# The Impact of Federal Coal Royalty Reform on Prices, Production, and State Revenue

*Brief Summary*

Headwaters Economics | May 2015

## Introduction

This brief summarizes the full Headwaters Economics report: "*The Impact of Federal Coal Royalty Reform on Prices, Production, and State Revenue*."

The Office of Natural Resources Revenue (ONRR) of the Department of Interior has proposed to reform the way federal coal is valued for federal royalty assessment, using arm's length transactions to value coal for royalties for both arm's length and non-arm's length sales. This report presents data and analysis that evaluate the revenue, price, production, and transparency implications of federal royalty reform on coal deliveries to the domestic power sector.

## Summary Findings & Graphic

We find that changes in federal royalty policy could have substantial revenue benefits for federal and state governments with limited impact on coal production or prices on federal lands. Specifically:

- The arm's length reform proposed by ONRR **would have no effect** on revenue, prices, production, or transparency.
- Responding to the proposed rule's request for comments about how the regulation could be finalized, we found that if the proposed rule is implemented using **net delivered prices** it would increase federal royalties and transparency. Federal royalty revenue would increase by $139 million annually (a 20% increase), with 91 percent of new revenue generated in Wyoming. On average, gross delivered prices would rise by $0.28 per ton, or a 1.6 percent increase. Demand for coal for the domestic power sector would fall by nearly one million tons annually, a 0.2 percent decline (See graphic next page).
- If **transportation cost deductions were limited to 50 percent** of the net delivered price of coal, federal revenue would increase by $512 million annually (a 73% increase) with 96 percent of the additional revenue coming from Wyoming. On average, gross delivered prices would rise by $1.17 per ton, or a 6.7 percent increase. Demand for coal for the domestic power sector would fall by 4.3 million tons, a one percent decline.
- At the **state level**, higher federal royalty distributions to the states outweighs declines in state tax revenue that would occur due to tax interactions that lower the taxable value of state severance taxes where royalties are deductible expenses, and from the small declines in production. The largest changes in revenue, price, and production are expected to occur in Montana and Wyoming. Montana would receive between $5.1 and $8.8 million in additional annual revenue. Wyoming would receive between $58 and $234 million in additional annual revenue.
- Many other factors other than fuel costs affect **prices for electricity**, including available generation capacity, the cost of switching between competing fuels, local transmission and reliability constraints, fuel purchase or power supply contracts, other operating costs, and environmental regulations. As a result, only a fraction of the increase in delivered costs can be passed forward as higher utility rates.

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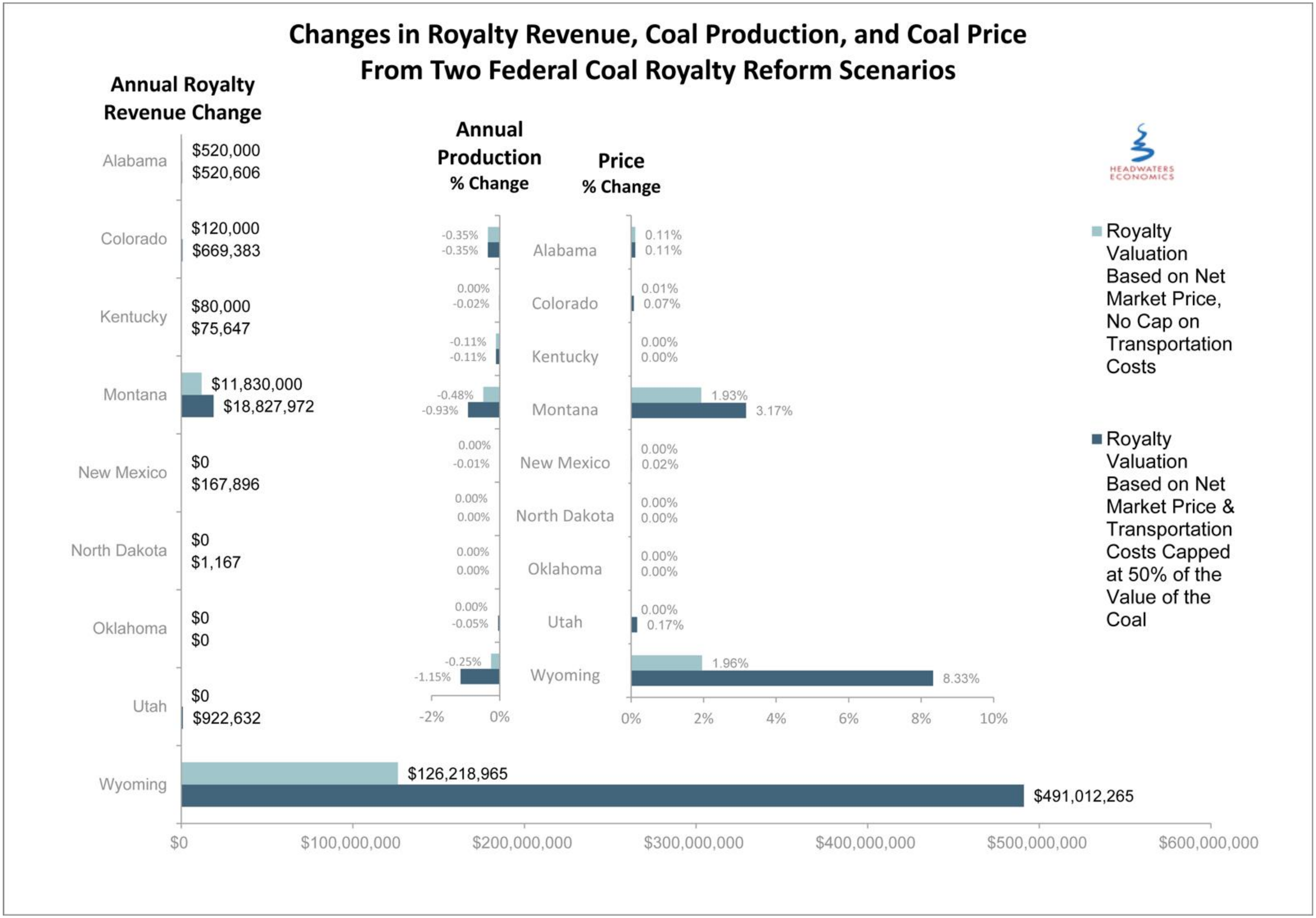
Headwaters Economics is an independent, nonprofit research group whose mission is to improve community development and land management decisions in the West, http://headwaterseconomics.org/. Full coal report: http://headwaterseconomics.org/energy/coal-royalty-reform-impacts.


Changes in Royalty Revenue, Coal Production, and Coal Price
From Two Federal Coal Royalty Reform Scenarios
Annual Royalty Revenue Change
Alabama $520,000 $520,606
Colorado $120,000 $669,383
Kentucky $80,000 $75,647
Montana $11,830,000 $18,827,972
New Mexico $0 $167,896
North Dakota $0 $1,167
Oklahoma $0 $0
Utah $0 $922,632
Wyoming $126,218,965 $491,012,265
$0 $100,000,000 $200,000,000 $300,000,000 $400,000,000 $500,000,000 $600,000,000
Annual Production % Change
Alabama -0.35% -0.35%
Colorado 0.00% -0.02%
Kentucky -0.11% -0.11%
Montana -0.48% -0.93%
New Mexico 0.00% -0.01%
North Dakota 0.00% 0.00%
Oklahoma 0.00% 0.00%
Utah 0.00% -0.05%
Wyoming -0.25% -1.15%
-2% 0%
Price % Change
Alabama 0.11% 0.11%
Colorado 0.01% 0.07%
Kentucky 0.00% 0.00%
Montana 1.93% 3.17%
New Mexico 0.00% 0.02%
North Dakota 0.00% 0.00%
Oklahoma 0.00% 0.00%
Utah 0.00% 0.17%
Wyoming 1.96% 8.33%
0% 2% 4% 6% 8% 10%
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Royalty Valuation Based on Net Market Price, No Cap on Transportation Costs
Royalty Valuation Based on Net Market Price & Transportation Costs Capped at 50% of the Value of the Coal