

Coal River Mountain Watch Messenger

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Energy Efficient West Virginia Highlights Potential for Efficiency in Local Schools

By Fallan Hill and Cathy Kunkel

This year, Coal River Mountain Watch is continuing to work with the statewide Energy Efficient West Virginia coalition to promote policies that will reduce demand for electricity in WV. These new policies will help our local members cope with rising electric rates, which have increased more than 50% in the past five years. Additionally, energy efficiency offers the potential to create new jobs and to help local governments save money.

One area where there is great potential for energy efficiency is school districts. Across the state, schools are spending \$64 million per year on electricity and natural gas. Some West Virginian schools have extremely inefficient energy usage, with heating systems that are more than fifty years old. In a few counties, some schools still burn coal directly for heating!

However, West Virginia also has a shining example of the potential for energy efficiency in schools: Wyoming County, a coalfield county, is leading

the state in energy efficiency.

Recently, Energy Efficient West Virginia made a trip to visit Terry Tilley, the energy manager of the Wyoming County Schools. Eight of the ten Energy Star leading schools in the state are presently located in his county. So far, the school district has saved over \$2 million in energy costs since January 2004.

Major efficiency improvements in the county have included lighting and heating system upgrades. In some schools, rather than rely on a central boiler, a new system uses efficient heating and cooling units that can regulate the temperature in individual rooms or a collection of rooms without having to regulate the entire building. Terry uses Energy Star Portfolio Manager, a computer program, to benchmark his buildings and figure out where there is greatest potential for improvement. With Portfolio Manager, Terry says you can "really focus on your worst buildings instead of wasting assists on buildings that are doing well." One particular school structure in the county, which was built in 1932, ranks at 99% on Energy Star Portfolio manager, meaning that it is more efficient than 99% of buildings of similar size and type. Energy audits on the buildings are performed regularly to make sure they meet maximum energy saving standards. Sophisticated building energy

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the state in energy efficiency. Recently, Energy Efficient West Virginia made a trip to visit Terry Tilley, the energy manager of the Wyoming County Schools. Eight of the ten Energy Star leading schools in the state are presently located in his county. So far, the school district has saved over \$2 million in energy costs since January 2004. Major efficiency improvements in the county have included lighting and heating system upgrades. In some schools, rather than rely on a central boiler, a new system uses efficient heating and cooling units that can regulate the temperature in individual rooms or a collection of rooms without having to regulate the entire building. Terry uses Energy Star Portfolio Manager, a computer program, to benchmark his buildings and figure out where there is greatest potential for improvement. With Portfolio Manager, Terry says you can "really focus on your worst buildings instead of wasting assists on buildings that are doing well." One particular school structure in the county, which was built in 1932, ranks at 99% on Energy Star Portfolio manager, meaning that it is more efficient than 99% of buildings of similar size and type. Energy audits on the buildings are performed regularly to make sure they meet maximum energy saving standards. Sophisticated building energy

Inside this issue ...

Who Owns Our State?	... 3
Health Effects of Coal Slurry	... 4
Clean Water	... 5
Coal River Mountain Update	... 6
Meet Our Summer Volunteers	... 8
What's Happening Where?	... 10
Mountain Justice Summer '12	... 12
Coal River Crossword	... 13

Building Bridges:

An analysis of critical infrastructure

By Julia Morrison

Bridges are the critical component of transportation that keep coal communities connected and miners moving. They literally bridge the gap, as an asset to all, and keep civilization and the economy functioning. The catastrophic failure of the I-35W bridge over the Mississippi River in Minneapolis in 2007 called attention to the deterioration of national infrastructure. This event prompted the American Society of Civil Engineers (ASCE) to issue a series of reports on America's infrastructure. According to the ASCE report fact sheet, 26% of all bridges in the United States are structurally deficient or functionally obsolete. This report also cited the shortfall of funding for repairs to be \$549.5 billion across a 5-year period. Like much of the rest of the nation, bridge infrastructure in southern West Virginia is in poor condition and funding is severely lacking.

An analysis to examine bridge infrastructure conditions and use along



MISSION
The mission of Coal River Mountain Watch is to stop the destruction of our communities and environment by mountaintop removal mining, to improve the quality of life in our area and to help rebuild sustainable communities.

See **EFFICIENCY** on page 9.

See **BRIDGES** on page 2.

the Coal Route Transportation System (CRTS) is being funded by the Coal River Mountain Watch organization. This analysis seeks to evaluate the possible damage that is being caused to bridge structures along the CRTS by tracking the routes and weights of coal trucks as recorded by the Public Services Commission. This analysis will also look at the structural integrity and weight limits of bridge structures



through data provided by the Department of Transportation. Close examination of these figures can estimate the extent of damage and help to prioritize reconstruction as funding becomes available.

According to the most recent data published, 96 bridges along the Coal Route Transportation System have posted weight limits. Of these bridges, 15% have fractures of critical members that jeopardize their structural integrity. Only 22 of the 96 bridges with imposed weight limits are slated for reconstruction by the West Virginia Department of Transportation. With several of the reconstruction projects scheduled to run well in 2017, the deterioration of these critical infrastructure elements appears to exceed the rate of repair, and poses a hazard to all who use them.

The CRTS roadway designation and associated regulation was enacted in 2004 by Senate Bill 583. This bill assigned CRTS permitting, monitoring, and fee collection to the West Virginia Public Services Commission (PSC.) The CRTS is currently comprised of just over 2,000 miles of public roadways designated for the transportation of coal trucks that exceed the maximum Gross Volume Weight (GVW) of 80,000 lbs. Every coal truck that hauls

on a CRTS designated roadway is required to purchase a permit to operate. Additionally, weight exceeding the first 80,000 lbs is charged a 5 cents per ton severance tax. The max weight limit is set for a 6-axle truck at 120,000 lbs, with a 5% leniency to account for poor weather. These fees, along with voluntary contributions from coal companies, are deposited into the

“15% of the 96 bridges along the CRTS that have posted weight limits have fractures of critical members that jeopardize their structural integrity”

Coal Route Transportation Road Fund (CRTRF.) The CRTRF is expected to cover repairs to the roadways for the damage done through wear and tear, however the annual income generated by CRTS roadway

fees, permits, and voluntary company donations barely exceeds the average cost of replacing a single bridge structure.

A study completed by Downstream Strategies of Morgantown, WV in 2009 titled “Coal and Renewables in Central Appalachia; The Impact of Coal on the West Virginia State Budget” showed the total amount of CRTS related income to be \$2.77 million while the average bridge expenditure was \$2.32 million. The same study also showed the total bridge infrastructure expenditure, paid for by state tax dollars, to be \$17.4 million for fiscal year 2009. There is a clear lack of correlation between the cost of repairs and the fees collected.

Such prece-

dents suggest that the financial burden of bridge maintenance falls primarily to the individual state taxpayer as opposed to the natural resource extraction companies who clearly do far more damage with 120,000 lbs loads than the average 5,000 lbs pickup truck.

The lack of equity demonstrated by such an analysis calls into question the adequacy of the fee structure currently in place for the CRTS. It seems, even with corporate donations, there is a severe shortfall from income to expenditure. While the entire nation struggles to maintain decaying infrastructure, there should be increasing accountability to insure the security of critical infrastructure that benefits all. ■

The final report will be made available for download upon completion on the website: www.JourneyUpCoalRiver.org

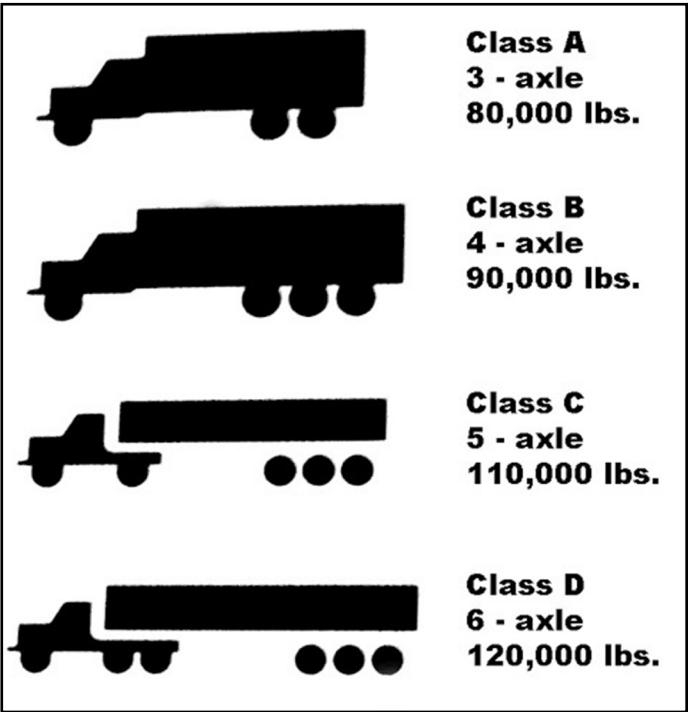


Image shows the weight limits by axle for trucks travelling the Coal Route Transportation System.

Who Owns Our State? Not us

By Jen Osha Buysse and Cathy Kunkel

CHARLESTON, W.Va. -- Occupy Wall Street has captured the attention and imagination of many who are disillusioned with our current political and economic climate. Although West Virginia is geographically far from Wall Street, the issues of inequality and corporate ownership raised by protesters are especially relevant to West Virginia.

The explosion in the Upper Big Branch Mine that killed 29 miners focused national attention on the human cost of coal mining, yet did little to question the larger power dynamics of corporate ownership and inequality that continue to place the land and people of West Virginia at risk.

The last systematic study of

in southern West Virginia communities that are some of the poorest in the state, yet are surrounded by some of the richest coal reserves in the country.

The southern West Virginia counties that produce around 100 million tons of coal a year have persistently remained

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some of the poorest counties in the nation, while out-of-state coal and natural gas companies enjoy high profits. With so much of the land owned by corporations, there are fewer opportunities for locally-based economic development that would keep more of the money in the local communities.

The 1981 land ownership study showed that absentee landholding companies typically pay less on property taxes per acre than local owners, which leads to lower tax revenues and social services for our counties. At the very least, as some state legislators have proposed, we should be using severance taxes to create a trust fund to keep some of the wealth in-state and prepare for the future.

If we had an additional 5 percent severance tax on coal and natural gas going into a trust fund, we would

be getting \$500 million a year. That is money that could be invested in the future, by making higher education more affordable, providing better child health care services, and investing in workforce development, for example.

Not only has corporate ownership made it more difficult for West Virginians to benefit from the natural resource wealth of our state, it has also contributed to our perpetual problems with job loss. Take the coal industry, for example. The amount of coal produced per worker more than doubled from the early 1980s through 2000, largely due to increased mechanization and a shift toward strip mining. We have perverse financial incentives that reward corporations for investing in capital-intensive equipment instead of more workers. As a result, we have an increasingly mechanized industry, bankrolled by Wall Street, that employs increasingly destructive mining practices and fewer people.

The question of who owns and profits from West Virginia's natural resources is one that we need to be asking more often. In terms of natural resources, we are one of the wealthiest states in the country, and we should no longer allow the 1 percent to treat us as a sacrifice zone for the nation's cheap electricity. ■



Image of protesters at Occupy Wall Street. Photo from 02varvara.wordpress.com.

land ownership patterns (done in 1981) found that nearly 60 percent of land in the sample of West Virginia counties studied was corporate-owned -- and the percentage is even higher for mineral ownership. This is a result of conscious exploitation by outsiders and local elites who were able to buy up much of the mineral wealth of the state around the turn of the last century.

The inequality that is the focus of Occupy Wall Street can be felt acutely

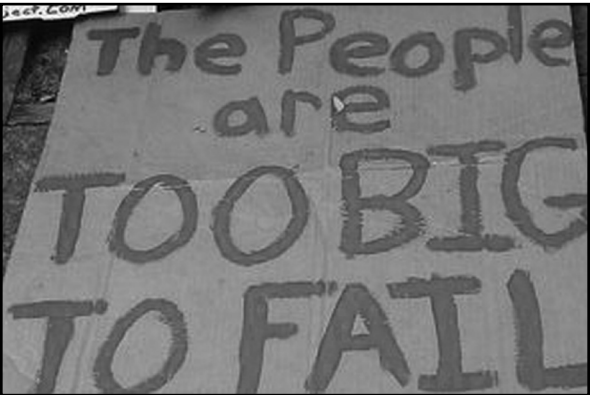


Image of a demonstrator's sign at Occupy Wall Street. Photo from crainsnewyork.com.



drawing by Fallon Hill

Health Consequences of Coal Slurry

The adverse effects of slurry impoundments and injections leaching toxic chemicals

By Venkata Goparaju

Coal slurry contains many organic and inorganic contaminants that have potential human health effects based on the duration and route of exposure. To analyze such impacts of slurry, it is imperative to understand what slurry is, what it contains, and how it can impact human health.

Once coal has been extracted from an underground or surface mine, it is processed in a preparation facility to remove non-combustibles so as to meet specific ash and BTU (British thermal unit) content, and to meet environmental parameters such as sulfur content. These requirements, along with increasing waste-to-coal ratios, have prompted many processing plants in West Virginia to move away from dry processing and opt for water-intensive wet methods. The preparation process is as follows: extracted coal and waste rock is sized through crushing and screening in which coarse waste of sand-size and higher is separated. The coal is then separated from fine refuse through a sequence of processes such as gravity and cyclone separations. Several chemicals are used in the process, such as magnetite to increase density and diesel fuel or kerosene to enhance floatability. The resulting slurry is then treated with a chemical thickener.

The slurry is therefore a fine waste containing chemicals that naturally occur in coalmines, chemicals added during coal processing, and also some coal fines. Genotoxic and mutagenic effects of slurry are mainly attributed to the presence of polycyclic aromatic hydrocarbons (PAHs) and heavy metal salts. However, it is important to note that the exact chemistry of coal slurry is unpredictable and may vary from site to site as companies do not usually reveal compositions of chemicals used in processing – such chemical compositions are considered “trade secrets”.

Coal slurry may be disposed of as a dry cake by using filter presses, or may be disposed in waste impoundments behind dams of coarse refuse or injected through injection wells or pipelines into abandoned underground mines. It is often thought that the solid content of slurry (amounting up to 20-40%) will settle down once it is disposed without any chemical leaching. However, both impoundments and injection sites have a possibility for chemical leaching. Increased secondary porosity through bedrock fractures from mining activities, along with roof falls, floor heave,



Image of coal prep plant from ilovemountains.org.

and post-mining earth movement in and around abandoned mines can allow chemicals to move from impoundments into the subsurface environment, and injection of slurry creates an injection well mound which forces slurry away from the injection point, contaminating subsurface and surface water.

Consequently, groundwater contaminated with slurry constituents may contain excess levels of aluminum, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, manganese, mercury, nickel, selenium, sodium, strontium, vanadium, zinc, and hydrogen sulfide, as well as organic compounds such as benzene and toluene, increased hardness and turbidity, and pH variations.

Accordingly, the health effects largely depend on exposure to the levels of specific chemicals in drinking water in addition to other forms of exposure such as inhalation and dermal contact. For example, selenium is an essential nutrient at low levels, but concentrations above the MCL (maximum concentration level) of 0.05 mg/l can result in damage to liver, kidneys and nervous system. Arsenic has been implicated with various cancer and non-cancer conditions. Lead can cause various problems including peripheral neuropathy, and reproductive and developmental problems, and exposure to excess manganese can cause liver problems, movement disorders, and Parkinson's disease. Aluminum, arse-

nic, beryllium, cadmium, chromium, nickel, and uranium have been attributed either individually or in combination to cancers involving different organs from brain to liver and bladder. Non-cancer conditions such as skin disorders and organ damages are possible occurrences from exposure to many of these chemicals. One of the affected persons I met in Rawl, Mingo County, had to suffer from recurrent liver problems with their attribution of medical reports to high levels of copper and other chemicals from contaminated drinking water. It is clear that slurry containing various inorganic and organic chemicals can contaminate water bodies in the vicinity with eventual health effects for people who use contaminated water. ■

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SSP Unveils New Searchable Map of Coal Sludge

By Mathew Louis-Rosenburg

SSP is thrilled to announce a powerful new tool for coalfield communities. On our website there is now an interactive map of all documented sludge impoundments and injections. For the first time, citizens can type in their address and find out about sludge disposal in their area. This is a huge leap forward for public transparency. Until now, information about impoundments was available if you knew where to look for it, but it was impossible to find out much of anything about injection wells, particularly older injections, without spending hours navigating through DEP records. Visit www.sludgesafety.org to find out if your community is at risk from slurry.

The tide may be turning on slurry. Several plants in West Virginia have added dry presses over the last 2

years, creating a safer, dry waste stream. On top of that, the most recently built plant in the state was built with filter presses. SSP has advocated for dry presses for years. Due to the tireless work of SSP and other concerned community groups, it is currently nearly impossible to get a new permit to “dispose” of slurry in impoundments or by underground injection in West Virginia. Only 5 plants still pump slurry underground in WV. With continued citizen pressure, we may yet see the end of wet slurry disposal.

Congratulations to the folks in the Seth-Prenter area who just settled their water pollution case against Alpha Natural Resources. Over 350 residents sued at the end of 2008, alleging their health had been damaged by wellwater contamination caused by slurry injection and irresponsible

mining practices. After many failed attempts at mediation, a deal was reached just days before jury selection was set to begin. While the terms of the settlement are confidential, we hear that folks are generally pretty happy with it. What we do know is that all of the evidence from the lawsuit will stay public. This is so important. Too often in the coalfields these settlements come with restrictive gag orders that prevent citizens from talking about what happened at all. In the case, all the expert testimony and documents that prove that the coal industry poisoned Prenter are available – some in the SSP Research Library on our website. This is a big victory for holding coal companies accountable for the damage they do in communities. Let's work for justice for all coal-impacted citizens. ■

Clean Water is More than Just Lizards!

By Debbie Jarrell

I had the opportunity to attend the West Virginia Department of Environmental Protection meeting titled “Coal River Watershed Meeting.” The Water Resources Protection and Management Act, amended in 2008, requires the DEP to develop a state-wide water resources management plan by 2013. To that end, the Department is developing the plan based on individual watersheds.

One of the first things the instructor told us was that the meeting was going to be about the quantity of the water, not quality. Upon hearing that I asked, “How can you make a watershed plan and not include the quality?” I was told that there was another department working on quality. A little further into the meeting we were told of the WV Water Protection Act of 2011. This piece of legislation was passed to force companies who withdrew water from the streams of WV to keep an accu-

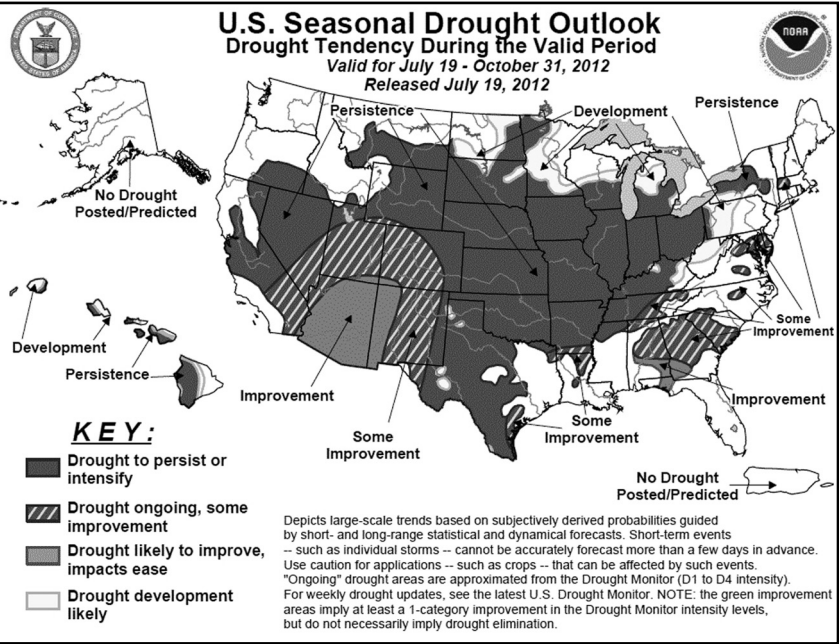
rate account of how much water was withdrawn during the year and report back to the WV DEP. The coal industry, we were told, is exempt from this rule. Again I spoke up, asking how we can make a watershed plan with a big hunk of the information missing, considering the coal industry is the largest user of water in our state. I was told that if I didn't like it, I needed to speak with my

legislators.

I wonder: when we have a severe drought in our area, who will be taken care of first? The coal companies or the people? I understand people may not want to think of a situation so dire as water not being available, and rivers drying up. However, our most recent bout with a derecho in our area gives one reason to really be worried about the future and Mother Nature.

Our area, according to the National Oceanic and Atmospheric Association, is and will remain abnormally dry this summer season. We still remain very fortunate compared to the rest of the United States.

I worry about the future of my grandchildren in our beautiful state. That is one of the reasons that the Tadpole Project is one of my favorites. Not only are we trying to clean up our area, we also get to involve our children in the project. We get to teach them about taking care of our Earth ... and lizards. ■



Map of drought predictions from www.cpc.ncep.noaa.gov.

Mining on Coal River Mountain:

Declines in coal usage, global economics, and Coal River Mountain mining permits

By Rob Goodwin

Over the past few months, CRMW has been keeping a close eye on how global economics and the decline in coal usage will effect mining operations on Coal River Mountain. One confirmed element of this research is that nearly all of the coal produced by Marfork Coal Company is metallurgical coal, also called coking coal. About 20% of coal in WV does not go to power plants because it is coking coal, used to make coke, a key element of the steel production process. Nearly all of the coking coal produced in southern WV is exported to Europe, Asia, and South America, with the majority going to Europe.

WV is one of the few places in the world where coking coal is produced. This makes it one of the only long-term hopes for the coal industry, which is seeing quick and sharp decline in the demand for thermal coal used at power

plants across the country. Cheap gas and new power plant emissions regulations have caused a shift away from coal burning in the US. Appalachian thermal coal production has long been expected to be hard hit by this decline; the industry has used the well-known

“power plant shut-downs and shifts to natural gas as a cheaper energy source will have little effect on the mining of Coal River Mountain”

phrase “Coal Keeps the Lights On” as justification for mining coal and mountaintop removal. However, when it comes to Coal River Mountain, this phrase does not apply – and may have never applied. Nearly all coal on Coal River Mountain is transported to the Marfork Preparation Plant, which primarily sells to foreign markets, and Massey claimed that this plant was the largest coking coal producer in the country. Alpha

announced this past spring that it was idling the Beetree Surface Mine and mentioned that this was a coking coal mine that would be idled due to soft demand in the European markets. This is likely connected in part to the European debt crisis and general state of the European economy.

It is our estimate that the main reason Alpha is proposing to perform mountaintop removal on Coal River Mountain is that it is planning to blend surface-mined coal with high grade coking coal in underground mines to create a coking coal product to be shipped all over the world. This means that power plant shut downs and shifts to natural gas as a cheaper energy source will have little effect on the mining of Coal River Mountain, with global steel demand being the primary force that puts Coal River Mountain and our communities in danger.

At Coal River Mountain Watch we generally support responsible underground coal mining for coking coal as a good transition and one that would provide real benefits to the local communities. Higher profit margins in the mining of coking coal should allow companies like Alpha to transition into responsible underground mining in many communities threatened by mountaintop removal. ■



Image of a “Coal Keeps the Lights On” sticker. Photo from coalminer.com.

What’s happening with the different mining areas on Coal River Mountain?

Middle Ridge Surface Mine

On June 5th, 2012, Marfork Coal Company, a subsidiary of Alpha Natural Resources, submitted an application to the West Virginia DEP to mine 800 acres of Coal River Mountain. The area to be mined is known as Boyd Branch Knob, located on the ridge between Sycamore Creek and Clear Creek. Marfork plans to mine 500,000 tons of coal each year for the next 15 years with no valley fills. We believe that despite the recent publicity by the coal industry of Obama’s “attack on coal”, Obama’s policies will have little if any effect at all on the ability for Marfork to obtain this permit from the WV Department of Environmental Protection (WVDEP). A 200-acre permit adjacent to this operation was rubber-stamped by the DEP without any federal objections in late 2011.

Based on past experiences with permits on Coal River Mountain, we have found that the DEP or the company will try and hide the public notice so we urge everyone to keep a close eye out looking for any public notices from Marfork Coal Company and permit number S-3017-12. Let us know 6 when you see them!

Eagle II Surface Mine Revocation

Earlier this year, in response to a citizen’s complaint from CRMW, Roger Calhoun at the Charleston OSMRE Field Office sent a letter to WVDEP ordering WVDEP to revoke the 2,000 acre Eagle II mining permit on Coal River Mountain. Five days later, WVDEP appealed the decision to revoke the permit to the Appalachian Regional OSMRE Office in Pittsburgh. Calhoun used strong words, calling the WVDEP’s actions arbitrary and capricious and an abuse of discretion. WVDEP does not have much to go on with its appeal as the law is very clear that a permit terminates after three years if an extension is not granted by the agency (this was the ground for CRMW citizen’s complaint). CRMW is optimistic in thinking that the permit will be held to some higher standards on a resubmitted version of the permit if OSMRE holds to its decision.

Collins Fork Permit Appeal

CRMW has filed an appeal in Kanawha County Circuit Court against the West Virginia Surface Mine Board’s decision to approve the Collins Fork permit, a 250-acre strip

Despite Longstanding Citizen Concerns Alpha Proposes Expansion of Brushy Fork Slurry Dam

By Rob Goodwin

The Mine Safety and Health Administration (MSHA) is considering an application from Alpha Natural Resources (formerly Massey) to raise the height of Brushy Fork dam by 60 feet. Preliminary approval was granted for this expansion; however, due to stability concerns discovered through federal oversight, expansion of the dam has been postponed since July 2009.

The Brushy Fork coal slurry impoundment is a massive lake storing over 6 billion gallons of coal slurry held back by an earthen dam. (Coal slurry is the toxic byproduct of washing coal before it is sent to be burned in power plants). This is the largest coal slurry impoundment in the state, and the dam is the tallest earthen dam in the western hemisphere standing 777 feet tall.

“the Brushy Fork coal slurry impoundment is a massive lake storing over 6 billion gallons of coal slurry held back by an earthen dam”

The engineering consultant firm, Geo/Environmental Associates (GEOE) that designed the Brushy Fork Impoundment and has monitored its construction, was issued citations from MSHA regarding their involvement in the Martin County Slurry Spill in 2000, when hundreds of millions of gallons of coal slurry leaked from a dam in eastern Kentucky. Barry K. Thacker, PE was directly involved and is still President of GEOE. The poor track record continues today. This spring GEOE received a series of citations from MSHA for failing to report serious conditions on Alpha Natural Resources’ impoundments acquired from Massey Energy in Sylvester, WV and Sidney, KY.

One Citation to GEOE at the Upper Lick Branch Impoundment stated: “The design engineer would have known the condition existed if he had met the standard of care for monitoring engineered construction...if incorrect-

ed the condition would would result in failure of the downstream slope of the dam.”

In July of 2010 Alpha extended the life of its Rock Spring Development Impoundment by four and a half years in Wayne County, WV after performing an investigation into alternative processing technology and the installation of several filter belt presses that were not cost prohibitive for continued operation of the plant. Alpha should be required to pursue similar measures rather than raising the Brushy Fork dam. ■



Image of Brushy Fork Impoundment from scholarsandrogues.com

mining permit on Coal River Mountain. The appeal is based on the fact that the West Virginia Department of Environmental Protection (WVDEP) failed to hold a timely public hearing on the permit. The WVDEP waited three years to hold a public hearing; state law requires that a public hearing be held within three weeks of the close of the comment period.

In June 2012, the WV Surface Mine Board stated:

“The Board finds it outrageous that WVDEP flagrantly violated the law by waiting more than three years after the initial comment period to hold an informal conference on the permit decision. It is clear from the testimony and admissions of counsel that WVDEP chose to violate the law by not holding the informal conference within the time frame outlined by statute.”

Despite these comments, the Board upheld the permit. One board member, John Blair Hunter, dissented from the decision.

CRMW’s appeal is asking that the permit be sent back to the WVDEP for an additional comment period so that citizens have the full range of rights of public participation required by law on the final draft of the permit. The 3 year gap, as well as several revisions of the permit, violate the law and disenfranchise citizens. For example, the initial proposal sent to public comment for the Collins Fork Permit in 2008 included a plan to abandon and reclaim the old impoundment in the area. The final approved version, however, removed this part of the plan but reduced the actual mining acreage from over 700 acres to just over 200 acres. ■

Meet our summer volunteers!



Kristen Ross is from Beckley, WV, but both of her parents are from Coal River. She is staying with her dad's parents down the street from the CRMW office in Naoma this summer. Her mother's parents used to live in Horse Creek Hollow and her grandfather instilled early in her a desire to help the people of Coal River and stop mountaintop removal strip mining. She graduated from West Virginia University in 2011 with a pre-law degree in Political Science and just finished her first year at West Virginia University College of Law. The law school has a newly created Land Use and Sustainability Clinic that she hopes to join next year. When she graduates from law school in 2014 she hopes to continue a career in environmental protection.

This summer, Kristen is working under Cathy Kunkel with the Land Reform Study. The last time the West Virginia had a comprehensive study of ownership performed in the state was 1981. Ted Boettner and Eli Schewel of the Center of Budget and Policy are working with Kristen and Cathy to compile statewide data of current land ownership. They are hoping to put together a methodology for compiling this information with each county. Two pilot counties for this land study are Boone County for its influence with coal and Doddridge County for its influence with natural gas. Specifically, Kristen is focusing on finding possible property tax law reforms to gain more revenue from the large land holding and absentee companies once the data is compiled for these counties. Kristen believes:



Venkata Goparaju is an international student from India, and has recently graduated with a Master of Science in Environmental Safety and Occupational Health Management from the University of Findlay, Findlay, Ohio. He first came across CRMW while browsing online about environmental safety related issues. As the organization's work appeared relevant to his interests, especially considering his experience of working and interacting with people in a coal belt area back home in India, he contacted CRMW and eventually came here as a summer intern. He is currently working towards preparing a comprehensive report on coal slurry including human health impacts and potential alternatives. He is also looking forward to establishing his career in environmental health and safety as the field has potential implications for saving human lives and protecting the environment. That said, he is thankful for the opportunity to learn closely about the impacts of coal mining in West Virginia and for all the related information he has been provided with. Apart from this, he likes visiting new places and is happy that he has grabbed nice memories from his stay in Charleston and visits to Naoma, Williamson, and other places.

"Coal is on its way out. Natural gas is on its way in. If we don't learn from the mistakes that we made letting coal ruin the state then the future of our state will remain grim."
-Kristen Ross



Julia Morrison is a graduate student pursuing a degree in landscape architecture at Chatam University in Pittsburgh, Pennsylvania. This summer, Julia came to the valley to compile a case study analysis of bridge infrastructure on the Coal Route Transportation System using data collected by the Public Services Commission of West Virginia (for more info, check out her article on pages 1 and 2).



Megan Kelley grew up outside of Syracuse, New York and is currently a senior at the University of Vermont in Burlington, Vermont. There, she is studying political science and writing a thesis on social movement theory, using the movement against mountaintop removal mining as a case study to examine how activists get involved in various social movements. This summer, Megan is working to put together this summer newsletter and is also helping out with various jobs such as outreach, gardening, and video editing.

EFFICIENCY from page 1

management is key to Wyoming County's success. Automated Logic, an interactive computer program linked to the system, tracks data on all the school buildings in the county and makes Terry's job in tracking energy use easier. From his office computer, he can monitor the air quality, temperature, and comfort of every room in every school. The system, he says, makes diagnosing problems easier and cost effective because it narrows down the field of things that need attention. Terry also says he's now able to monitor the health of the buildings as well. He can go to his office and print off information that shows what is at work to eliminate mold or CO2 buildup.

So far, the school has saved over \$2 million since January 2004, but Terry points out that there are more than just financial benefits. "It's hard to put a number on comfort. If I was the parent of a child in the Wyoming School district I'd want my child to have the best of opportunities. I'd want him to

be safe riding the bus and then be safe and comfortable in his classroom, and I think this new system helps to achieve that".

Terry says, "It's not so much about saving money for us now, although that is still important, it's about the quality of the buildings and the people in them." The Wyoming County Vo-tech students participated in the implementation of solar panels on the roof of their building and there is discussion of placing a greenhouse in the lot adjacent to the building. There are several educators that are excited about the endeavor.

Energy Efficient West Virginia is starting a campaign to push other school districts to follow Wyoming County's example. Improving energy efficiency in schools has the potential to improve comfort and save millions of dollars for West Virginia's school system that can be better spent on education. ■



Image of energy manager in front of Mullens Middle School in Wyoming County. Photo from wvcommerce.org.



Fallan Hill is from Plymouth, Illinois. She graduated from Illinois College with a degree in Environmental Science in 2010. Before volunteering with CRMW, Fallan was working in her community as a gas station attendant and a grocery store cashier. In her free time, Fallan submits nature writings for

Karlyn Hunt is from Nashville, TN. Karlyn is an undergraduate student at Warren Wilson College near Asheville, NC, majoring in Global Studies with concentrations in Appalachian Studies and Environment and Society. This summer, Karlyn worked with Julia on the project involving bridges and the CRTS.



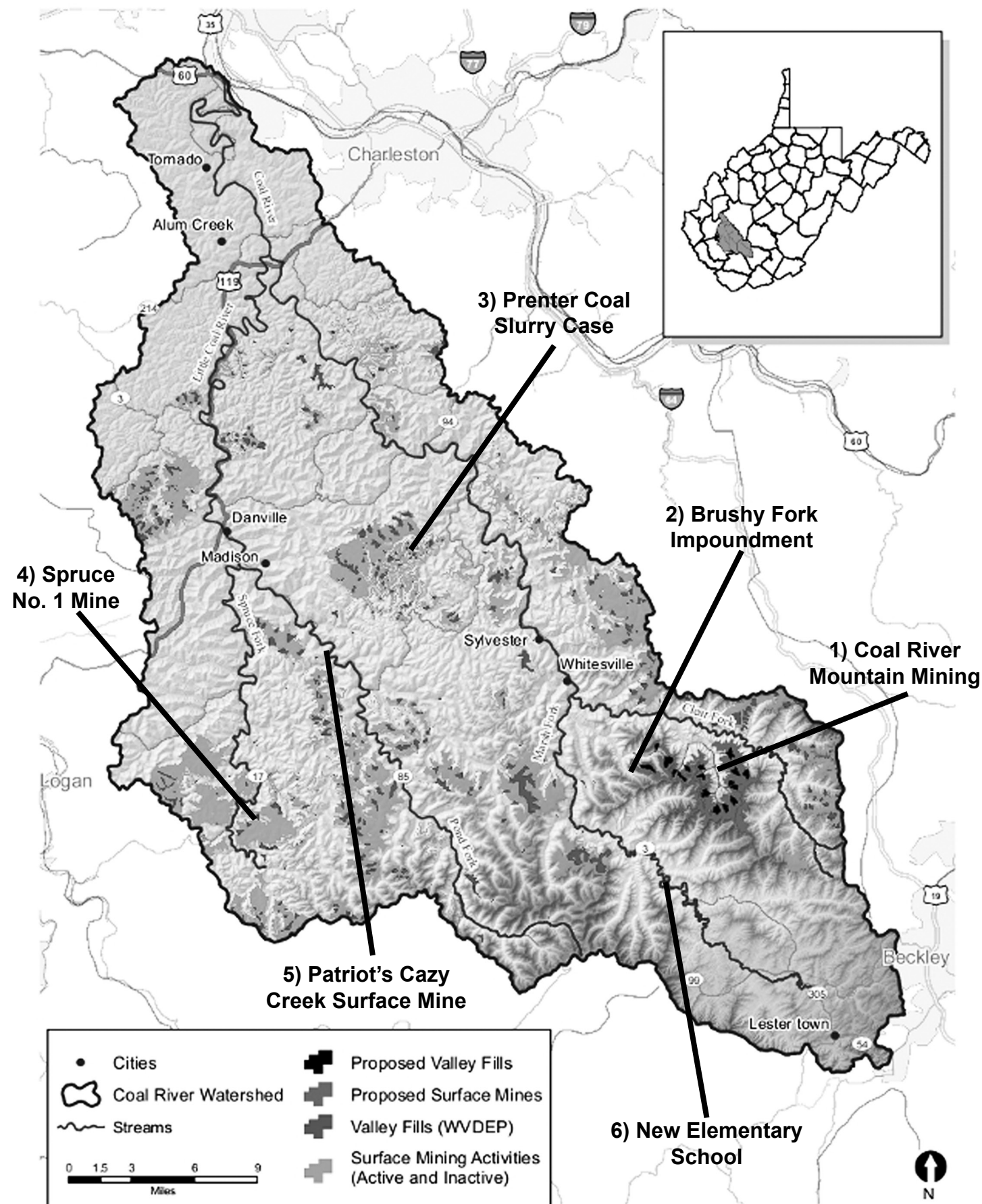
publication in books and nature magazines. This summer, Fallan is working with Cathy Kunkel on Energy Efficient West Virginia to encourage school systems to be more energy efficient and realize their options to increase their efficiency and decrease their energy costs. Fallan assists with the collection of school data and records her findings for a presentation given by Cathy Kunkel and her at the WVASFA conference in Morgantown at the end of July.



Bird's Eye News

What's Happening Where?

A View of the Latest from the Coal River Valley Watershed



1) Coal River Mountain Mining: Coal River Mountain Watch is filing an appeal with the Kanawha County Circuit Court against the Collins Fork Permit. Marfork Coal Company has applied for a permit for a site that would be known as Middle Ridge Surface Mine. The Eagle II Surface Mine recently had its permit revoked but the WVDEP is working to appeal that revocation. For more information on each of these sites, see pages 6 and 7.

2) Brushy Fork Impoundment: This impoundment is a sludge impoundment that sits in an area above Whitesville. There are currently proposals to expand the impoundment, but we urge you (yes, you!) to get involved and contact the MSHA and voice your opinion against expansion of the impoundment. See page 14 for contact information!

3) Prenter Coal Slurry Case: Congratulations to the folks in the Seth-Prenter area who settled their water pollution case against Alpha Natural Resources in June. Over 350 residents sued at the end of 2008, alleging their health had been damaged by well water contamination caused by slurry injection and irresponsible mining practices.

4) Spruce No. 1 Mine: US Environmental Protection Agency appealed the decision of a DC district court that nullified its decision to veto the permit to bury several miles of streams and mine over 2,000 acres near the community of Blair, WV. Briefs on the case are due in September and Arch Coal has agreed not to mine areas of the permit related to the veto until after the court briefs are filed.

5) Patriot's Cazy Creek Surface Mine: In June, citizens along the West Fork of the Little Coal River attended a hearing asking the WVDEP to renew a 750 acre surface mine permit owned by Patriot Coal. This permit would close the public road over Cazy Mountain that residents use daily. WVDEP is considering terminating the permit for the same reason as the Eagle II permit on Coal River Mountain.

6) New Elementary School: This is the location of the new elementary school in the Coal River Valley! We've been told that the students should be able to attend school in the new location starting in January 2013.

Answers to the Coal River Crossword on page 13:

Across: 3) bridge 5) morels 6) kanawha 7) pipestem 10) beckley 12) sludge dam 13) peat 15) hillbilly 20) route three 21) withers 22) west virginia 23) judy bonds 24) jazz hollow 25) moundsville 27) ramps 28) naoma 29) cardinal 30) Blair mountain
Down: 1) wyoming 2) ticks 4) ginseng 8) manganese 9) henry 11) charleston 14) bear 16) crts 17) mother's day 18) overburden 19) metallurgical 26) libert

Mountain Justice Summer Camp 2012

By Junior Walk

Mountain Justice Summer Camp was held from May 19th through the 26th in the Appalachian South Folklife Center in Summers County, West Virginia this year. The week consisted of workshops for skills that are useful in the fight against surface mining. There were also panels made up of people from areas affected by coal extraction and surface mining, which I took part in. During the panels, affected community members told stories of what it's like to live in these areas, and answered questions from the audience. In my opinion the trainings and panels went very well and I'm sure the folks who attended got a lot out of them.

The week culminated in two direct actions. One took place at a point of extraction, Kayford Mountain, the home place of long time activist Larry Gibson and his family. On that action activists blocked coal trucks on a haul road with a banner that read "Stop extraction, build a healthy future". On the other action there were five people who trespassed on a coal barge to stop the coal from being exported from the state. One of the activists, Ricki Draper was quoted as saying, "I am incredibly proud to stand today with the century-long Appalachian resistance against the devastating effects of the coal industry. I have broken the law because the legal system is broken. I have broken the law because mountaintop

removal is destroying our health, our mountains, and our futures. I have broken the law because the destruction of our landbase, which is our endowment, is legal."

All in all the week was a success, both in building our movement and raising awareness around the issues of coal extraction and surface mining. In my humble opinion every time we have one of these camps it puts us one step closer to shutting down this terrible, despicable practice of surface mining. I hope that folks stay engaged and involved in the movement, and I think they will. If you missed summer camp this year, Fall Summit will also be here in West Virginia. ■



Garden Corner

This summer, the Coal River Mountain Watch volunteer house put in a new garden! We now have a nice big fenced-in garden on the side of our house. It's a great opportunity for our volunteers to spend some time in the yard and learn about gardening, and for the house to eat a lot of home-grown vegetables! Here's some more garden news from Fallan, the summer garden volunteer:

What has been planted in the garden?

A lot of things! We planted summer squash, lettuce, chard, potatoes, beans, carrots, tomatoes, cabbage, basil, peas ...

Have things been growing?

Yes! We've even eaten things out of the garden, including a few tomatoes, carrots, lettuce, chard, and quite a bit of squash.

Which plants have been the most successful?

Squash. It grows in abundance in West Virginia. I guess the climate helps it!

Have we been struggling with any pests?

We've seen a few slugs, and there have been ants on the sunflowers. However, more of the insects in the garden have been beneficial, including a lot of pollinators like bees.

What are we hoping to plant in August?

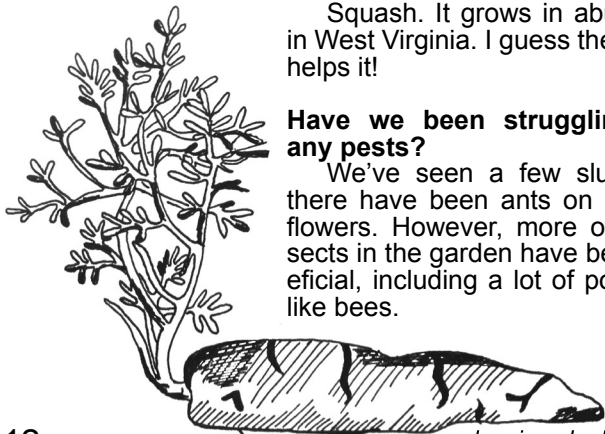
We're hoping to plant some fall squash - definitely acorn squash. Possibly we'll plant some more spinach and kale, as those tend to grow best in fall weather.

Any suggestions for next year's garden?

Go easy on the squash. Don't plant as much as you think you'll need - plant less! It spreads out a lot. Stake up the tomato plants early, because you don't want them getting too heavy. Heavy tomato plants are harder to stake. Try to weed daily. Maybe we even could try mulching the garden to keep the weeds down, which would be healthier for the garden!

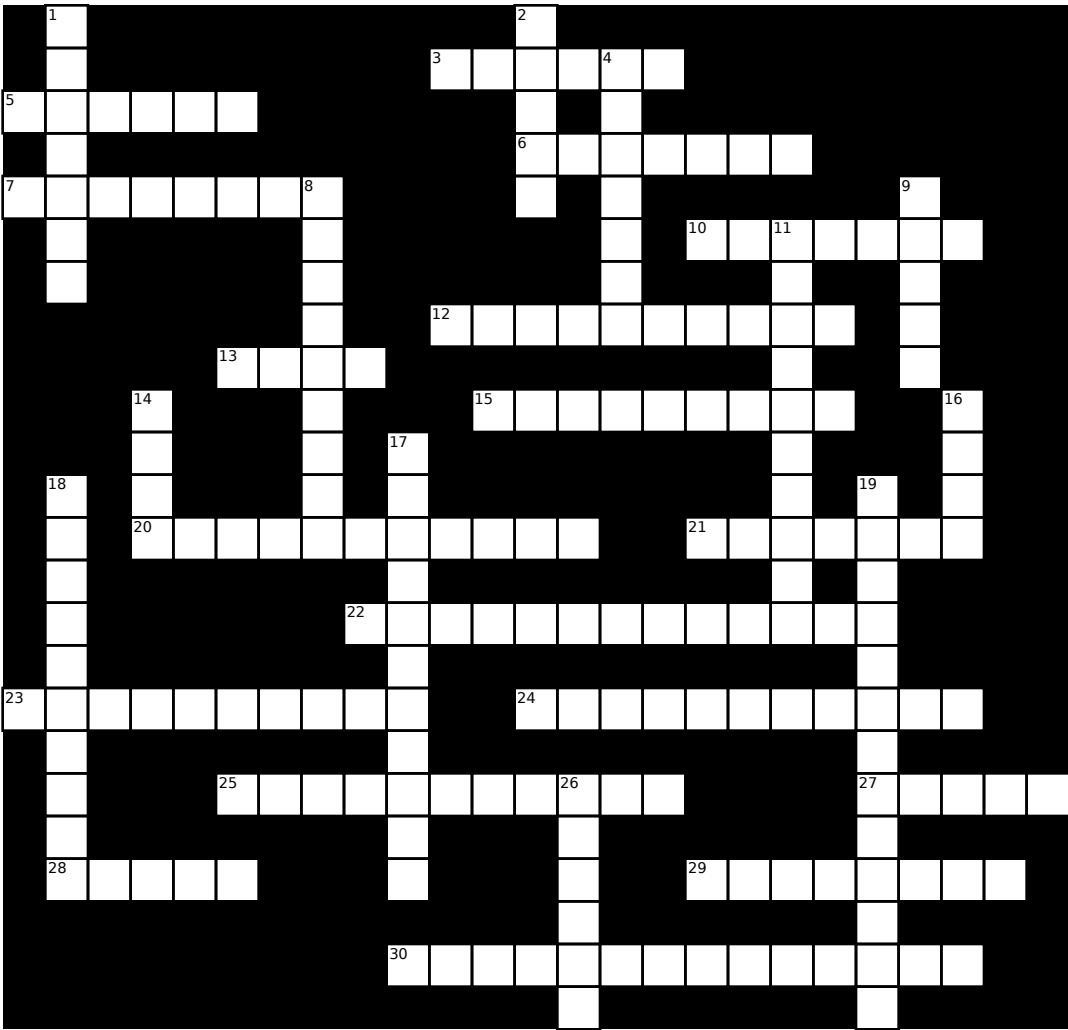


This photo shows the volunteer house summer 2012 garden in all its glory!



Coal River Crossword

By Megan Kelley



- Across

 - 3 Featured on West Virginia state quarter
 - 5 Molly munchers
 - 6 River in Charleston
 - 7 Location of Mountain Justice Summer 2012
 - 10 Home of Tamarack
 - 12 400 yards from Marsh Fork Elementary School
 - 13 Precursor to coal
 - 15 Save the endangered
 - 20 Coal River Valley thoroughfare
 - 21 Famous West Virginian from Slab Fork: Bill
 - 22 Wild and wonderful
 - 23 Mountain hero, activist
 - 24 Miles Davis' valley home
 - 25 Adena culture burial mound located in
 - 27 Leeks and activists
 - 28 Location of CRMW's new office
 - 29 West Virginia State Bird
 - 30 2011 march on
- Down

 - 1 West Virginia county with the most energy efficient school system
 - 2 Check for these after a woody walk
 - 4 Highly valued for roots
 - 8 Chemical found in coal slurry (Mn)
 - 9 Folklore hammer hero: John
 - 11 Capital
 - 14 CRMW's New House compost pet
 - 16 Roadways designated for the transportation of coal
 - 17 Family holiday first observed in Grafton, 1908
 - 18 Material that lies above coal, removed during surface mining
 - 19 Type of coal used to make steel
 - 26 Montani semper ...

Answers on page 11!

“How can I get involved?”

- **Contact MSHA:** Urge them to respond to the demands of citizens and reject proposals to expand the Brushy Fork Impoundment. Administrator: Kevin Stricklin, (202)-693-9500, stricklin.kevin@dol.gov
- **Become a member:** Membership amplifies your voice, connects you to others, and helps our standing in legal cases.
- **Speak Out:**
 - Letters to the editor and blogs: We want the world to read about our vision of a sustainable economy, not just the deep-pocket propaganda
 - Talk to your neighbors: Reach out, build community, help us unite around these issues that affect us all
- **Donate:** In these financial times, every bit helps us keep going.
- **Share your story with visitors:** We're always looking for community members to tell journalists, students, and other visitors their stories about the impacts of mountaintop removal and their work to create a healthy future.
- **Keep educating yourself:** Our website (www.crmw.net) has updates and links, and our regular Action Alerts will help keep you posted. Another excellent site for information is www.ilovemountains.org.
- **Become a volunteer:** Join us by living at our volunteer house in the Coal River Valley! Internships are available for working on CRMW projects, with food and housing provided.

“How can I get involved with the Sludge Safety Project?”

Sludge Safety Project is looking to grow and we need you! To overcome the power of the coal industry and their protectors in the state government, we need people power like never before.

We are in the process of recruiting volunteers and building the teams necessary to make lasting changes. SSP has done tremendous work over the last decade and won concrete victories for communities and big wins for the whole state. If you want to help us take our work to the next level and win permanent protections from slurry for coalfield communities, contact us today!

What you can do:

- **Help organize a movie screening & potluck.** One of the best ways to start learning about how to fix the problems in your backyard is to see how others have done the work in their own communities. Let's learn from each other and not reinvent the wheel!

Host or organize a screening of SLUDGE, an Appalshop film about the 2000 sludge impoundment break in Martin County, KY and the community response to that sudden disaster.

- **Receive and share our Coalfield Organizing Tool Kit.** Over the years in SSP, we have learned much and 14 built connections with intelligent

and helpful allies locally and nationally. This tool kit is a first attempt to get that information down on paper and into the hands of the people who need it most.

This resource is geared toward anyone who wants to take action but finds themselves puzzled as to how to get started. We have helpful tips for organizing and developing your own leadership skills, as well as information on the nitty-gritty of bad water, sludge impoundments and strip-mining permits.

Give us a call or drop an email and we'll get one (or more) sent your way.

- **Educate your legislators to take action on banning slurry.** Several studies have been released recently on health, sludge, and living in the coalfields. These studies continue to show that slurry injections are unsafe and that communities are at risk from toxic sludge.

People are suffering from bad water, disease, and unsafe living situations near dangerous coal waste impoundments. This is not acceptable.

There are ways to process coal that are safer and produce less waste. It's up to us to make sure our representatives and senators have the facts. During the off-season is the perfect time to lobby your legislator close to home in your own district. They have more time and you don't have to go all the way to Charleston. Call their business numbers (available online) and set up meetings. We are here to help you get ready, but you are the person they need to hear from. You can find your legislators' contact information online at www.legis.state.wv.us.

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- **As always, get sludge safety issues in the news!** You can call the "Readers Voice" line, where you can leave an anonymous voice message. The Charleston papers then select some of the messages, type them up, and print them in the newspaper.

The number for the Gazette is: (304)-357-4451 and for the Daily Mail, it is: (304)-357-4330. Call now! It's free!

Contact SSP:
(304)-924-1506
email info@sludgesafety.org
visit www.sludgesafety.org



Mark your calendars!

- August 14-15:** Alliance for Appalachia Regional Steering Meeting in Virginia
- August 24-26:** Music on the Mountaintop Festival in North Carolina. Benefit festival for Appalachian Voices.
- September 1-2:** Labor Day Gospel Music Festival on Kayford Mountain in West Virginia.
- October 30-31:** West Virginia Water Research Conference in Morgantown, WV. See www.waterconference.org/2012 for more information.

In addition to the events listed above, please keep an eye out for upcoming information about Mountain Justice Fall Summit 2012. Exact dates and location have yet to be determined, but we're sure it will be a great time!

AMPLIFY YOUR VOICE

Become a member or renew your membership today!

Coal River Mountain Watch (CRMW) is a grassroots organization working to preserve the communities in the mountains of southern West Virginia. Our mission is to stop the destruction of our communities and the environment caused by mountaintop removal mining, to improve the quality of life in our communities, and to help rebuild sustainable communities. CRMW works to empower local residents to work together to fight the effects of irresponsible mining techniques. While we honor the tradition of coal mining in this state, it is our position that mountaintop removal is destructive to our homes and to our mountain heritage, and must be halted. Our goals include advancing economic diversity and increasing public safety. CRMW welcomes members who support our mission and goals. CRMW does not discriminate against any person on the basis of race, gender, age, religion, physical ability, or sexual orientation.

Name _____

Street Address _____

City, State, Zip Code _____

Email Address _____

Friend ____\$10 Defender ____\$25 Champion ____\$50 Warrior ____\$100 Other \$____

P.O. Box 303, Naoma, WV 25140 (304) 854-2182



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(304)-854-2182

THANK YOU!

To all our supporters, funders, and all those who make our work for justice possible.