United States Department of the Interior Budget Justifications and Performance Information Fiscal Year 2008, Bureau of Land Management*:

> BLM plans to spend $4.4 million within the Oil and Gas program on Oil Shale activities in 2007. This amount is retained in the 2008 request in order to finalize the programmatic EIS, manage the ongoing RD&D leases, prepare the commercial leasing rule and *to perform site-specific NEPA analyses required to offer commercial leases by the end of 2008...* (Page III-139, emphasis added)

Nowhere in the budget document cited above is there any mention of the BLM's obligation under Section 369 (e) for the Secretary of the Interior to consult with the Governor of Colorado, representatives of local governments, Indian tribes, or other interested persons prior to making a decision about moving forward with a commercial oil shale leasing program.

We believe that this headlong rush to develop a commercial oil shale program and the commitment to issuance of long-term commercial leases is ill-advised. It is vitally important that interested Coloradoans have the most complete information about the potential impacts of oil shale development in Colorado, an understanding of any proposals for a commercial program that the Administration might have in mind, and the results of the RD&D program established, before we commit federal oil shale resources to full development.

Given the fact that some companies with an interest in the development of oil shale have stated publicly that their research programs will not determine whether or not their proposed technology is commercially viable for some years, we can afford to take a cautious, careful approach to this issue.

We therefore urge Congress to review the current statutes that apply to the BLM's oil shale development program, and take the steps necessary to assure that we do not imprudently rush into a commercial scale program before we understand the full array of impacts from the development of this resource.

This letter has also been sent to each Member of the Colorado Congressional delegation.

Sincerely,

Keith Lambert
Mayor of Rifle, CO

Roy McClung
Mayor of Town of Parachute, CO

Frank Breslin
Mayor of Town of Newcastle, CO

Tod Tibbetts
Pro-Tem Mayor of Town of Silt, CO

Doug Edwards
Mayor of Palisade, CO

Bruce Christensen
Mayor of City of Glenwood Springs, CO

Michael Hassig
Mayor of Town of Carbondale, CO

Tresi Houpt
Commissioner of Garfield County, CO

Diane Bush
Commissioner of Routt County, CO

Mick Ireland
Former Commissioner of Pitkin County, CO

Judy Beasley
Trustee for Town of Parachute, CO

Scott Chaplin
Trustee of Town of Carbondale, CO

Alice Hubbard-Laird
Trustee of Town of Carbondale, CO

J. Russell Criswell
Trustee of Town of Carbondale, CO

John Foulkrod
Trustee of Town of Carbondale, CO

Stacey Patch
Trustee of Town of Carbondale, CO

Ed Cortez
Trustee of Town of Carbondale, CO

James R. Bennett Ph.D.
Trustee of Town of Palisade, CO

Dr. Teresa Coons
City Councilor of City of Grand Junction, CO

Ken Brenner
City Councilor of City of Steamboat Springs, CO

Townsend H. Anderson
City Councilor of City of Steamboat Springs, CO

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