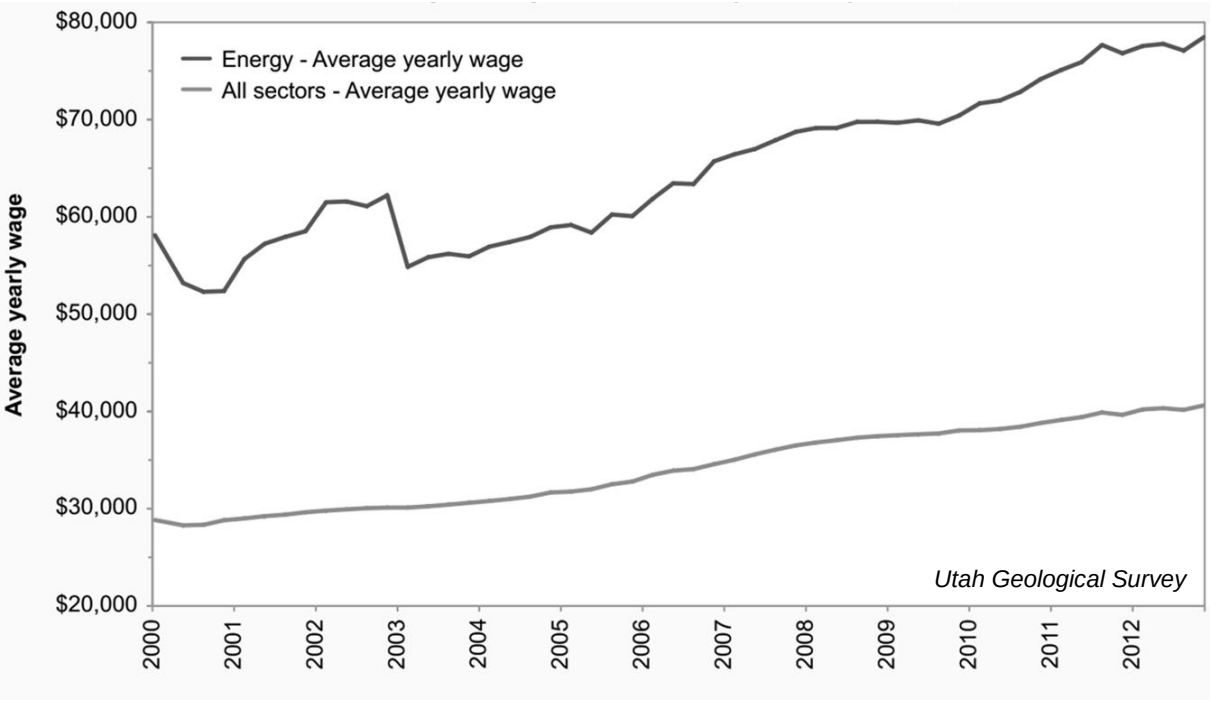
Leveraging America's Resources as a Revenue Generator and Job Creator
Testimony of Dr. Laura Nelson, Director of the Utah Governor's Office of Energy Development

United States Senate Committee on Energy and Natural Resources
Tuesday, July 22, 2014
10:30 a.m., Dirksen Senate Office Building, Room 366

This morning I will focus primarily on energy revenues and energy jobs; however, mining and agriculture are also critical natural resource sectors in Utah, as are our state and national parks. Utah leverages all its natural resources profoundly to generate revenue and create jobs. Unfortunately, given its status as a public lands state, Utah is not at liberty to chart its own course, to determine how best to balance its development and conservation goals. Utah is willing – and has proven itself able – to manage its natural resources effectively, but we remain subject to arcane federal regulatory processes that hinder our natural, environmentally responsible economic growth.

In particular, energy jobs in Utah account for 1.4% of the state's jobs - just under 18,000 - but account for 2.6% of the state's total wages; correctly suggesting that energy jobs are unusually high-paying. The average energy job in Utah pays about 190% of the state's median wage.

Average Annual Wages in Utah (1990-2012)



With respect to the state's energy revenues, they flow through the following means: Federal mineral leases, severance taxes, royalties from the School and Institutional Trust Lands Administration

permanent fund, property taxes, sales tax, income tax, and conservation tax. Of these, most significant are the property taxes and Federal Mineral Leases, which in 2012 made up over 60% of the $577 million in energy revenue to the state.

Utah's Energy Revenue

	Gross Value ($M)	Property ($M)	Sales ($M)	Severance ($M)	Conservation Fee ($M)	SITLA ($M)	Federal Royalties ($M)	Income ($M)	Total Revenue ($M)
Oil and Gas	3,871	57	9	66	6	59	148	**33**	**379**
Coal	626	4	N/A	N/A	N/A	10	18	**7**	**39**
Solar	1	N/A	N/A	N/A	N/A	N/A	N/A		**0**
Wind	53	7	N/A	N/A	N/A	N/A	N/A	**0**	**7**
Hydroelectric	85								
Geothermal	25								
Total Energy Dev.	4,663	68	9	66	6	69	166	**40**	**425**
Other Energy	N/A	124		N/A	N/A	N/A	N/A	**28**	**152**
Total All Energy	4,663	192	9	66	6	69	166	**68**	**577**

Utah Office of Energy Development

Utah has benefitted from energy booms in recent decades, and today's boom seems certain to have staying power; because it is driven not only by market conditions, but also by a technological revolution that has come in the form of new drilling and well-stimulation techniques. We believe that to the extent that we can access our resources, we can create a sustained growth in development activity and in associated jobs and revenues, while balancing the need for proactive environmental management.

Unfortunately, in a public lands state that is 70% federally owned, the ability to access and responsibly develop our natural resources is dramatically impeded by abstruse environmental and species regulations. In addition to those regulations, we've seen a significant reduction in permits and/or lease sales from the BLM over the last few years. During the previous administration's eight years at the helm, Utah saw an average of over 300,000 acres leased per year, and in the current administration's first term that number was just under 85,000 acres. That means that annually this administration's BLM has leased less than 30% as much land as during the Bush Administration in any given year.

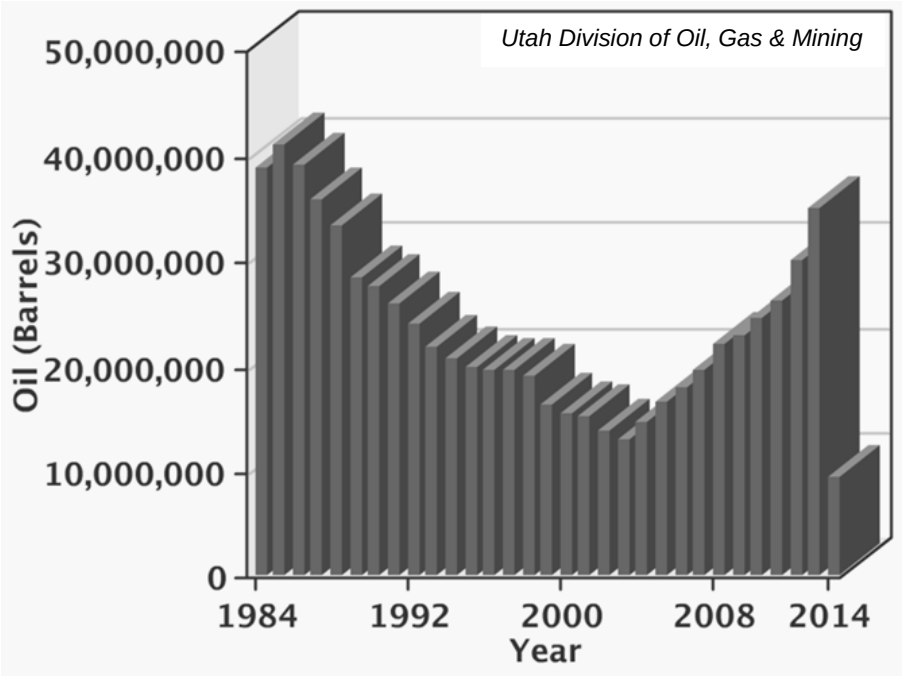
BLM Leasing Trends in Utah

Fiscal Year (Oct-Sept)	Competitive Leasing					
	Lands Nominated		Lands Offered		Lands Leased	
	Parcels	Total Acres	Parcels	Total Acres	Leases	Total Acres
2000	504	700,378	316	481,959	122	165,499
2001	289	363,088	212	270,835	120	146,582
2002	365	531,538	152	188,609	75	92,650
2003	358	498,512	219	284,456	134	149,395
2004	785	1,106,101	502	784,098	377	563,652
2005	981	1,450,295	329	505,563	280	421,320
2006	1122	1,683,265	653	999,533	550	828,886
2007	901	1,286,813	390	556,625	294	386,014
2008	324	459,920	124	163,391	105	143,105
2009	729	934,112	308	413,443	229	299,895
2010	317	482,103	38	45,144	18	14,228
2011	208	365,592	17	23,114	5	2,958
2012	469	909,364	45	54,657	24	20,467

Bureau of Land Management

Remarkably, notwithstanding this trend Utah's growth in production has been steady. During the same 12 year period - 2001-2012 - Utah's oil production grew from 15 million barrels per year to over 35 million barrels per year. That growth is fueled largely by activities on state trust lands and private lands.

Utah Oil Production Trends Over 30 Years



I have mostly been addressing conventional energy production, because in Utah that drives approximately 95% of energy revenue and jobs. However when we're talking about development activities favoring private and state lands, Utah's still-nascent solar industry is particularly telling. Over the past twelve months market conditions have aligned with utilities' obligations under the 1978 Public Utilities Regulatory Policy act to generate significant solar development activity, and this has occurred without a Renewable Portfolio Standard. Indeed, during that time 19 projects ranging in size from 2 to 80 megawatts have signed power purchase contracts with PacifiCorp.

Of those solar projects, not a single one is to be constructed on federal land. And these projects are proposed for the southwest portion of the state, an area where more like 85% of lands are under federal control. The indication is that even the solar development community, an industry sector that is unequivocally endorsed by the Obama administration, has determined that developing projects on federal land in Utah is simply a non-starter. And this is true regardless of the federally designated "Solar Energy Zones."

In 2013, Utah produced:

- ***35 million barrels of oil;***
- ***471 million MCF of natural gas; and***
- ***17 million tons of coal.***

Solar is an exciting opportunity poised for explosive growth. However, capacity limitations, land requirements, and infrastructure constraints will limit solar's contribution to Utah's overall energy jobs and revenue picture. Our foundational resources are oil, gas, and coal. Utah is 11th among states in oil production, 9th among states in natural gas production, and 15th among states in coal production. Our as-yet-untapped oil shale and oil sands resources are by far the largest resources in the country, with 77 billion barrels of oil recoverable from oil shale, and 15 billion barrels of oil recoverable from oil sands. These are perhaps Utah's most promising energy resources in terms of future revenue and job creation potential. The numbers are staggering.

The keen challenge is that, unlike solar, oil shale and oil sands seem to have been designated as "non-preferred" energy option. The Department of the Interior appears to be restricting commercial demonstration of these promising opportunities through draconian restrictions in leasing justified by the preconceived notion that oil sands and oil shale technologies are not yet commercially viable. Additionally, perennial threats of new listings under the Endangered Species Act are further restricting the commercial demonstration of these promising resources.

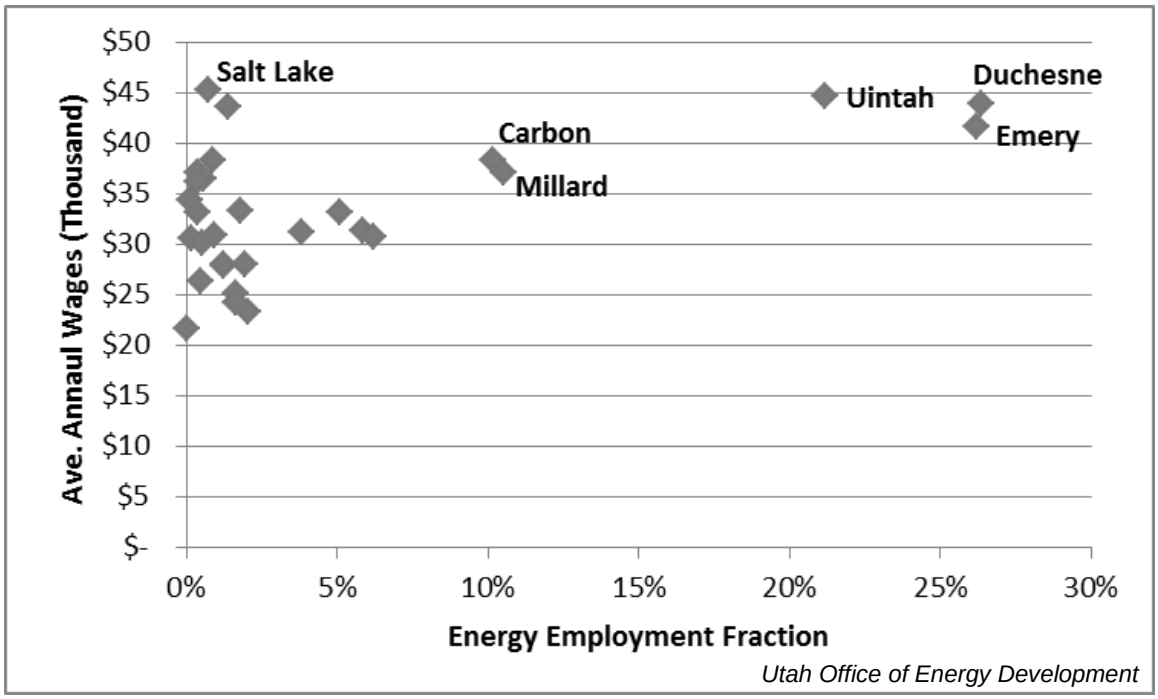
The State of Utah's goal is to take back the reigns, to the extent possible, so that it can follow a resource development path that makes sense for Utahns. As mentioned earlier, Utahns and their elected leaders fully value the economic and social values underpinned by the state's pristine natural environment. The state's diverse beauty attracts tourism, outdoor recreation, the film industry, and many

other sectors that are essential to the state economy. It also provides multiple benefits to Utahns. It is therefore in the state's interest to preserve Utah's natural environment while at the same time responsibly developing its natural resources. Utahns have learned – and demonstrated – that conservation and economic development can go hand in hand, and it's time for our partners in Washington D.C. to support an increased role for the state in managing its resources. This will allow Utah's policymakers, its regulators, its development community and other stakeholders to find the right balance for Utah's energy and natural resource opportunities.

Percentage of Property Tax From Energy Development

County	Electric Power	Pipeline & Gas Utilities	Oil & Gas Extraction	Coal Mines	Energy-Related Total	% County Total
Beaver	4,005,401	781,190	-	-	4,786,591	47%
Carbon	1,212,365	929,868	5,875,469	2,013,815	10,031,517	44%
Daggett	18,078	910,660	79,558	-	1,008,296	45%
Duchesne	513,882	435,967	8,755,478	-	9,705,327	41%
Emery	18,294,819	55,046	878,589	826,773	20,055,227	81%
Juab	2,940,010	779,865	-	16,380	3,736,255	37%
Millard	12,026,872	1,515,244	-	-	13,542,116	62%
San Juan	786,959	728,963	4,983,254	-	6,499,176	47%
Sevier	543,802	66,628	2,034,055	1,282,057	3,926,542	29%
Uintah	1,716,184	1,978,536	24,128,270	64	27,823,054	57%
Statewide	76,285,872	35,031,612	48,652,269	4,307,474	164,277,227	7%

Energy Wages in Utah Counties



Utah Office of Energy Development

Oil & Gas Projects on BLM Land Currently "Pending"

- *Wild Horse Bench EA (Koch Exploration)*
  - *135 wells*
- *Monument Butte Oil and Natural Gas Development Project EIS (Newfield)*
  - *5,750 wells*
- *Atchee EA (Rosewood Resources)*
  - *151 wells*
- *Greater Chapita Wells Natural Gas Development Project EIS (EOG)*
  - *2,808 wells*
- *Southam Canyon Field/Big Pack/Riverbend Natural Gas EA's (Enduring Resources)*
  - *1,397 wells*
- *Little Canyon Field/Hill Creek Unit/King Canyon Natural Gas EA's (XTO)*
  - *1,311 wells*

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