

POVERTY SEMINAR

MOUNTAINTOP REMOVAL AND POVERTY IN WEST VIRGINIA

Daniel Winegard

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Washington and Lee University

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PROLOGUE

“The environmental protection [agency] won’t help us ... the law won’t help us. Nobody on earth wants to help us. My only solution is to get out of here.” (McNeil, Combating Mountaintop Removal, pp. 47, 52).

-James Simon, Sylvester resident, on house and property damages he blamed on the mining.

NARRATIVE: DOWNWARD MOBILITY

SYLVESTER, WV

Mary Miller lives in Sylvester, Boone County, WV. Sylvester formed in 1952 for coal miners to avoid living in a coal camp, and the town has had several coal companies operating at its limits over the years. Those companies’ managements had lived in Sylvester. (Bringing Down the Mountains, pp. 34-36).

In 1997, the type of management that Sylvester had gotten used to had changed with Massey beginning MTR activity. (Bringing Down the Mountains, pp. 34-36) What happened in Sylvester is typical for what MTR does to a community. (Bringing Down the Mountains, pp. 34-36)

First, an ominous letter goes out to residents living within half a mile of blasting informing them of the upcoming blasting, offering them to have their property surveyed so any blasting damage can be determined from preexisting housing damage. (Bringing Down the Mountains, p. 36). Anyone outside the half-mile range would have to buy their own survey, and the surveys are expensive. (Bringing Down the Mountains, p. 36). Because damage must be proven to result from the blasting (and not construction defects), without the survey there is no legal recourse for damages. (Bringing Down the Mountains, p. 36). Those in poverty can hardly afford an expensive survey, or the costs of litigation, so they have to absorb the cost of repairing the damage or just must manage to live with it. (Bringing Down the Mountains, p. 36).

Noise is the least of the problems of the homeowners. Blasting causes structural damage by the ground disturbance: walls, floors, foundations become unmoored. Windows break and fall out. Ejected debris (flyrock) causes property damage and threatens human injury. (Bringing Down the Mountains, pp. 34-35). Water wells are destroyed. (Bringing Down the Mountains, p. 53). Layers of coal dust cover the ground within a mile of the blasting, affecting many people beyond the half mile zone. (Bringing Down the Mountains, p. 36). Increased flood risks make insurance harder to obtain. (Bringing Down the Mountains, p. 53). Mary Miller’s home, originally valued at \$144,000, fell to \$12,000. Her home value was depressed by the proximity of mining operations, the view of said operations, and the overall loss of town population and the corresponding closing of the town’s elementary school. (Bringing Down the Mountains, p. 53).

Sylvester was so covered with dust that they sued to get some dust reduction measures, which had little effect. (Bringing Down the Mountains, p. 39). The nearby slurry impoundment (where

the byproduct of coalwashing is collected) poses a risk of breaking through to the hollowed out underground and flooding the town, threatening human life at and destroying miles of streams and anything that lives in them. (Bringing Down the Mountains, pp. 39-40). There have been several incidents of impoundments breaking and doing just that. (Bringing Down the Mountains, pp. 41-42). Even without a major breakout, many Sylvester streams were polluted from mining or leaking slurry, or just completely covered by the valley fill. (Bringing Down the Mountains, p. 52).

INTRODUCTION

MTR definition

Mountaintop removal (MTR) is a method of strip mining coal where the tops of mountains are blasted off with explosives to expose buried coal. (Defenders of Appalachia, p. 2). MTR is the most efficient, profitable way to get coal. (Defenders of Appalachia, p. 3). Coal companies allege that MTR is a positive economic force, providing jobs, infrastructure, and other benefits to the regions where it is occurring.

However with regard to the environment, public health, and the local economy, MTR appears to be the most destructive method to obtain coal. (Defenders of Appalachia, p. 3). While MTR's destructive effects are many and interrelated, I am focusing on their effect on poverty in particular. A disconnect exists between the image of MTR propagated by the coal companies and their allies and the evidence of realities of MTR on the ground. How the extraction of valuable coal may inflict detrimental economic suffering to those where it is occurring is a dangerous paradox, because the local people most affected by it are made less and less able to do anything about it.

In order to show the effects of MTR in West Virginia, I compared the poverty rates of WV counties fully or mostly within the MTR region with the remainder of WV'S Counties. By 2009, 11 counties in southern West Virginia could be considered mostly or entirely hosts to MTR activity, and the remaining 45 were not. (Appalachian Voices). These 11 counties are: Boone, Clay, Fayette, Kanawha, Logan, McDowell, Mingo, Nicholas, Raleigh, Webster, and Wyoming.

The Status of Poverty in Southern West Virginia

"MTR is not something that could happen in a 'normal,' unmarked, American place. It can only happen in an interior colony like Appalachia, which sacrifices for America but is not of America."

- (Removing Mountains, p. 176)

Coal producing counties in Western states are better off compared to coal producing counties in West Virginia, Kentucky, and Virginia. (From Pick and Shovel, pp. 78, ftn. 296, citing a Sunday-Gazette-Mail newspaper article, at 2001 WL 6672917). But perhaps a better comparison for

economic purposes would be between swaths of territory within Appalachia, MTR affected and not.

West Virginia historically has had its share of poverty, which can be quantified by several measuring tools. Poverty is chiefly measured by the poverty rate, which itself is but one of three components by which economic distress is measured, the other two being the three-year average unemployment rate and the measure of per capita market income. (Mountains of Injustice, pp. 53-54). The Appalachian Regional Commission (ARC) uses these indicators to create an index to compare counties in Appalachia against the rest of the United States. (Appalachian Regional Commission: County Economic Status and Distressed Areas in Appalachia). The lower ranking counties in the index are labeled “distressed”. Counties that are not distressed can have areas within them designated “distressed areas,” which ARC defines as areas where the median family income is 67% or less than the US average and also has a poverty rate that is 150% of the US average or higher.

The Mountaintop Mining/Valley Fill Draft Programmatic Environmental Impact Statement (DEIS), conducted by the EPA and other agencies, demonstrates that almost half of West Virginia’s fifty-five counties were designated “distressed” by the ARC in 1990. (EPA Mining/Valley Fill DEIS, 2003, pp. III.P-1 to P-2). In 2013, although only eight counties were labeled “distressed,” an additional twenty-eight had at least one distressed area and averaged three each among them. (ARC: County Economic Status and Number of Distressed Areas in West Virginia, Fiscal Year 2013).

A. Per Capita Market Income

The DEIS study area is spread over the Appalachian Coalfield Region and so includes the southern West Virginia areas of MTR activity. (EPA Mining/Valley Fill DEIS, 2003, pp. I-5). West Virginia was the worst of the four states in both per capita income in 1990, and state growth of per capita income from 1980-1990. (EPA Mining/Valley Fill DEIS, 2003, pp. III.P-1 to P-2). Most of the study area counties of all four states had “starkly lower” per capita income than their respective states in 1990, and per capita income had grown more slowly between 1980 and 1990 than their states over the same period. (EPA Mining/Valley Fill DEIS, 2003, pp. III.P-1 to P-2). It is telling that the counties with the worst distress also have the most active strip mining and MTR. (Defenders of Appalachia, p. 633).

It does not seem that too much had changed by 2010, as West Virginia’s per capita income was still the lowest among the four states in the DEIS study area, and was second lowest among the twelve states of the Appalachian Region as defined by the ARC, only beating out Mississippi. (ARC: Personal Income Rates, 2010); (ARC: The Appalachian Region).

B. Three-year Average Unemployment Rate

West Virginia is actually doing relatively better than the rest of the Appalachian Region (as defined by the ARC) or the whole United States, with a Three-Year Average Unemployment Rate of 8.0% versus 9.4% and 9.3%, respectively. (Appalachian Regional Commission). (Three-Year Average Unemployment Rates, 2009–2011). While this may well be explained by the

recent economic downturn, it would still imply that West Virginia is resilient to economic issues that are nationwide. Nevertheless, this does not tell the whole story.

C. Poverty Rate

The poverty rate is defined by the US Census Bureau, and is determined by the proportion of people whose income falls below a certain income threshold, as defined by family size and composition. (US Census Bureau: How the Census Bureau Measures Poverty). While MTR has increased in usage and scope over time, the poverty rates for central and southern Appalachia have remained at their 1964 levels (30%) (Defenders of Appalachia, p. 633).

The U.S. Population Reference Bureau utilizes a regional form of analysis, defining and dividing Appalachia on economic grounds. (Mountains of Injustice, pp. 52-54). The West Central Subregion covers parts of Ohio, Virginia, Kentucky, and Tennessee, in addition to most of West Virginia – which covers MTR territory across their respective states (although Ohio does not appear to have any MTR territory). (Mountains of Injustice, p. 54). In 2000, the West Central Subregion had a median poverty rate of 21.9%. (Mountains of Injustice, pp. 51, 54, 72). By comparison, the neighboring Northern Subregion enjoyed 11.9% median poverty rate. (Mountains of Injustice, pp. 54, 72).

West Virginia had 18.7% poverty rate in 2011, which was the 40th highest state poverty rate and higher than the US average of 15.9%. (US Census Bureau: Small Area Income and Poverty Estimates: WV by County). Eight of West Virginia's eleven MTR counties were in the upper third of the poverty rate of West Virginia counties, at least 21.3%, two of which, McDowell County and Clay County, had the highest poverty rates of all of West Virginia's fifty-five counties at 34.2% and 29.2%, respectively. (US Census Bureau: Small Area Income and Poverty Estimates: WV by County).

By either a regional, state, or county measure, the poverty rate does appear to be higher in territory that has MTR than territory without it. Further, many measurements of economic distress follow that poverty rate pattern. But while this correlation between MTR and poverty is definite, by itself it does not prove that MTR caused or perpetuates poverty.

MTR process

The EPA's website divides MTR into five basic steps, but simplifies it to the point of leaving out too much detail to give an accurate depiction of how the process works.

- The area's trees and vegetation are cleared out first, and the topsoil is either saved or put in an already stripped area. (Bringing Down the Mountains, p. 5).
- Roads are constructed to enable dump trucks and shovel loaders to pre-strip the area to give a base for the dragline (big earth-moving machine) to operate the site. (Bringing Down the Mountains, p. 5).
- EPA 1. Removal of overburden (rock and dirt). (EPA: Mid-Atlantic Mountaintop Mining).
- EPA 2. Removal of upper seams of coal and beginning of valley fill. (EPA: Mid-Atlantic Mountaintop Mining).

- Upper seams of coal are shattered by blasting, and then removed. (Bringing Down the Mountains, p. 5).
- EPA 3. Draglines excavate lower coal layers. (EPA: Mid-Atlantic Mountaintop Mining).
- EPA 4. Regrading, as coal is still being excavated. (EPA: Mid-Atlantic Mountaintop Mining).
- EPA 5. Finishing of coal removal, final regrading then revegetation. (EPA: Mid-Atlantic Mountaintop Mining).
- The overburden is indeed used to regrade, but any leftover is dumped into a valley fill. (Bringing Down the Mountains, p. 5).

It is apparent that MTR is a collection of processes, of which preparatory clearing out, road construction, valley fill, and blasting are suspiciously underreported on the EPA website. The scope and scale of MTR directly increases the externalities on the environment, as every step has environmental consequences.

THE APPARENT EFFECTS OF MTR

Against the Environment

“The evidence is strong that MTR is highly polluting to the air and water of local environments during and after mining activity”

– (Hendryx, 2011, p. 45)

MTR is most known for its environmental effects, which result from two main activities: blowing up a mountain, and dumping the byproducts of blowing up a mountain. (Defenders of Appalachia, pp. 631-632). Dust and noise result from these blasts, or from overloaded truck traffic. (Bringing Down the Mountains, pp. 38-39). The physical change to the landscape from removal of tree growth through reclamation ends up altering the wildlife makeup drastically. (Dorsey, 2011, p. 162). The byproducts, or valley fill, are dumped into valleys, constricting streams and harming the wildlife dependent on them. (Defenders of Appalachia, p. 632). Some streams become too polluted for any life to live ever again. (Dorsey, 2011, p. 162).

People are part of the environment, and any adverse health effects resulting from MTR can only stem from the changes to the environment that people live in. If the environment is altered and degraded, the people who depend on it are similarly affected.

Health hazards

Because of mechanization and the low sulfur mining boom after 1990, MTR creates larger mines which have proportionately bigger impacts. (From Pick and Shovel, p. 86). In general, Appalachian residents have worse health than nationally, some of which is because of lower socioeconomic status. (Hendryx, 2011, p. 45). Even controlling for poverty, a study has shown

that MTR also correlates to higher mortality, implicating the effects of MTR on the environment. (Hendryx, 2011, p. 44). Specifically, adult and child poverty were significantly higher in MTR than other mining areas, and were both also significantly higher for areas with other mining than non-mining areas. (Hendryx, 2011, pp. 48-49). This was true for MTR areas over other Appalachian areas and for Appalachian areas over non-Appalachian areas. (Hendryx, 2011, pp. 48-49). Mortality rate was significantly higher in MTR areas than for areas with other mining, for non-mining areas, for other Appalachian areas, and for non-Appalachian areas. (Hendryx, 2011, pp. 48-49). There was no significant difference among the other areas. (Hendryx, 2011, pp. 48-49).

“[T]he effects of MTM on such factors as depressed property values, employment declines and volatility, and foregone alternative economic opportunities have been previously identified.”

- (Hendryx, 2011, p. 50).

Even this study only establishes that people who live near MTR are poorer; it may suggest that MTR may be a cause of poverty, or perhaps MTR is a mechanism keeping people poor. (Hendryx, 2011, p. 50). If so, poverty makes the environmental effects of MTR more difficult to contend with. (Hendryx, 2011, p. 50). Mortality also being connected to MTR makes the correlation less and less likely to be mere coincidence, especially since “MTM activity is significantly associated with elevated chronic CVD [cardiovascular disease] mortality rates.” (Laura Esch, 2011, p. 1).

Poisonous heavy metals that enter the water supply from valley fills may cause a spectrum of gastrointestinal issues. (Defenders of Appalachia, p. 633). The coal dust thrown up by the blasting can become a constant “haze,” impacting visibility and quality of life. (From Pick and Shovel, pp. 87-88). Coal dust film causes respiratory issues, such as asthma, bronchitis, and allergies. (From Pick and Shovel, p. 87). An elementary school in Rock Creek, where on the playground “coal dust settles like pollen”, also reports “fifteen to twenty students [go] home sick every day because of asthma problems, severe headaches, blisters in their mouths, [and] constant runny noses.” (Defenders of Appalachia, pp. 633, internal citations omitted). And it isn’t just the children.

“Every day it's blast and it's blast it's blast and it's dust and it's dust. . . . I'm a nurse. I see people with . . . asthma. [Another Blair resident's] son has allergies. I see people come in with these. And I know by looking in the community that this dust is affecting everybody in the community. . . . The elderly, we have lots of elderly people that live in our community, and it is affecting them drastically.” (From Pick and Shovel, p. 88).

-West Virginia Resident Brenda Rollins

At the very least, health related issues drive up health care costs and place a burden on the community to help those who cannot afford the increased cost of living. Unhealthy environments make unhealthy people, and the poor cannot afford to miss work or be unable to work. An additional money drain may be too much for those in poverty or near poverty in West Virginia, and threatens to drag them further into poverty.

EXPLAINING THE SETTING

Appalachia as a sacrifice Zone

“Issues or impacts that may disproportionately impact low-income populations in the EIS area are identified as “significant” issues... [T]he ability to mine in a particular location is an economic one and there is no reason to believe the presence or absence of an environmental justice (or any other segment of the) population affects the decision to mine.”

- (EPA Mining/Valley Fill DEIS, 2003, pp. IV.K-1).

Poverty should be understood in relation to the southern West Virginian counties with great amounts of MTR activity. (Bringing Down the Mountains, p. 8). Southern West Virginia is an example of a “periphery region” which has proportionally less power economically and politically, and supplies its resources to the stronger “core regions”, which act to keep the status quo for the periphery region. (Bringing Down the Mountains, p. 2). In Southern West Virginia, the resource is coal, and coal companies and other coal-dependent interests act to control the core region’s acquisition of Southern West Virginia’s coal and presumably the status quo which enables this relationship to continue. (Bringing Down the Mountains, pp. 2-3).

Cheap coal has long been taken from Appalachia at the expense of its habitat and its inhabitants. First, it can be viewed as “energy sacrifice zone,” where an area’s extractable resources take precedence over its people. (Mountains of Injustice, p. 171). This is similar to the concept of Appalachian as an environmental “sacrifice zone,” a higher purpose – in this case the national interest - is placed above the destruction of the environment. (Removing Mountains, p. 31).

“A system that depends, contradictorily, on the destruction of its own natural basis can only survive because those who benefit feel safer from the type of environmental and economic disaster experienced by the poor.”

- (Removing Mountains, p. 31).

Coal companies have little incentive to follow regulations that harm others but would reduce profits. There isn’t much resistance for coal companies to overcome. Apathy by outsiders keeps this system alive, apathy fueled by the “differential worthiness” logic: it is your own fault if you are poor, and if you are rich you deserve it. (Removing Mountains, p. 33). The inevitable conclusion is that poor whites deserve to be poor.

CAUSING POVERTY DIRECTLY: MTR MYTHS AND HOME VALUATION

MYTH: “MTR is not a problem to people living near its operations.”

“Blasting notifications are mailed to everyone living within ½ mile of a mine site if blasting is proposed.”

- (EPA Mining/Valley Fill DEIS, 2003, pp. IV.K-2).

“The regulations were designed to minimize damage potential and only indirectly address nuisance [caused by nearby MTR operations, such as noise and vibration]; however, citizens may exercise their right to take civil action against a mining operation for nuisance-related concerns.”

-(EPA Mining/Valley Fill DEIS, 2003, pp. IV.I-1).

“Some blasting within legal limits may still constitute a nuisance to people in the general area. As with all nuisances, the affected persons may have legal recourse regarding blasting nuisances through civil action. Consequently, blasting is not considered a ‘significant issue’ and no actions are considered in this [Environmental Impact Statement].

-EPA Final Programmatic Environmental Impact Statement, 2005.

A Dorothy resident reported of cracked foundations, broken window sills, and knocking things off the walls from blasting that the West Virginia Department of Environmental Protection (DEP) assured was within legal limits (McNeil, Searching for Home Where Mountains Move, 2008, p. 47). Similar problems and flyrock plagued the denizens of Sylvester. (Bringing Down the Mountains, pp. 34-35).

There seems to be a fundamental disconnect between what government agencies say MTR does and what MTR actually does. The results of MTR can impoverish people who use their homes as their primary store of value: Mary’s Sylvester home suffered a staggering 92% decrease in value. (Bringing Down the Mountains, p. 53). Most middle-class people could not easily walk away from that kind of loss, let alone anyone with less of an income.

MYTH: “We will offer you a fair price for your home.”

“[W]ith regard to any property within 1-mile radius of a blast, there should be a rebuttable presumption that the blast caused any property damage.”

-Cecil Roberts, UMWA. (Bringing Down the Mountains, p. 29).

Coal companies can only develop mining operations up to 300 ft. from an occupied home, as per the law in WV. (FromPick36). Arch Coal Inc. bought up the houses that would be within the 300 ft., but did not go to purchase anyone else’s homes. (FromPick36-37). Instead, Arch Coal waited for the MTR caused conditions to drive the other residents to come to them and be bought out. (FromPick36-37). Curious is the high rate of fires burning down the houses that the coal company purchased, as if an unseen hand was leveling the land for them. (FromPick35).

Assurances that the fair market value of the houses would be honored are worthless: the value has already decreased from the proximity of the coal mining activity. (From Pick and Shovel, p.

96). Mary Miller's \$144,000 home in Sylvester dropped down to \$12,000. (Bringing Down the Mountains, p. 53). This alone will impoverish the hapless residents who kept most of their assets in the equity of their home, as the property becomes nearly worthless by no fault of their own.

As if the depressed property could be sold – the only interested would be the coal company. (From Pick and Shovel, p. 96). This enabled the coal company to set the price and terms of the deal to be nonnegotiable. (From Pick and Shovel, p. 96). Worse, some of these terms were illegal: a waiver of future complaints related to strip mining against the company, a lifetime ban on living near the mine, promising to take back former protests, and not make future protests against strip mining. (From Pick and Shovel, pp. 96-97). The majority of the sellers have no way of knowing that these contract terms are not legally enforceable, and so the sellers abide by unconscionable terms to their detriment. (From Pick and Shovel, pp. 96-97).

MYTH: "Coal companies are here to cooperate with communities"

A. Evicting Communities

"Coal mining is carried out in close proximity to hundreds of communities in Central Appalachia.... With few exceptions this mining is conducted in a safe and responsible manner, and with the full support of the communities in which it is carried out."

-Arch Coal President and CEO Steven F. Leer. (From Pick and Shovel, p. 92).

"We are constantly seeking new ways to lessen any adverse impacts our operations might have on surrounding communities."

-Arch Coal President and CEO Steven F. Leer, from a 1998 pamphlet mailer. (From Pick and Shovel, p. 98).

"Do not blame the modern coal industry for water-quality problems in Southern West Virginia. Modern coal mining does not pollute."

-Stephen Walker, president of Walker Machinery, an industries dependent on MTR. (Bringing Down the Mountains, p. 45)

"Our philosophy is not to impact people[.] ...And if there are no people to impact, that is consistent with our philosophy."

-Arch Coal VP David Todd (From Pick and Shovel, pp. 100-101)

Despite declarations to cooperate with the affected communities, the coal companies' actions in the operation of MTR indicate otherwise. Coal companies targeted communities for destruction. (From Pick and Shovel, p. 79). A company-owned town, Yolyn, was a town where the populace lived as tenants at will by the previous promises of the coal company presidents. (From Pick and Shovel, pp. 81-83). Rather than dealing with the complaints stemming from MTR, the later coal

company presidents reneged on those promises and evicted the residents of the entire town. (From Pick and Shovel, pp. 81-83).

As in Sylvester, coal companies hardly even need to have the power to evict residents to get them out of the way: the living conditions “inspired” the town’s population and businesses to pack up and leave. (Bringing Down the Mountains, p. 53). Even if all physical aspects of MTR magically disappeared at this point, it is too late, because the hemorrhage of people and economy has already driven down the property values of the remaining residents (Bringing Down the Mountains, p. 53).

B. Flood Risks

Putting the community at a potentially greater flood risk also undermines the assertion of good intentions of the coal companies.

“Thirty floods have occurred in the past two years where watersheds were bared and redesigned, and several people have lost their lives in such floods.”

-August 1997. U.S. News and World Report. (From Pick and Shovel, p. 60).

The EPA presents conflicting data from on whether Valley Fill sites suffer less flood risk: non-Valley Fill sites had peak discharge recurrence intervals ranging from 10 to 25 years, while Valley Fill sites ranged from below 2 years to 100 years or above. (EPA, 2005, p. 506). Such widely ranging data surely indicates that further study is needed, not that it should be the final say on the matter. Results that indicate that Valley Fill sites have anywhere above a 100 year recurrence interval (i.e., 1% chance of peak discharge within the next year), below a 2 year recurrence interval (i.e., 50% change of peak discharge within the next year) or in between should be very troubling, for it presents the possibility that error is masking high risk of flood peak discharge due to Valley Fill. That a non-Valley Fill site’s 10 year recurrence interval, or 10% chance of peak discharge within the next year, could become 50% or greater upon a Valley Fill is added to it surely warrants concern to future Valley Fill sites.

In addition, research on Kentucky-based MTR does present the “very high probability” that MTR and Valley Fill activity has “increase[d] flood risks”, but acknowledges that many other factors intervene so that a general rule that Valley Fill makes floods worse would not be accurate. (Phillips, 2003, p. 378). Nevertheless, peak flow increases probably would result more so than any other result. (Phillips, 2003, p. 378). Although a nuanced understanding seems most appropriate as to the relationship between Valley Fills and floods, a direct connection should not be ruled out.

CAUSING POVERTY INDIRECTLY: MTR MYTHS AND THE ECONOMY

MYTH: “MTR running coal companies will provide jobs”

“Mountaintop removal accounts for only 4,317 workers in the state – less than 1 percent of its job force.”

-August 1997. U.S. News and World Report. (From Pick and Shovel, p. 60).

	WV Coal Jobs, all types	Tons of Coal Produced
1970	45,261	143,132,284
2002	15,377	163,896,890

(Bringing Down the Mountains, p. 13).

As the chart above shows, there are fewer overall mining jobs now than there was in 1970, when MTR was introduced to West Virginia. (From Pick and Shovel, pp. 69-70). Why have jobs been lost when *more* of this valuable resource is being acquired than ever before? Part of this job loss is due to there being less need for underground mining employers because underground mining has become more efficient: Marshall University’s Center for Business and Economic Research found that productivity among underground miners increased from 2,100 tons per employee in 1980 to 8,000 tons per employee in 1998. (EPA Mining/Valley Fill DEIS, 2003, pp. DEIS III.Q-1 to Q-2, 2003). While more coal is mined, the increased mechanization of traditional strip mining has reduced the number of human jobs needed. (From Pick and Shovel, p. 32).

During 1990-1997, the coal industry lost 10,000 jobs, even though the use of MTR was expanding. (Defenders of Appalachia, p. 3). Mechanization has drastically reduced jobs needed for MTR, which by default needs less people than underground or traditional surface mining. (Bringing Down the Mountains, p. 13). In fact, the mechanization available for MTR can extract as much coal as it would take three times as many men working underground. (Removing Mountains, p. 4). Despite the increase in coal production, coal jobs have gone down. (Bringing Down the Mountains, p. 13).

Indeed, the number of coal workers in West Virginia has basically returned to its pre-20th century levels: in 1892 there were 13,894 coal workers, and in 2003 there were 14,498 coal workers. (From Pick and Shovel, p. fn. 129). At the height of coal employment in 1940, West Virginia had 130,000 employed by coal companies; this dwindled to 12,000 by March 2009. (From Pick and Shovel, p. 60). With fewer jobs comes less structured communities, and the lack of infrastructure in turn scares corporations away. (From Pick and Shovel, p. 28).

Coal companies put forth the narrative that without coal mining, communities would be devastated without jobs. (From Pick and Shovel, p. 28). Poor people who need jobs support coal for this reason, but this support may be misplaced, since there are fewer jobs than ever. (From Pick and Shovel, p. 31).

MYTH: “Coal mining is economically good for WV.”

From the surface, coal mining doesn't appear to be that much of an economic power in West Virginia, providing merely 3% of state employment and 5% of state income. (EPA Mining/Valley Fill DEIS, 2003, pp. IV.I-3). However, coal mining is concentrated in several West Virginia counties to major effect:

"Buchanan County, Virginia, and Knott County, Kentucky, where coal-related earning comprise 60, 33, and 42% of county earnings, respectively... In West Virginia, 34% of property taxes collected come from coal. Schools rely on these property taxes to supply around 30% of district budgets."

- (EPA Mining/Valley Fill DEIS, 2003, pp. IV.I-3).

But why are the local economies depressed around these "billion dollar" coal fields? (From Pick and Shovel, p. 85). What causes this paradox that is West Virginia, a state full of coal and timber, but also the 5th most impoverished state in 2007? (Barry, 2012, pp. 16-17, 154). Although to its credit, West Virginia in 2011 climbed to be the 10th most impoverished state (ignoring DC). (Small Area Income and Poverty Estimates: State and County). Coal mining in general does not appear to help the economy of its region. (Defenders of Appalachia, p. 633). Rather, the wealth generated by the coal flows to very few, and those few are out of state interests; the money doesn't stay in West Virginia. (From Pick and Shovel, p. 79).

"Nearly 150 years and some 13 billion tons of coal later, it's strikingly obvious that the great wealth of natural resource in West Virginia has been anything but a blessing. Rather than bringing riches, it has brought poverty, sickness, environmental devastation, and despair. By virtually every indicator of state's economic and social well-being – educational achievement, employment rate, and income level – West Virginia remains at or near the bottom of the list. Nowhere is the decline clearer than in the southern part of the state, where the promise of riches was once brightest."

-Jeff Goodell, Journalist for *Big Coal*. (Barry, 2012, pp. 17, 154).

MYTH: "Coal is the only thing WV can do economically, and is needed to provide jobs."

"If the mining process is stopped or impeded, Logan County would suffer devastating consequences. The county commission is not saying coal mining is perfect. But we cannot lessen the degree of dependence on coal that currently exists."

-Logan County Commission Administrator. (Bringing Down the Mountains, p. 45).

"If you do away with any mining method ... you take away jobs and the use of private property ... without coal, communities are devastated."

-Massey Energy CEO Don Blankenship. (From Pick and Shovel, p. 81).

“Surface mining employment study area wide represents 25% of mining employment, but declines in surface mining production typically result in some amount of commensurate increases in underground production and employment.”

- (EPA Mining/Valley Fill DEIS, 2003, pp. IV.I-3).

Rather than getting rid of all coal mining, having more underground mining would create more jobs for local people. (Mountains of Injustice, p. 168). Another approach is to go to an alternative source of energy, like wind power. Because these solutions are becoming less and less possible with continuous knocking down of mountains, it is imperative to put more effort into having them enacted as fast as possible. (Mountains of Injustice, pp. 170-171).

“Both stripping and the recreation and tourist industry which employs four times as many people are today growing rapidly. But they cannot both continue to grow. One must force out the other.”

-State Senator Si Galperin, 1971. (Bringing Down the Mountains, p. 80).

West Virginia has historically depended on the economy of coal, but this does not necessarily mean that it will always depend on it. This is a foregone conclusion: at some point, it will be too cost-prohibitive to mine the remaining coal in West Virginia. If West Virginia wants to avoid the attendant economic calamity, then it has to recognize the possibility of other economic bases.

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MYTH: “MTR’s result of flat land is good. WV needs flat land to develop economically”

“Two of the factors most often cited as hindering economic development in Central Appalachia are the rugged terrain and the poor access. The steep slopes and the narrow, flood-prone river valleys severely constrain the available supply of developable land. The use of land after coal mining has been completed may include residential and/or commercial development. Building on and use of this relatively rare flat land could provide jobs from construction, service and commercial industries, and tourism.”

- (EPA Mining/Valley Fill DEIS, 2003, pp. IV.H-2).

“There is a need for flat land development in West Virginia. With mountaintop removal, we can get it.”

-Former State Senator and Cannelton Official Tracy Hylton. Cannelton undertook the first MTR operation on West Virginia’s Bullpush Mountain in 1970. The flattened mountain remains undeveloped. (From Pick and Shovel, pp. 69-70). EPA Final Programmatic Environmental Impact Statement, 2005.

“With mountaintop removal, you get 100% mineral recovery, you can’t mine again, and you get better land use than you ever had.”

-West Virginia Coal Industry Lobbyist Ben Greene (From Pick and Shovel, p. 59)

The end product of MTR, lots of flat land, is viewed as something WV needs in order to develop economically, as if the only things holding WV back were the mountains. (Removing Mountains, p. 176). As for any problems stemming from land use, the EPA is content to state that “existing regulatory controls are adequate to address this issue” (EPA Mining/Valley Fill DEIS, 2003, pp. II.A-6). The EPA is almost naively optimistic on post-mining land use, emphasizing the possibility of “diverse recreational experiences”, such as the creation of a public golf course or trails for “hiking, biking, camping or other use open to the public” (EPA Mining/Valley Fill DEIS, 2003, pp. IV.J-3).

This view objectifies land as useless, which only has value by how it can be improved by development. (Removing Mountains, pp. 210-211). Flat land is associated with possibilities of commercial consumption and modernity, which “epitomizes the civilizational standard of property”. (Removing Mountains, p. 177). However, very little has seen any sort of development. (Removing Mountains, p. 178). And what has been developed hardly benefits the local poor and working class people, such as the golf course that the EPA shows off. (Removing Mountains, p. 178).

DISEMPOWERING COMMUNITIES

MYTH: “People who oppose MTR don’t care about your jobs. Or they only care about the environment!”

“There will be people there who don’t want this permit issued. They don’t care about your job. Please attend this hearing and show that you support the future of our jobs here at Dal-Tex. Encourage your family and friends to join you. Arrive early to get your ‘I’m proud to work at Dal-Tex’ T-shirts while supplies last.”

-Message enclosed with Arch Coal’s Dal-Tex Mine employee paychecks, before a hearing about the Dal-Tex mine’s attempt to obtain an expansion permit. 1998. (Bringing Down the Mountains, p. 44).

Coal companies are not above attacking the character of the opposing side in an argument (*ad hominem*). It is an attractive argument to make as well, since enough people are dependent on the coal companies for work or business that they would rather not argue against MTR, no matter the consequences.

The locals that are hired to work for coal companies would not speak out against MTR and bite the hand that feeds them for fear of being fired, but this fear extends to all their family and friends that they may know. (Mountains of Injustice, p. 168). Should someone advocate against the coal company’s actions, the company may retaliate by firing whoever is associated with that person. (Mountains of Injustice, p. 168).

Even if someone is not directly employed or dependent on the coal company, the job creation argument itself can be extended to MTR making definite contributions to the economy, and so to overall property values of people not directly affected by MTR. (Removing Mountains, pp. 210-211). These MTR supporters may see their opponents are environmental altruists, who only care

about nonhuman nature and would “kill a man to save a tree”. (Removing Mountains, pp. 210-211). It is because of this short-sighted misunderstanding of environmentalism that some with anti-MTR inclinations call themselves “concerned citizens” so to distance themselves from the environmentalists. (Removing Mountains, pp. 210-211).

This propaganda further divides communities between those who are reliant or supportive of coal jobs and those who are more concerned that the MTR activity will adversely affect them. It is an argument that removes the middle ground – that coal companies should be held to the existing regulations, that they should deal with the communities in good faith, or that less intrusive measures of mining should be undertaken so that the communities are less impacted. Preventing communities from forming a united front against regulatory abuse puts the community at the mercy of the coal companies.

MYTH: “The current laws and their enforcement effectively regulate MTR.”

The Clean Air Act in 1990 promoted decreased sulfur emissions, increasing the demand for low sulfur coal, which was available in the Appalachians in West Virginia and elsewhere. (Defenders of Appalachia, p. 2). Attracted to the low sulfur coal, mining activity increased in these areas, including mountaintop removal. (Defenders of Appalachia, p. 2). MTR improved to become the most profitable tool of the coal mining business. (Defenders of Appalachia, p. 3).

Two main pieces of legislation cover MTR: the Clean Water Act (CWA) and the Surface Mining Control and Reclamation Act of 1977 (SMCRA). (EPA: Mid-Atlantic Mountaintop Mining). The CWA applies in particular to valley fills polluting streams, and where the valley fill can be placed. (EPA: Mid-Atlantic Mountaintop Mining). From 2000-2004, the CWA was amended to enable “waste dumping into streams,” as valley fills were redefined from being classified as “waste” to being “fill”. (Removing Mountains, p. 24), (Reece, 2009, p. 49).

The poor enforcement, if any, of the applicable laws during MTR activity effectively abandons the local communities to suffering the effects of MTR. DEP Environmental Supervisor Darcy White, before the West Virginia Surface Mine Board, stated as to why the agency never was able to observe dust emitting from blasting at the Dal-Tex mine: “[W]e can’t be there all the time.... They shoot probably four blasts every day” (From Pick and Shovel, pp. 87-88, Ft 363). It seems that as long as there are no complaints, there is no problem.

“And what [DEP officials] told me is . . . there is no law about how much [dust] can come down into a community from blasting from a mine. DEP officials bemoaned the fact that agency inspectors could never seem to be able to get to the Blair area in time to observe the dust coming off the mine. Without actually seeing the dust blowing from the mine, DEP claimed an inability to take enforcement action. For its part, the company repeatedly pointed to steps it was taking to protect Blair residents from mine blasting.”

-Victoria Moore, resident of Five Block (center of Dal-Tex coal complex operations)
(From Pick and Shovel, pp. 88, 92).

The intrusive activities of MTR is the most crucial part of regulating it, since once MTR ends, the damage is done. Putting lip service to the needs of local residents shows that DEP is not representing the people that they are supposed to, but instead are aligned with the wealthy and powerful coal political interests.

By SMCRA, coal companies must return the mountain to its approximate original contours (AOC), but can vary the AOC to be used for better uses. (Mountains of Injustice, p. 164). Coal companies are able to leave flat land, ostensibly for future economic use. (Mountains of Injustice, p. 164). However, less than 1% of post-MTR land has been actually developed into anything. (Mountains of Injustice, p. 165).

After the damage is done, the land is not left as it should be legally. When companies do not follow the Approximate Original Contour (AOC) requirement, not only is the land left in much worse condition, but the companies make no effort to put the land to some sort of use. (From Pick and Shovel, pp. 65-66). Even though SMCRA required a proposal of how to develop the stripped land in order to waive the AOC requirement, DEP liberally granted AOC waivers despite no economic follow through on the part of the companies. (From Pick and Shovel, pp. 65-66). Further, three-quarters of active MTR sites hadn't even bothered to apply for the AOC waiver, and these too were overlooked by DEP. (From Pick and Shovel, pp. 65-67).

Even the definition of AOC is left vague, so DEP interprets it as much. It is unsurprising that DEP would not enforce the spirit of the law, restoration of the mountains, when the letter of the law has no force because of the ambiguity. (Fox, 2005, p. 26). Because DEP did not enforce the AOC waiver requirements, communities were denied economic development in return for destroying their mountains. (From Pick and Shovel, pp. 65-67). This lax enforcement hurts communities even after MTR is finished, and prevents any real recourse to a coal company deliberately ignoring the regulations.

RECOMMENDATIONS FOR CHANGE

The best way to avoid the problems associated MTR, poverty related and otherwise, is to reduce or eliminate MTR activity. This isn't so simple to execute, but a method of advocating for it is through environmental justice.

Environmental justice "starts in ordinary, everyday experience of the environment", and is "based in very specific places and communities" (Removing Mountains, p. 216). In order to have real involvement, there must be something tangible about the issue at hand. A local connection is necessary to bring attention to the abuses of the environment and the people living in it. Without it, it is more likely that people will only care about MTR when it starts affecting them personally.

"The federal action agencies comply with the requirements and the spirit of the EJ executive order both in the development of this EIS document and in the implementation of the federal programs to regulate mountaintop mining activities"

- (EPA Mining/Valley Fill DEIS, 2003, pp. IV.K-3).

Presidential Executive Order 12898 requires an evaluation of environmental justice impacts on minority/low-income populations of federal actions. (EPA Mining/Valley Fill DEIS, 2003, pp. IV.K-1). Anything through a state agency, however, does not require this evaluation, so even if MTR could be found to be an unacceptable level of impact, West Virginia would do no such evaluation. Obviously, an impetus for environmental justice must come from somewhere else.

Starting in 1998, Coal River Mountain Watch (CRMW), an active grassroots organization in West Virginia, has dedicated itself to opposing MTR. (Bringing Down the Mountains, p. 9). The strongest hope for environmental justice for the MTR affected people of Appalachia is the coordination activities of similar activist organizations. Other organizations include: Ohio Valley Environmental Coalition (OVEC), West Virginia Highlands Conservatory (WVHC), ilovemountains.org, Appalachian Voices. (Dorsey, 2011, p. 160). Some of these organizations can offer people information, legal help, and aid that they are otherwise unable to obtain.

Fractured communities have little political will, but a coalition of activist groups can unite and expand the resources that are available. Activist groups are necessary to put pressure on government levels to enact more protective legislation, put through taxation schemes that will help communities directly hurt by MTR, and overall advocate for less destructive methods or mining coal. These groups are better able to lean on incidences of lax enforcement of the existing regulatory by government agencies, and bear the cost of litigating in court or through the agency process.

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CONCLUSION

Due to the amorphous nature of MTR as a group of activities, it is difficult to find data that can definitively pin an MTR operation as the mechanism creating or maintaining poverty within its area of effect. I believe an understanding of the nature of poverty in West Virginia must take into account that MTR contributes to poverty in both a specific and generalized way.

MTR causes specific, measureable harm to individuals and families by causing health problems through environmental inputs and by destroying the value of affected property. The general economic harm of MTR is due to it fostering dependence on an economic transaction which provides a lifeline for few at the expense of the many. MTR's few jobs, obliteration of nature, and continuation of single resource economy serves to takes wealth out of the community while leaving little in it. The political power of the harmed communities is neutralized, from within by the use of divisive propaganda to prevent a community from organizing, and from without by the lack of MTR oversight by the responsible government agencies.

What allows this sort of destruction is the apathy of the people who are not involved. It is the complement of NIMBY (not in my backyard) – someone else's problem is not our problem. Legal efforts can halt MTR (if the violation is big enough), but the agencies and the law are on the side of the coal companies, and they aren't going to be easily changed as long as coal companies maintain their political power. Activist organizations provide a vehicle for citizens to

get involved regardless of where they live, so any efforts to mitigate the future damage from MTR will likely come from them.

The double reduction of a community's economic and political power all but dooms a community undergoing MTR. The people will survive, elsewhere, but have to start over. The poorest can hardly afford to do that. MTR is something that is best addressed at its roots, and so people who can afford the time and money to put a stop to MTR will have to be convinced to do so through the supporting activist organizations.

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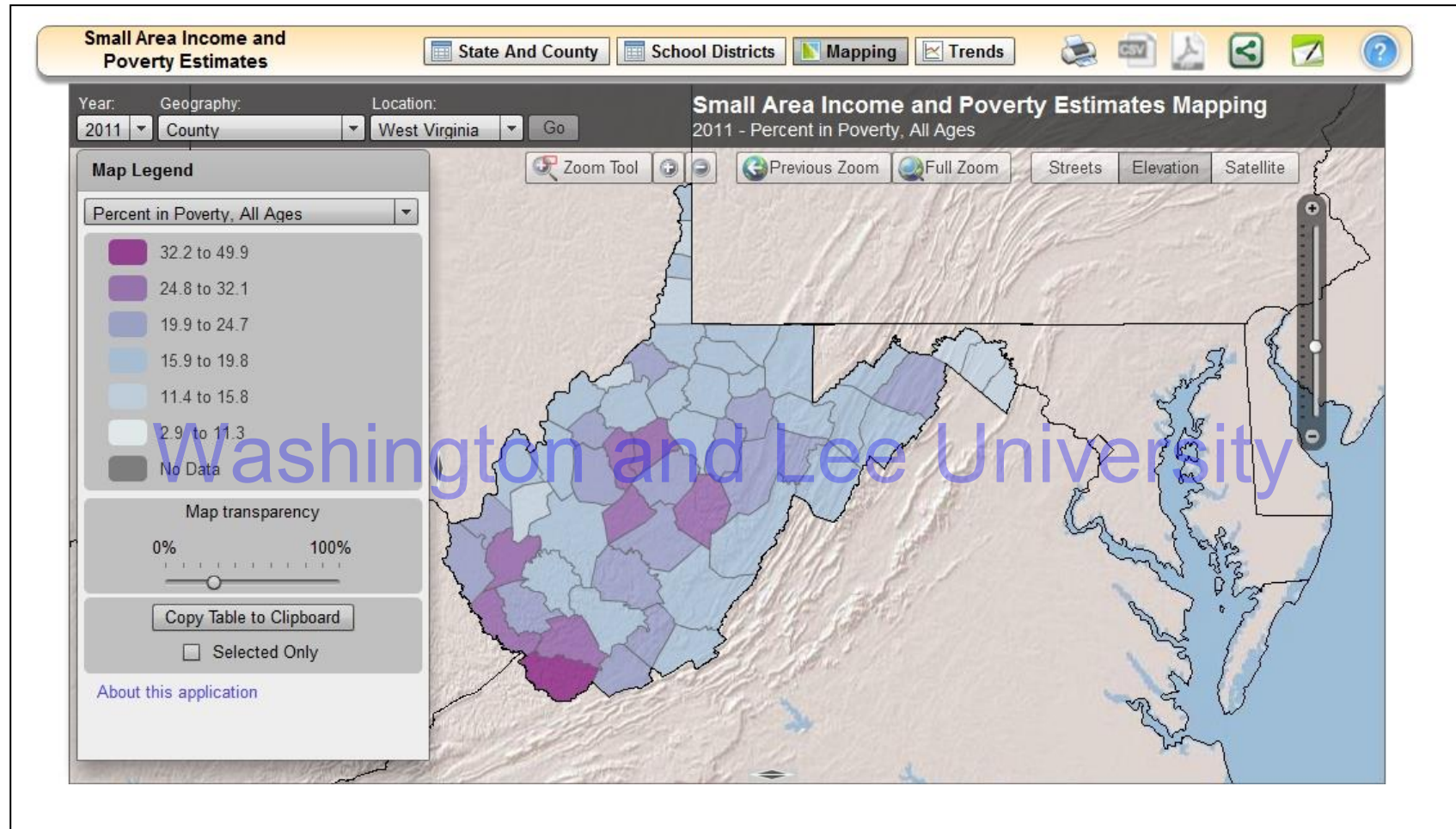


<http://appvoices.org/end-mountaintop-removal/>

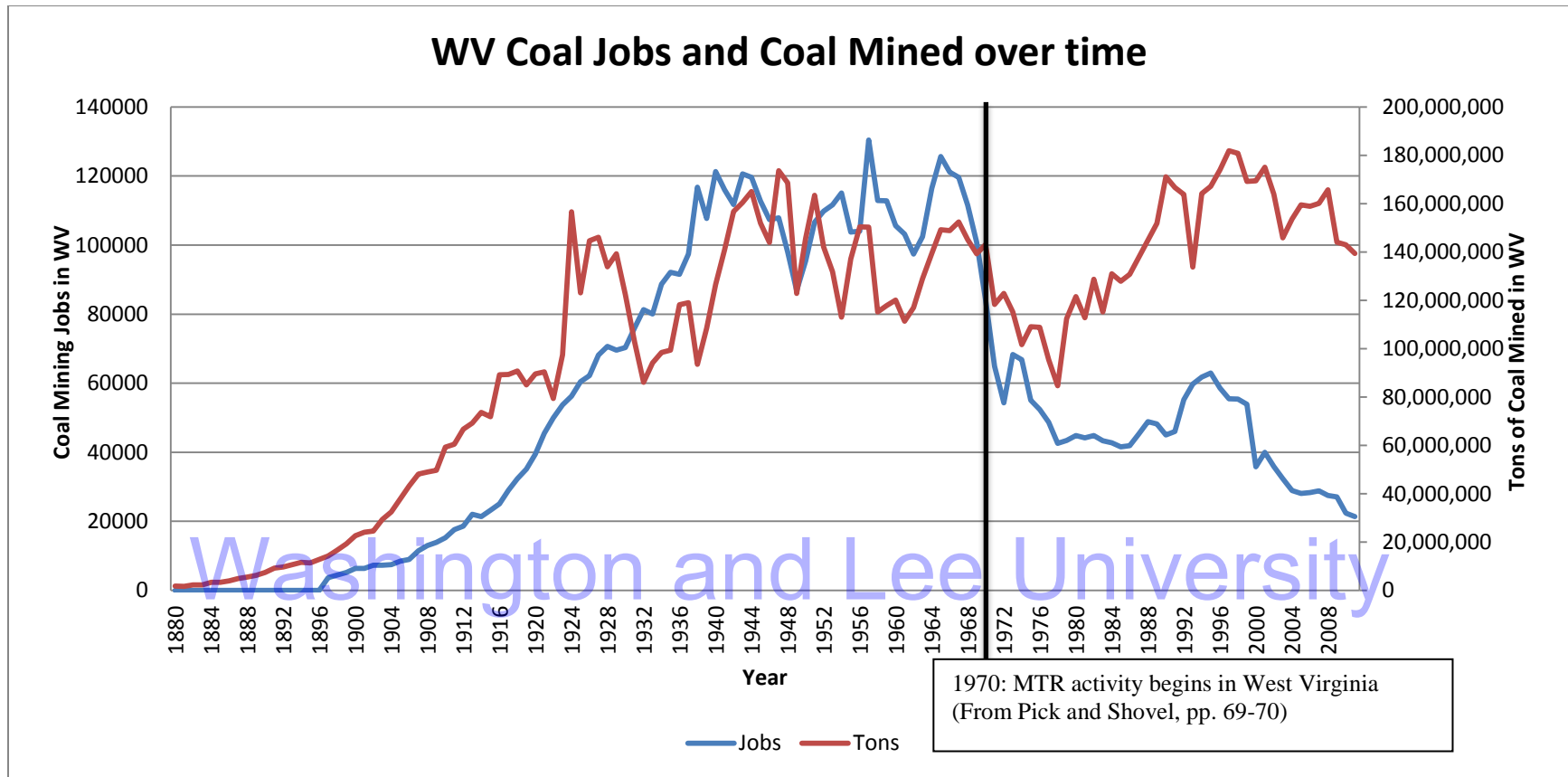
2011 County Poverty Rates, for Counties hosting substantial MTR activity

County	Pov Rate	# on Map
Boone County, WV	19.60%	1
Clay County, WV	29.20%	2
Fayette County, WV	21.80%	3
Kanawha County, WV	17.20%	4
Logan County, WV	21.40%	5
McDowell County, WV	34.20%	6
Mingo County, WV	26.00%	7
Nicholas County, WV	21.30%	8
Raleigh County, WV	17.00%	9
Webster County, WV	26.80%	10
Wyoming County, WV	25.60%	11

<http://www.census.gov/did/www/saipe/data/interactive/#view=Mapping>



<http://www.census.gov/did/www/saipe/data/interactive/#view=Mapping>



Source: <http://www.wvminesafety.org>

County Economic Status and Distressed Areas in West Virginia, Fiscal Year 2013

