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MEMORANDUM FOR REPRESENTATIVE KEN IVORY

FROM: Thomas Young, Ph.D.
DATE: October 24, 2016
SUBJECT: Effect of Eliminating Selected Activity on Currently Classified Federal Land

You asked the question “What type of effect would businesses and individuals feel if the federal government implemented a policy disallowing extractive activities and select other economic activities on what is currently classified as federal land?” Presented here is one possible result.

If all extraction and non-recreational activity (hunting/fishing/hiking) on what is currently classified as federal land in Utah were to cease, in 2020 employment could decline by about 93,000 jobs (-5%) relative to the 2020 baseline. Wages could decline by \$8 billion (-5%) and Utah-specific Gross Domestic Product (GDP) could fall by \$11 billion (-6%). By way of comparison, employment dropped by about 6% during the past housing market-induced recession in 2009 and 2010, or about 71,000 jobs. The initial year effect on jobs in this study has a decline in jobs of about 62,000 and then growing to a decline of 93,000 after the shock of the elimination of most economic activity on what is currently classified as federal land works its way through the system.

In arriving at these figures, I employed Regional Economic Models Incorporated’s (REMI) PI+ model to estimate what might happen to households and connected industries if employment in extractive industries and selected other economic activities operating on what is currently classified as federal land diminishes to zero.

In arriving at these results, I assumed most of the oil and gas production activity in Utah would cease; price levels for gasoline would be higher (because of a shift in where refineries in Utah get product to refine); manufacturing of oil and gas products would see a marginal decline; a decline in some production of copper, nickel, lead, zinc, gilsonite, potash, magnesium chloride, manure salts, salt, and clay; a large portion of grazing is eliminated (including purchases on such things as hay and alfalfa, hired labor, and the other purchases cattle ranchers make); a drop in geothermal activity; a decline in timber activity; an overall increase in the cost of doing business in Utah; and an increase in the cost of consumer electricity.

A summary is given in Figure 1. Notes about the assumptions behind the analysis follow Figure 1.

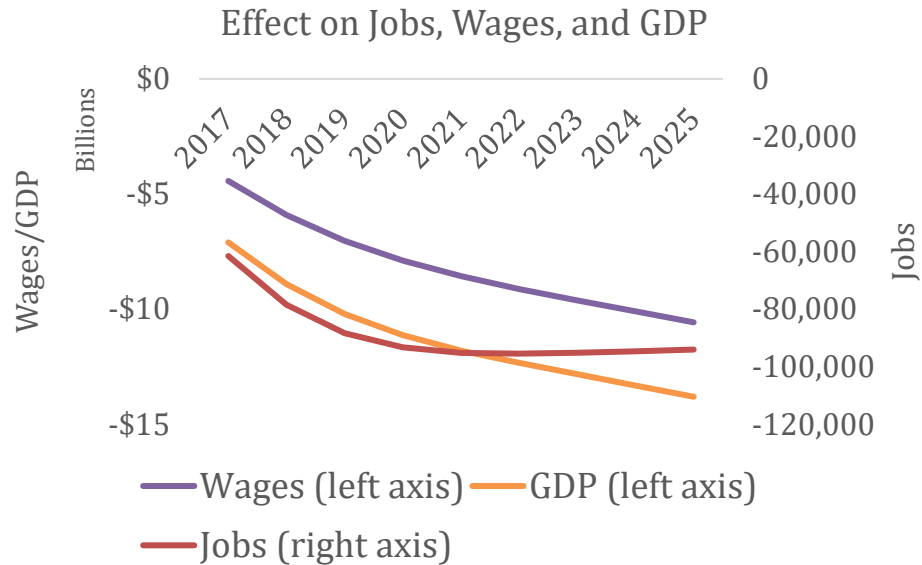
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Figure 1 - Effect on Jobs, Wages, and GDP



In addition to presuming that the relationships produced by REMI's Tax PI+ model holds throughout time, some other specific assumptions are probably worth mentioning.

First, the results assume the elimination of future growth in the industry, something that could, depending upon technological changes and other factors, happen already.

Second, the results assume most (but not all) of the employees who lose jobs do not shift to another industry, start businesses, or some other positive economic activity in Utah, but rather leave Utah in search for better economic opportunities.

Third, some of the industry multipliers are relatively high in comparison with other industries, such as Oil & Gas Manufacturing. When these industries die, it leaves a larger hole than when say a Retail sector dies. Detroit is an example of a city with a base manufacturing industry that went through a soft hollowing out. The auto industry was directly affected, with the linkage effects being felt by connected entities.

Fourth, some of the effects come through a "price-effect", meaning that prices in Utah rise much faster than prices in other areas. Why would this have an effect? Electricity and other input costs in Utah are some of the most competitive in the U.S. Eliminating this competitive advantage makes business conditions in Utah less attractive. With this acknowledged, it's possible the effect is overstated for one main reason – it assumes the disallowance of most economic activities on federal land happen only in Utah. Should this happen across the U.S., the results may increase or decrease the result.