

ALL OF OUR EGGS IN ONE BASKET?

An update on the decline of Central Appalachian coal and increasing budget woes in West Virginia

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Introduction

For many years, both private and government forecasts have predicted sharp declines in Central Appalachian and West Virginia coal production (McIlmoil and Hansen, 2010; McIlmoil et al., 2013; Lego and Deskins, 2015; Risch and Shand, 2015).¹ In recent years, these declines have occurred, largely as predicted, and southern West Virginia has been hit particularly hard. Headlines tell stories of miners losing their jobs, mines closing, companies filing for bankruptcy, and decreases in severance tax revenues—all of which have significant impacts on local economies. For example, Boone County plans to end free trash removal (Maher and Frosch, 2015), and Monongalia County instituted a hiring freeze and cut funding for nonprofits (Farrell, 2016). At the state level, Governor Tomblin announced a 4% across-the-board budget cut in October 2015, due primarily to declines in coal severance tax revenues (Office of the Governor, 2015).

In this white paper, we present five key charts that update the story of the decline of Central Appalachian coal, with a particular focus on West Virginia.

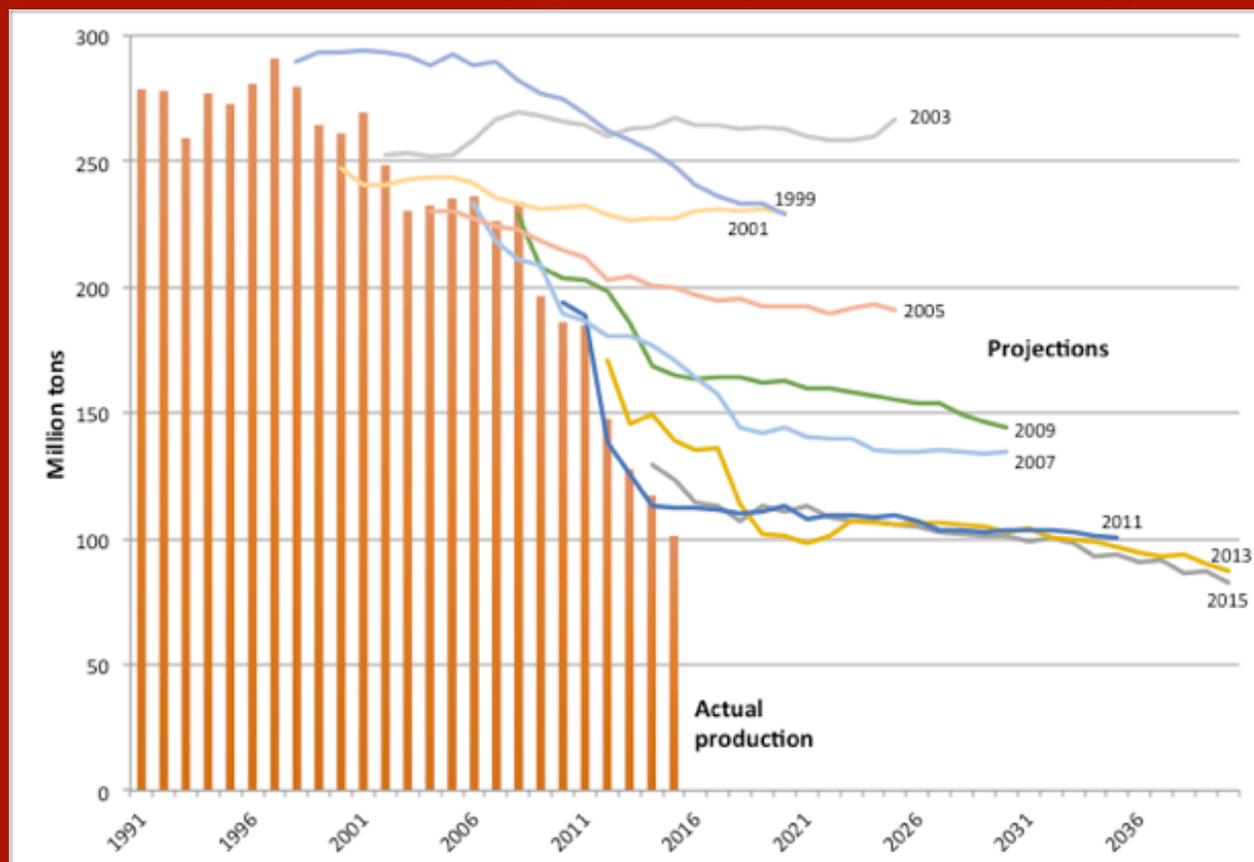
¹ The Central Appalachian coal basin includes the southern West Virginia counties of Boone, Clay, Fayette, Greenbrier, Kanawha, Lincoln, Logan, McDowell, Mercer, Mingo, Nicholas, Raleigh, Wayne, and Wyoming counties. It also includes counties in eastern Kentucky, southwestern Virginia, and Tennessee.

The U.S. Department of Energy makes projections of production by coal basin, including for the Central Appalachian basin. Starting in the mid-2000s, projections have generally predicted steeper declines in coal production than did earlier projections. While these projections suggest that coal extraction will continue to be a significant industry in Central Appalachia, they also forecast that production levels will stay low and not return to the peaks of the 1990s.

Future demand for Central Appalachian coal will likely continue to decline—primarily due to the increasing cost of mining thinner, harder-to-access coal seams and competition from cheaper natural gas, renewable energy, and energy efficiency improvements at homes and businesses. Future environmental regulations on coal mines and power plants, such as the federal Clean Power Plan, may further reduce demand for West Virginia coal.

1. For years, we have known that Central Appalachian coal production was going to decrease dramatically. And it has.

Actual and projected coal production in Central Appalachia



Sources: Projections from various EIA Annual Energy Outlooks. Actual production from EIA (2015a and b). Note: 2015 production data is for the 12 months ending in September 2015.

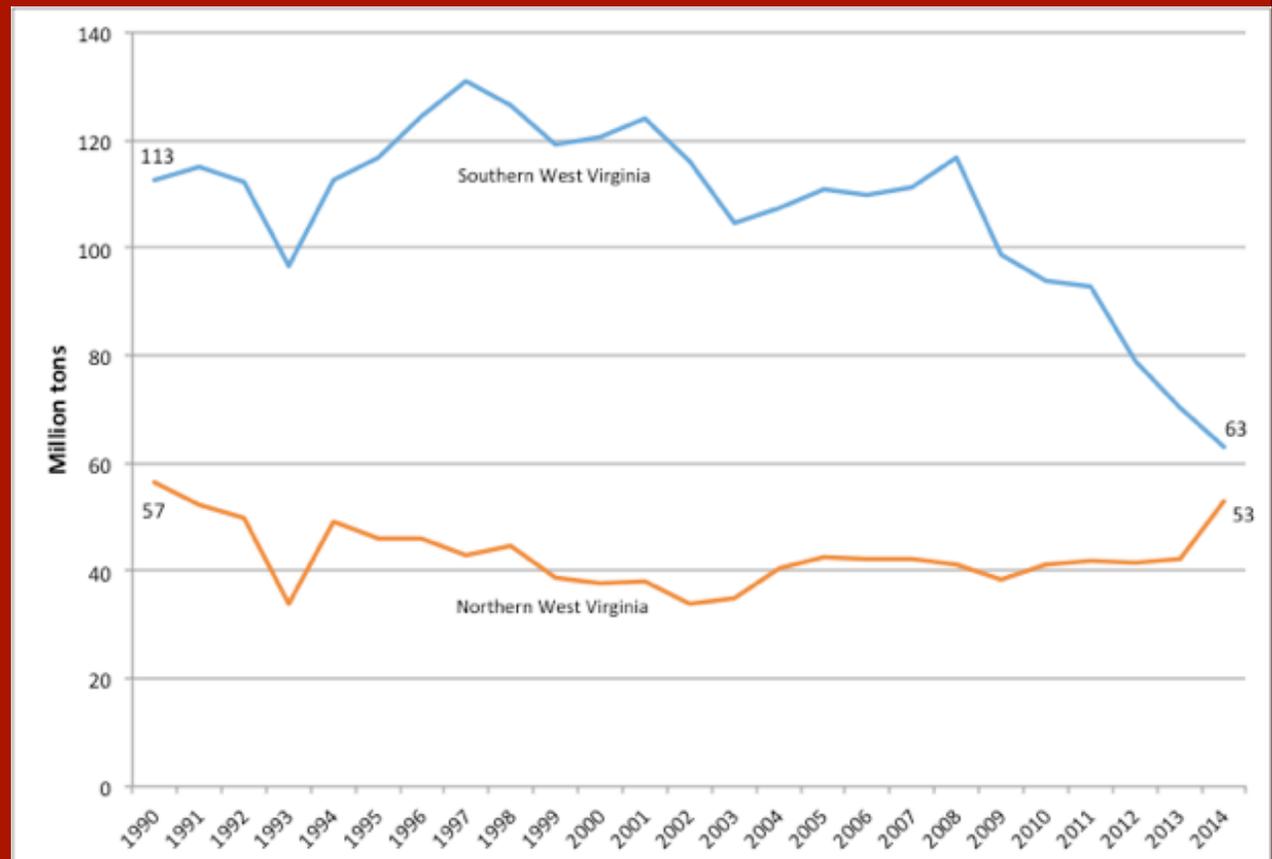
The southern West Virginia coalfields are located in the Central Appalachian coal basin, while the northern West Virginia coalfields are in the Northern Appalachian basin.

Coal production in West Virginia's southern counties has dropped significantly since the 1990s, in line with production across the entire Central Appalachian basin. In contrast, coal production in the state's northern counties remains relatively stable.

Many counties and municipalities in southern West Virginia lack economic diversity, which would provide resilience against downturns in a single industry. Undiversified economies are especially susceptible to further declines in coal mining activity.

2. Coal production is falling fast in southern West Virginia, but staying stable in northern West Virginia. This is significantly impacting coal-dependent communities in southern West Virginia.

Coal production in southern and northern West Virginia



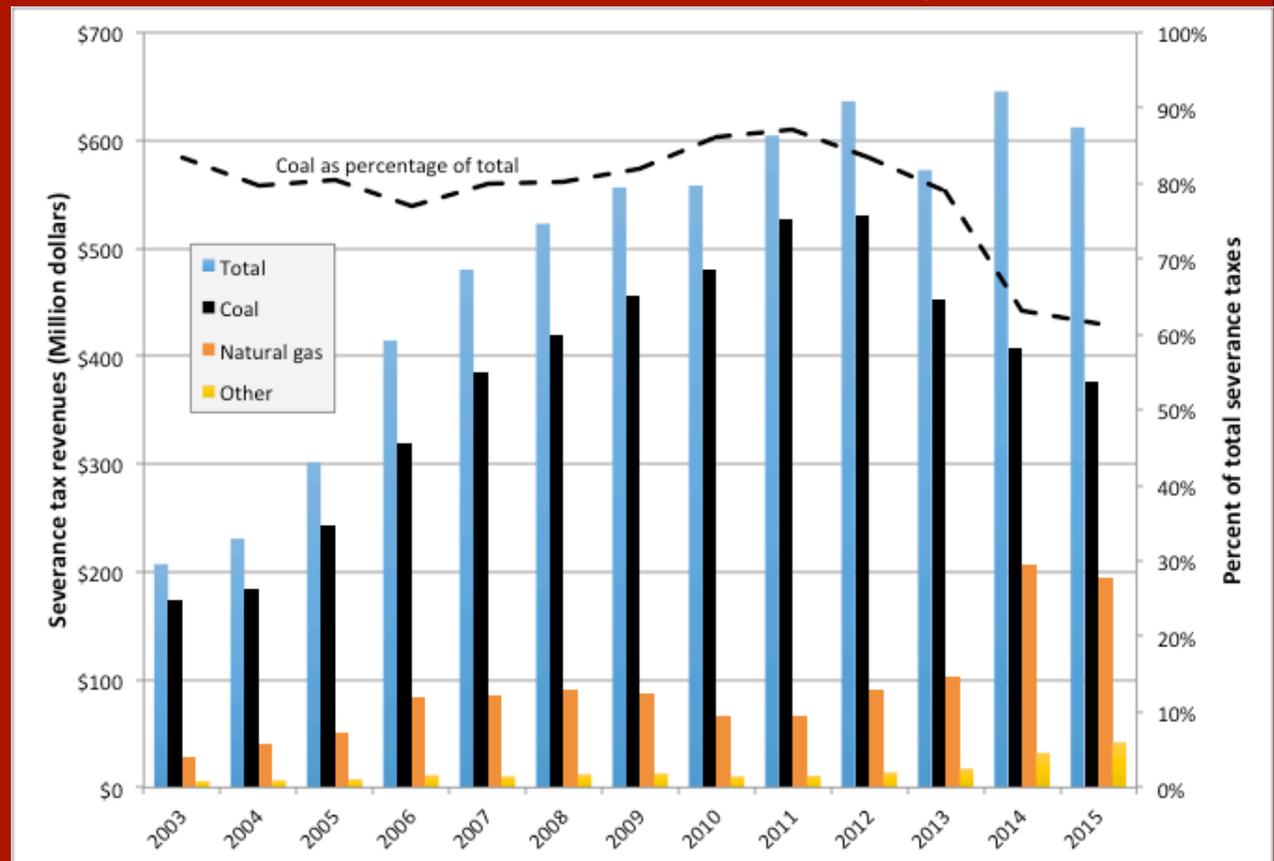
Sources: 1990-2013 production from various EIA Annual Coal Reports. 2014 production from Lego and Deskins (2015).

While coal still provides the largest component of severance tax revenues, sharp declines in coal-generated severance tax revenues since 2012 have only been balanced in part by increases from natural gas extraction.

In the three years since coal severance tax revenues started to decline, only in 2014 did the increase in natural gas severance taxes more than offset the decrease in coal severance taxes.

3. This is a statewide issue. Severance tax revenues from the coal industry are declining, and increased revenues from the natural gas industry have not fully made up the difference.

Severance tax revenues from coal, natural gas, and other sources



Sources: Federation of Tax Administrators (2014) and West Virginia Department of Revenue (2015). Note: Years are fiscal years. Severance tax revenues include General Revenue Fund and other revenues.

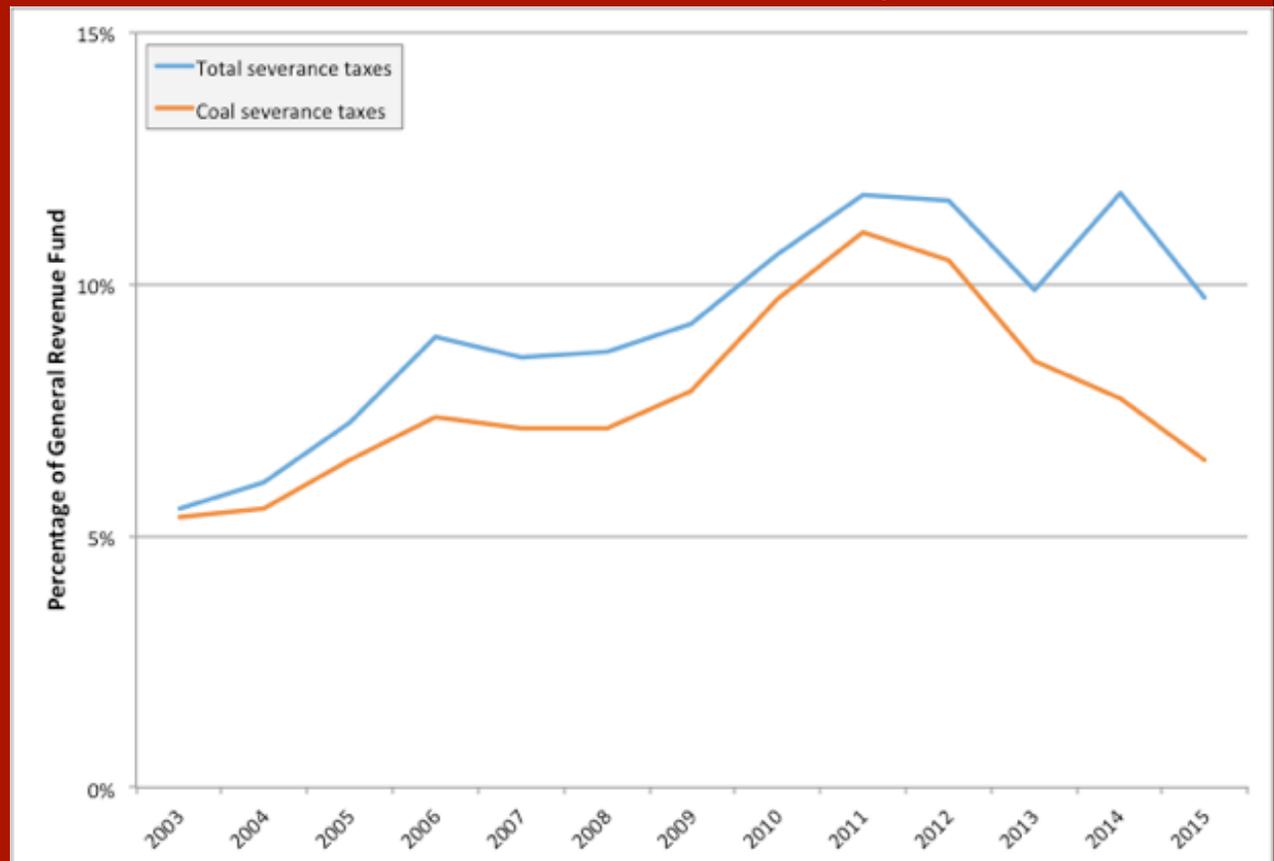
Overall, severance tax receipts to the General Revenue Fund have plateaued in recent years—at 10-12% of the budget.

Since 2011, however, coal severance taxes have decreased significantly. This raises significant concerns for the future should gas and coal prices remain soft, or should increases in gas severance tax receipts fail to keep pace with predicted declines in coal severance tax receipts.

Relying on severance taxes to fund such a substantial portion of the General Revenue Fund places state services at risk not only to declines in coal production, but also to declines in coal prices.

4. The General Revenue Fund relies heavily on severance tax revenues.

Percent of General Revenue Fund budget from severance taxes



Sources: West Virginia State Budget Office (2015), Federation of Tax Administrators (2014), and West Virginia Department of Revenue (2015). Note: Years are fiscal years. Total severance taxes include those generated from coal, natural gas, and other resources.

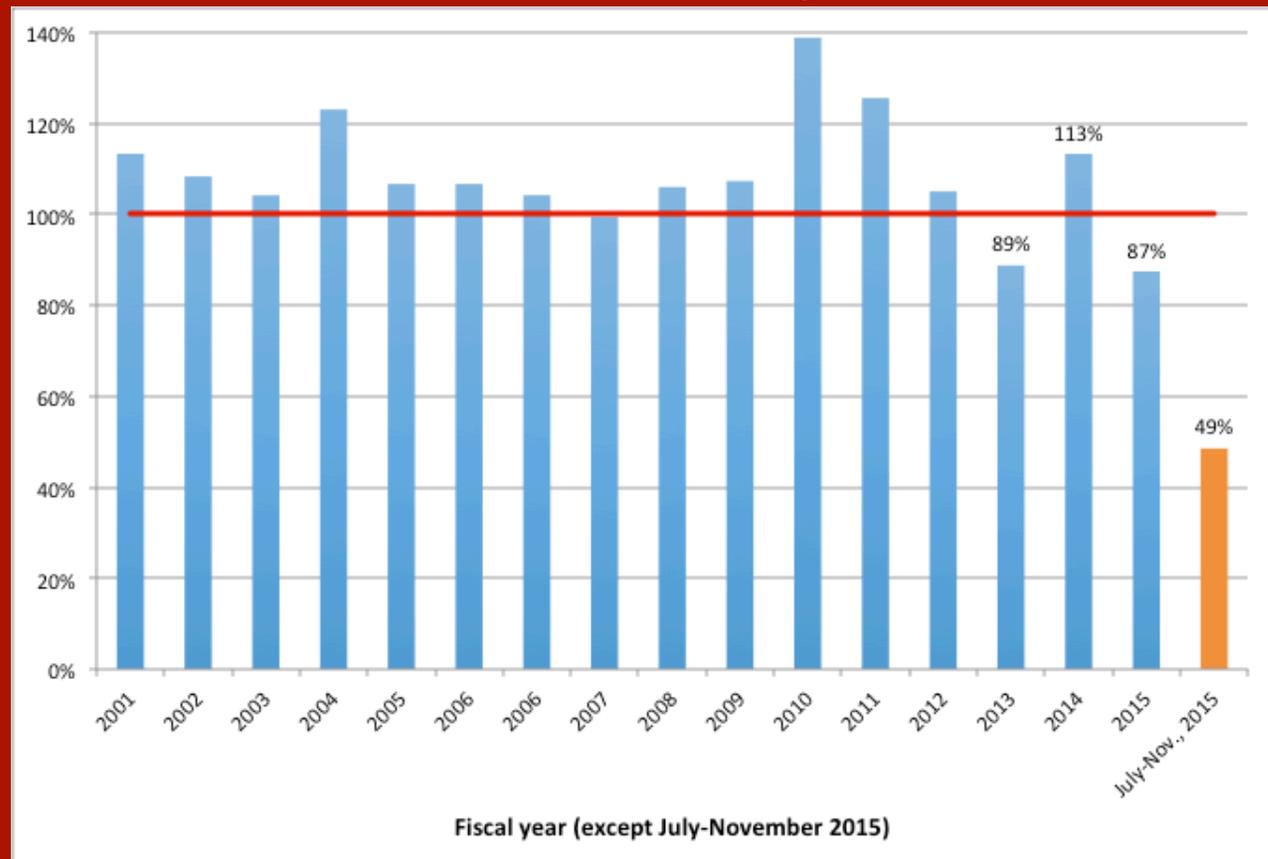
Throughout the 2000s, actual severance tax receipts always satisfied the budget.² In fiscal years 2013 and 2015, however, receipts did not meet budgets.

During the first five months of fiscal year 2016, receipts only totaled 49% of the amount budgeted for these five months.

Clearly, the impacts of declines in coal production, together with low coal and natural gas prices, are being felt. This severance tax revenue shortfall is the main reason why Governor Tomblin announced a 4% across-the-board budget cut (Office of the Governor, 2015), which will result in cuts in government services across West Virginia.

5. Recent budgets have overestimated expected revenues from severance taxes, including the first three months of fiscal year 2016.

Ratio of collected versus budgeted severance tax revenues



Source: West Virginia State Budget Office (2015). Note: Years are fiscal years.

² The exception is fiscal year 2007, when 99% of budgeted severance tax receipts were collected.

Conclusion

For years, we have known that coal production was likely to drop significantly in southern West Virginia, and that coal production will likely continue to decline in the future. Now that these projections are coming true, the state is grappling with fewer jobs, bankrupt companies, and declining severance tax revenues.

Together, these present unprecedented challenges not just for southern West Virginia counties, but also for the state as a whole.

New approaches are needed.

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