FREE

The Appalachian VOICE

February/March 2014

WATER CRISIS in West Virginia:

10,000 gallons of chemicals, 300,000 residents without water, and more unanswered questions about how this happened and who exactly is protecting our water.

ALSO INSIDE:

The Appalachian VOICE
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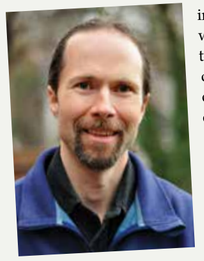
A Note from Our Executive Director

On January 9, more than 10,000 gallons of chemicals used to process coal spilled into the Elk River in West Virginia — just upstream of a drinking water intake serving more than 300,000 people. As I write this in early February, residents across a nine-county region are still dealing with contaminated tap water.

The latest disaster in West Virginia was not the result of an isolated mistake or oversight, but rather a systemic, decades-long failure of regulators and elected officials to place public health above the interests of coal and chemical corporations. It was as predictable as it was preventable.

Water polluted by the poorly regulated coal industry is an everyday fact of life for many in Appalachia, not just a one-time emergency. In addition to the severe pollution caused by mountaintop removal mining, slurry from coal washing — a process that involves the spilled chemicals — is stored behind earthen dams or pumped into empty mine shafts underground. Either way, the threat to groundwater is unmistakable. In one example, residents of Prenter, W.Va., south of Charleston, experienced years of skin rashes and tooth decay from contaminants in their wells linked to coal slurry.

As Appalachian Voices' Program Director Matt Wasson describes on p. 14, this ongoing contamination of groundwater has forced many West Virginians to stop using their well or local municipal water, and instead rely on water piped in from an industrial stretch of the Elk River in an area known locally as "Chemical Valley."



Amidst the inevitable lawsuits, finger-pointing and government investigations arising from the water crisis, one thing remains clear: it will take a lot more than a few tweaks of local, state and federal policies to truly ensure that West Virginians and other residents of Appalachia's coal country can use their water resources without fear of falling ill, or worse. It will take a major shift in political power away from the coal industry and to the people of Appalachia.

For the mountains,

Tom

Tom Cormons, Executive Director

Across Appalachia

Environmental News From Around the Region

A Call for Justice: The People's Pastoral

By Kimber Ray

The collective voice of the world rises up — from the people of Appalachia's hills and hollers, from the rich diversity of global communities, and from the air, water and land of Earth itself. The Catholic Committee of Appalachia and Jeannie Kirkhope, administrative director of the CCA, hope to gather this call for help — first from Appalachia, then expanding globally after this spring. Their project, the People's Pastoral, will create a non-denominational document and art collection inviting inclusive dialogue and action.

"So often, people want to help, but they help the way they think people need help as opposed to what really needs to be done," Kirkhope explains. "You don't know what needs to be done until you ask people what they need."

The People's Pastoral will express stories of struggle from marginalized groups including the impoverished, the undocumented, the gay and transgender communities, those suffering from abuse and drug addiction, and people living on polluted lands.

CCA issued its first, traditional Pastoral Letters — those written by a bishop rather than the people themselves — in 1975 and 1995. The response was always strong. "People came out to commit their lives to serving the mountains," Kirkhope recalls, and their work contributed to the evolution of organizations like Big Laurel Learning Center, a social and ecological justice community in Mingo County, W.Va.

Once the People's Pastoral is published in 2015, creative expressions will include a production at the Barter Theatre in Abingdon, Va. But the healing process, Kirkhope says, begins with listening. "Stories are a big part of it," she adds. "Going over the struggles is an important part of getting over it, getting through it. When you know you're being heard, it brings about a sense of hope."

CCA invites you to help collect these stories — anyone can share their story online or host a listening session in their community. Add your voice at ccappal.org.

Maison Reciprocity Takes on Europe

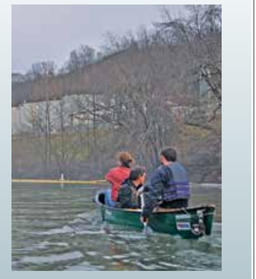
By Kelsey Boyajian

Appalachian State University's Solar Decathlon team is hammering away in preparation for the Solar Decathlon Europe 2014 to be held in Versailles, France this summer. ASU will be pairing with Universite d'Angers for the project, dubbed Maison Reciprocity. The task is almost 60 percent complete as of mid-January.

ASU first championed this 12 year-old energy efficiency competition in 2011 with their Solar Homestead project, based on a rural setting in Asheville. In contrast to the United States' contest, the European Decathlon will focus on an urban development solution. ASU's design will feature a four-story space with two floors of businesses, two floors of residential space and an open-air green space on the roof. A slightly smaller 1300-square-foot mock version of the building will be transported in six separate shipping containers and reassembled in France.

"The European Decathlon starts to think not only regionally, but globally as well by designing a home that can reflect both this region and France," explains Mark Bridges, the communications manager for the project.

About the Cover



The day after the West Virginia chemical spill was reported, Erin Savage and Eric Chance of Appalachian Voices paddled onto the Elk River accompanied by intern Sarah Caldwell, Paul Corbit Brown from Keeper of the Mountains, and Rob Goodwin from Coal River Mountain Watch. A sickly sweet odor wafted through the hazy air as they collected water samples.
Photo by Eric Chance

GET INVOLVED environmental & cultural events

Energy Savings for Appalachia Gatherings
Learn how to reduce your home energy use, save money and better protect the environment at an Energy Savings for Appalachia presentation with Appalachian Voices. To find a community meeting near you and join the movement, visit appvoices.org/energysavings/events

Great Backyard Bird Count
Feb. 14-17: Join this 17th annual birdwatchin event at select National Parks or in your own backyard. Participants spend 15 minutes — or as long as they'd like — tallying birds numbers and species, then entering them into the GBBC online checklists. Free. Visit: birdsource.org/gbbc

Winter Lecture Series: The American Chestnut
Feb. 18, 25 and March 4, 11, 7-9 pm: The Frontier Culture Museum hosts a series of lectures on the decline of the American Chestnut, exploring the importance of this tree species to frontier culture and examine current restoration efforts. Free. The Dairy Barn Lecture Hall, Frontier Cultural Museum, Staunton, Va. Visit frontiermuseum.org

Nexus 2014 Water, Climate, Food and Energy Conference
March 3-7: The conference, led by UNC's Water Institute, will focus on bringing together scientists, members of government and business organizations to work towards solving environmental issues. $125-$425. The Friday Center, Chapel Hill, N.C. To register: nexusconference.web.unc.edu

Mountain Justice Spring Break
March 1-9, March 9-16: Anti-mountaintop removal activists are hosting two retreats to bring together concerned citizens, students and environmentalists who want to learn from and stand with Appalachian communities fighting to protect our land and culture. $50-500/Va. retreat, $100-125/W.Va. retreat. Cost includes housing, food, trainings and workshops. To register: mjsb.org

Organic Growers School Spring Conference
March 8-9: Choose from over 70 classes and workshops to learn about gardening, baking bread, permaculture, sustainable living and other advice for recreational and professional growers. $85. Asheville, N.C. To register: organicgrowersschool.org

WPA Concert Series: Atlantic Chamber Ensemble at RVCC
March 9, 4pm: Witness the talents of eleven professional musicians from Richmond, Virginia. $30. Rockfish Valley Community Center, Afton, Va. Visit: wintergreenperformingarts.org/atlantic-chamber-ensemble

4th Annual Dahlonega Trail Fest
March 14-16: Celebrate Dahlonega's designation as an AT Trail Community. Festival includes camping, speakers, music, films, and a 5K trail run. Free. Dahlonega, Ga. Visit: dahlonegatrailfest.org

56th Annual Highland Maple Syrup Festival
March 15-16: Attend this famous festival, a designated "Local Legacy" by the Library of Congress." Events include a syrup making demonstration, crafts, music, dancing and a maple syrup camp. Free. Pickens, W. Va. Call 304-924-5363 or visit pickenswv.squarespace.com/maple-syrup-festival

Appalachian Farmers Market Association's 6th Annual Conference
March 22, 9 am-4:30 pm: The AFMA will again host this informative conference with a focus on local food and agriculture. Dr. Allen Straw will give a speech entitled 'Food Safety for our Local Food System'. Those attending will learn about insect and pest identification, USDA programs, erosion control, speciality crops, and other useful farming information in the sessions and workshops. $20. Slater Community Center, Bristol, Tenn. To register: appfma.org

Guided Wildflower Hikes
March 22-23 and 29-30: Look for signs of spring during a hike with park staff plant specialists. Free. Rock Island State Park, Tenn. Call: 931-686-2471

37th Annual Appalachian Studies Conference
March 28-30: Join the Appalachian Studies Association for their three-day conference focusing on the rich traditions in New Appalachia. $20-105/students, $50-155/non-students. Scholarships available. Marshall University, Huntington, W. Va. To register: appalachianstudies.org/annualconference/

Spotlight on Eastern Kentucky Economy

By Molly Moore

When more than 1,700 citizens gathered in Pikeville, Ky., to discuss ideas for regional economic revitalization at the Shaping Our Appalachian Region (SOAR) Summit last December, the crowd was diverse.

In attendance were concerned citizens, grassroots organizers and many of the state's government and business leaders.

During breakout sessions, participants discussed topics such as jobs, entrepreneurship, infrastructure, tourism and regional identity. Common themes included the need to invest coal severance taxes back into coal-impacted communities and to encourage youth to remain in the region.

Progress was quick regarding one of the most popular ideas at the summit: the expansion of broadband internet in under-served eastern Kentucky. In January, Gov. Steve Beshear and U.S. Rep. Hal Rogers announced $100 million in federal, state and private funding to bolster the region's internet access. *The Lexington Herald-Leader* reported that it could take three years to install fiber optic infrastructure, the first phase of the project.

Another project touted by politicians at the summit was the expansion of the Mountain Parkway between central Kentucky and Pikeville to four lanes, a $750 million, six-year project that Gov. Beshear has called on lawmakers to approve.

Also in January, President Obama declared that eastern Kentucky would be one of five new "promise zones" where the area will be given special preference for federal grant dollars through existing programs. The initiative also aims to diversify the economy by increasing support for education, leadership and job training and establishing a revolving loan fund for small businesses.

To learn more about the SOAR Summit, read the report at governor.ky.gov/Documents/SOAR-report.pdf.

NC Trail Wins Environmental Education Award

By Kelsey Boyajian

A trail at Lake James State Park has received an environmental education award from the National Association for Interpretation for championing fun and informational ways to take a hike.

Two maintenance employees of the park volunteered to construct the interactive trail, completing it in a matter of months. According to Park Ranger Jamie Cameron, they received what he believes to be the first environmental education award to be given to a trail.

The trail features hand-built displays ranging from a rotten log station to a fairy house around the ¾ mile walk.

Recent Conservation Gains in Appalachia

By Meredith Warfield

With the Southeastern Cave Conservancy's recent 75-acre land acquisition, two caves that were formerly off-limits have now been opened to the public in eastern Tennessee. The Run to the Mill Cave Preserve includes a pit nearly 170 feet deep and the largest population of endangered Indiana Bats in the state. Preliminary studies have revealed a likely presence of white-nose syndrome — an infection that has wiped out roughly 5.7 million bats in eastern North America. By managing the property, researchers hope to contain this disease and maintain local ecosystem health.

A 21-acre addition to the Chattahoochee National Forest in Georgia will ensure protection of the Soque River, a critical tributary to Atlanta's primary drinking water source. The Soque River is also home to a significant population of brook trout, Georgia's only native species of trout. With the Trust for Public Land's purchase, the public will have use of the fishing waters as well as easier access to thousands of surrounding acres of national forest.

Cold Snaps May Disrupt Invasive Pests

By Kimber Ray

Good news for Appalachia: this past January marked one of the coldest winters in nearly 20 years.

Consecutive warmer-than-average winters have allowed harmful insects — even those native to the region, such as southern pine beetles — to soar to outbreak levels. Just a few degrees below zero can prove deadly for the less hardy among these pests. Widespread mortality requires much lower temperatures: eight degrees below zero for the southern pine beetle, and 30 degrees below zero for the invasive emerald ash borer and hemlock woolly adelgid.

As of press deadline in late January, another below-zero cold snap is predicted. This could prune southern pine beetle populations, as well as winter ticks and even the kudzu plant. But Yong-Lak Park, an entomologist with West Virginia University, says it is too soon to evaluate the effect on dormant insects until they awaken in the spring.

While these lethal bug temperatures were the norm before the advance of climate change, researchers caution that this cold spell is only a brief improvement. Across the country, some insects will inevitably survive, but for now, many communities have been granted a temporary respite to plan alternative methods to address harmful and invasive insects.

Report Finds Budget Cuts Harm National Parks

By Kelsey Boyajian

A recent report entitled "Death by a Thousand Cuts" portrays the mounting financial difficulties faced by national parks due to budget cuts directly affecting their maintenance and operations.

These cuts have totaled $350 million since last year, a 13 percent reduction in funding for all national parks. In Shenandoah National Park, a $625,000 reduction lead to a shorter campground season and the cancellation of 200 programs. The Blue Ridge Parkway was hit the hardest with a loss of $784,000, leading to a shutdown of parks and picnic areas. The report, authored by Environment America, notes that national parks are an important home to threatened and endangered species, as well as a significant source of revenue for the national and local economy.

Great Attendance at Virginia Parks

Virginia State Parks had record-breaking attendance this past year with nearly nine million visitors, a six percent increase from 2012. Revenue from Virginia's 36 parks totaled $206 million, representing a four percent increase from the previous year's earnings.

Hiking the Highlands

Snowshoeing Canaan Valley's Winter Wonderland

By Molly Moore

When fresh snow muffles the sounds of scurrying squirrels and creaking twigs, the winter woods offer a serenity that's different from the rustling, lively forests of spring, summer and fall. But the deep snow that can make a frosty trail so bewitching can also creep over the tops of otherwise sturdy boots, sending even a dedicated hiker in search of snowshoes.

Paulita Cousin was one such convert. As the naturalist and park activities coordinator at West Virginia's Blackwater Falls State Park, Cousin had long preferred to explore the Tucker County park by hiking. When she tried to lead a group outing in three feet of snow, however, each step was a challenge. After a brief struggle the crew turned around and borrowed snowshoes from the park's rental facility, and the rest of the day went smoothly.

Since that day in 2009, whenever the snow reaches the tops of Cousin's ankle-high boots, she straps on a pair of lightweight aluminum snowshoes.

Generally, snow should be at least four to five inches deep for snowshoeing, though that can vary depending on a particular trail's rocks and roots. The versatile sport has a mellow learning curve that makes it an accessible hobby for people of all ages and abilities, Cousin says. She recalls a gentleman who first tried the pastime in his late 90s — he loved it, and came back for repeat visits.

For a nature enthusiast like Cousin, the winter offers a window into the lives of more reclusive wildlife such as bobcats, gray and red foxes, coyotes and black bears. Tracks in the snow reveal where these animals were leaping, running and walking. "It's fun, I get easily distracted by following their path just to see where they went and what they're doing," Cousin says.

These tracks can also uncover the presence of elusive snowshoe hares, nocturnal animals that have a white coat in winter and brownish-red fur in other seasons. Their big feet help them stay aloft in the snow in the same way that a snowshoe distributes a person's weight across the snow's surface.

According to Cousin, an old cabin near Blackwater Falls State Park's Lindy Point overlook offers quiet, lucky visitors a chance to spot the reclusive snowshoe hare. Lindy Point is also one of the best trails in the park for beginning snowshoers and cross-country skiers. During the winter, a forest service road that connects the park's sledding area to the Lindy Point Trail is unplowed and provides a fairly level, three-mile excursion to one of the park's signature viewpoints. The woods along this route feature rhododendron and mountain laurel, which keep their green leaves in winter, and also include maple and cherry trees and evergreens like red spruce and hemlock.

For outdoor enthusiasts looking for a slightly more demanding route, Cousin recommends visiting the other end of the park and taking the two-mile trek from the Dobbin House Trail to Pase Point, which boasts a couple of short but steep inclines and more rugged terrain.

The state park also connects to a host of trails in the Monongahela National Forest. Particularly bold adventurers can even take the eight-mile Davis Trail from the Blackwater Falls petting zoo all the way to Canaan Valley State Resort Park, which has its own snowshoeing and cross-country skiing trails in addition to a downhill ski area.

Snowshoes make winter trails more accessible. Photo by Jessica Scowcroft

Rob Gilligan, superintendent of four West Virginia state parks including Blackwater Falls and Canaan Valley, advises snowshoers to wear layers, bring a snack and water, and travel in pairs for added safety. He suggests that resort guests let hotel staff know their expected return time, and says that since all trails are marked with reflective blazes, late afternoon explorers should bring a headlamp or cell phone so they can see the blazes if needed. Most importantly, snowshoers should go at their own pace. "There's no hurry or stress involved," he says. "It's all about enjoyment."

Blackwater Falls, photo by AKA Flash Photography

CANAAN VALLEY SNOWSHOEING

Blackwater Falls State Park
Winter activities: Snowshoeing, cross-country skiing, sledding
Snowshoeing and cross-country ski trails: More than 10 miles, many groomed
Rentals and lessons available: Yes
Contact: (304) 259-5216, blackwaterfalls.com

Canaan Valley State Resort Park
Winter activities: Snowshoeing, cross-country and downhill skiing, ice skating, snow tubing
Snowshoeing and cross-country ski trails: 19 miles
Rentals and lessons available: Yes
Contact: 304-866-4121, canaanresort.com

White Grass Touring Center
Winter activities: Snowshoeing, cross-country and telemark skiing, ski skating, sledding
Snowshoeing and cross-country ski trails: 31 miles, 15-19 miles groomed
Rentals and lessons available: Yes
Contact: (304) 866-4114, whitegrass.com

This GREEN House

A Sustainable Habitat

By Sarah Kellogg

Nestled in a mountain forest of oaks, poplars and rhododendron, a neighborhood of charming houses sits lightly on the land. These are the energy efficient homes of the GreenWood Community, a project of the Watauga County Habitat for Humanity. The neighborhood is the result of hard-working families and dedicated volunteers who share a vision that affordable housing can also be sustainable.

Habitat for Humanity is an international nonprofit organization that helps low-income families finance and build their own homes. Melissa Finger, her husband Kenny and two sons, Isaiah and Dakota, are part of the Watauga County, N.C., Habitat chapter, and will be finishing their own home this February. The experience has been transformative for them — in recent months they have spent every Saturday working and learning together as they construct their sustainable new home.

Since its inception in 1987, Watauga Habitat has constructed 23 homes for those in need of affordable housing. In spring 2011, the organization broke ground on the first of 20 homes that will make up the Habitat GreenWood neighborhood. Today, the two completed houses on this 20-acre plot of land are already a model of affordable and sustainable community development.

"We thought it was important to pull the community together," says Alex Hooker, executive director of the Watauga Habitat. "The vision is for homeowners to all work together to keep up the community and shape things the way they want to."

Already, current and future homeowners are bonding as they work on completing the third and fourth houses in the neighborhood. "We've all worked on each other's homes," says Finger, whose house is GreenWood's third. "People are going above and beyond — their house is done and they're still out helping."

Homeowners and volunteers involved in the construction process have the opportunity to learn about sustainable design, especially when it comes to energy efficiency. "It's been really exciting to watch my 14- and 17-year-olds learn," remarks Finger. "I think they're even more proud than we are."

Three out of the four homes have south-facing windows with overhangs, which allow sunlight to naturally heat the home, a feature known as passive solar design. Streetlights powered by solar panels are an example of active solar technology, and were provided by a generous donation from Rumple Memorial Presbyterian Church.

The walls of each house are Insulated Concrete Forms — interlocking blocks made of a styrofoam-like substance — that are stacked and filled with concrete. These insulate 50 percent better than what's required by code, and 20 percent better than Energy Star requirements. The blocks are easy for volunteers to stack, making construction simpler, and are produced only an hour and a half away in Johnson City, Tenn.

Additionally, the GreenWood homes are extremely well-insulated. According to Jim Rogers, the construction coordinator for Watauga Habitat, air leaks in a normal house amount to a window-sized hole, whereas air leaks at the GreenWood homes are the equivalent of a hole the size of a 3-by-5 index card.

Since the homes are so airtight, they are well-suited for a heating and air conditioning unit called a ductless mini-split heat pump. These units can be very energy efficient since they allow for the temperature of each room to be set individually and eliminate the need for air ducts, which account for up to 30 percent of energy loss in a home.

Each home is also equipped with Energy Star certified appliances, windows and lighting. All of this energy efficiency means that residents often pay only about $30 a month to heat and cool their 1400-square-foot homes. This will be a major upgrade for the Fingers, who paid almost $450 to heat their home this past December. "We can't wait to move in," says Melissa Finger. "We have a single wide trailer that's freezing cold and our power bills are outrageous, so we're super excited."

Future homeowners have been working hard with experts and volunteers to construct energy-efficient housing through Watauga County's Habitat for Humanity project. The siding used to construct the GreenWood Community homes, at right, is locally sourced hemlock wood. Photos by Alex Hooker

Watauga Habitat has big plans for the future. They recently received a $50,000 grant from Walmart to build an on-site lumber mill, which will process the hardwood trees that will be cut down to clear the lots for the next sixteen houses. Additionally, Watauga Habitat and the residents plan to expand the community area, build rain gardens and construct sediment ponds to keep runoff from going into streams. They hope to involve students from Green Valley Elementary — just a short walk away — in these projects to provide opportunities for environmental service learning.

With exceptionally low energy bills and exciting plans for community cookouts this summer, everyone at GreenWood is in high spirits. "We truly feel blessed," says Finger. "It's an answer to our prayers."

Watauga Habitat holds regular volunteer days on Wednesday afternoons and Saturday mornings. Call (828) 268-9545.

Whitewashing Reality: Diversity in Appalachia

By Rachel Ellen Simon

The United States may be thought of as the good ol' "Red, White, and Blue," but in the minds of many, Appalachian America is simply "white, white, white" — racially, that is. The stereotype of Appalachia as a strictly white Anglo-Saxon region has been perpetuated by journalists, novelists, social scientists, and even many regional historians. Yet this generalization oversimplifies a more complicated — and more colorful — reality.

Appalachia is not a homogenous region today, and, even historically, diversity has always been present. Prior to the arrival of Europeans in the 16th century, Appalachia was home to thousands of Native Americans, the largest being the Cherokee. Following their forcible removal via the 1838 Trail of Tears, around 1,400 natives remained in the mountains, forming the core of the Eastern Band of Cherokee Indians.

At the same time that the natives were being forced out, Africans were being forced in. By 1860, people of African descent made up between 10 and 15 percent of the region's population. These slaves brought with them the akonting and ngoni, precursors to the five-string banjo. The combination of African-American blues with other musical imports formed what would become one of the region's most popular exports: modern-day country and bluegrass music.

Invariably, the commingling of cultures led to intermarriages that created ethnic and racial combinations new to the region. Even as diversity increased, racist laws supported a climate of white superiority while facilitating the disenfranchisement of non-whites, who were clumped into a category then dubbed "coloreds." This term was used to signify Native Americans, Africans and even Irish immigrants upon their initial arrival.

The coal boom drew a mix of European immigrants and African Americans to work in Appalachia. Photo courtesy of University of Kentucky Libraries, Harlan County Mine Strike Photographic Collection, 1939

Other European immigrants were lured to the area by the first major coal boom at the end of the 19th century. As demand for miners increased, coal operators began to look outside the region for more workers; they particularly targeted eastern and southern European immigrants. Between 1820 and 1920, more than 60,000 Italians, Hungarians, Austrians, Russians, Poles and other immigrant workers had settled in the Appalachian coalfields, constituting as much as 40 percent of the workforce. African Americans from further south were also drawn to the mines and surrounding timber camps, creating a melting pot of diversity in central Appalachia.

Yet, the jobs that initially drew these newcomers to America and to the region did not last. The coal slump of the 1920s and the Great Depression of the 1930s led to widespread unemployment, with vast numbers of workers leaving for northern industrial cities, reducing both Appalachia's population and diversity. By 1990, minorities made up only 9 percent of Appalachia's total population, with African Americans comprising the vast majority of this subgroup.

Diversity on the Rise

During the past three decades, however, diversity has been increasing throughout the region, particularly in urban areas and university towns. In the 1990s, racial and ethnic minorities accounted for nearly half the region's population growth, while the Latino population increased by nearly 240 percent. West Virginia alone welcomed new residents from 31 different countries during that time period. Many of these newcomers were drawn to the region for work in specific industries, including poultry processing in East Tennessee, Christmas tree farming in western North Carolina and horse farms in West Virginia. By 2010, minorities accounted for more than 16 percent of the region's population.

Despite the influx of such newcomers, minority population rates in Appalachia remain well below the national average. Yet, contemporary Appalachia is undeniably a much more multicultural place today than it was even thirty years ago, a fact that is gaining wider recognition among artists, academics and leaders of nonprofits, if not yet the general American public. Today, Heifer International's Blue Ridge Seeds of Change initiative supports the growing number of Latino food producers in Appalachian North Carolina, while the Affrilachian Artist Project chronicles the experience of African Americans across the region.

Even the federal government has come to embrace a broader understanding of the region's demographics; in response to a petition filed by Appalachian scholar Fred Hay in 2005, the Library of Congress officially changed its Subject Heading that referred to the people of Appalachia as "Mountain Whites" to "Appalachians (People)." This seemingly minor triumph indicates a much greater one — Appalachia's long-white-washed image is finally being colored in to reveal a more nuanced, accurate portrait of the region and its history.

Handing Off and Holding On:

Melungeon Identity and Appalachia

By Kimber Ray

Attempting to trace the origin of the Melungeon people is akin to pursuing the source of the Cumberland River coursing through their historical territory. Like the waters of the Cumberland Gap, where neighboring streams weave through Tennessee, Kentucky and Virginia to meet among the rolling crests of the Appalachian Mountains, the Melungeons — a mixed-race population of Appalachia — are the product of a great fusion. Yet where had these waters passed before they arrived in Appalachia?

If the water had traveled along the same path as the Melungeons, some might speculate that it had pooled into swimming holes for the lost colonists of Roanoke Island, off the coast of North Carolina. Others may suggest these were the same waters that had carried the notorious ships of 17th century Portuguese slave traders across the Atlantic Ocean. While any of these stories may be true, each one blunders over an essential truth: the Melungeons— like the river — are an indisputable presence that is greater than any far-flung origin.

"You can't pin down a definite definition for Melungeons," says Tucker Davis, a freelance journalist and self-identified Melungeon from Buchanan County, Va. He recalls a youth spent exploring his rural mountain community of Grundy, where everyone had a different story about what it was to be Melungeon. From neighbors recounting tales of African or Native American lineage, to a Sunday school teacher who said they could be identified by a small knot of bone on the back of their heads, no one could say who the Melungeons were with certainty.

A popular misconception is that Melungeons can be identified by their dark skin and piercing blue or green eyes. This may have been true historically but, by its very nature, a racially mixed group will manifest in countless expressions over time.

The quest to conclusively characterize Melungeons may be spurred by the abiding mystery of whether they were in Appalachia even before the English. William Isom, a coordinator for the grassroots Community Media Organizing Project, explains that his family had long passed down an oral history of their Melungeon heritage; yet he was the first to conduct more extensive academic and genealogical research on his family's deep-rooted history in the Cumberland Gap region of Tennessee.

"I've always been really intrigued with genealogy and keeping records even as a kid," Isom states. "So I've always been interested in copies of the family tree and family photos. It's a personality thing; I'm that guy who likes to archive things and keep these scraps together."

From sifting through these pieces of the past, Isom says he's settled on the idea that Melungeons are ambiguous because the population is historically mixed. In vivid detail, he speaks of how the English first scaled the Appalachian mountains in the 17th century and encountered people of color — neither Native American nor black — who dressed like Europeans, lived in houses, and spoke some kind of English, which they used to announce that they were Portuguese.

But this history still would not provide a decisive answer of origin: the Portuguese were the first slave traders, and their population included Jews, Muslims and North Africans. What is known with more certainty is that the term Melungeon did not appear in print until 1813, where it was used to ascribe mixed-race identity to others.

Tucker Davis has documents from this early time period of his own ancestors appearing in court, fighting the theft of their land after having been labeled Melungeon. According to Isom, discrimination and the resentful sentiment of being labeled a Melungeon can still be very tangible in northeast Tennessee.

Recalling folklore that would brand Melungeons as bogeymen, Isom says that children would be warned, "Don't go out in the woods at night, the Melungeons will get you." In his community, it was not uncommon for fights to ensue if the word was thrown around.

With a map of the Cumberland Gap spread on the table, Sylvia Ray, mother of Tammy Stachowicz, researches the residences of her Melungeon ancestors. Ray is preparing a meal in the 1968 photograph to the right. Many recipes were passed down by her Cherokee grandmother in southeastern Kentucky. Photos courtesy of Tammy Stachowicz

"If you called someone Melungeon, it meant you hated that person to the core of their being," Isom says. "But now it's fine," he adds, because "most of the Melungeon population has assimilated into broader society, so the threat — the dread — of getting your property taken, or being murdered is no longer a reality."

Growing acceptance of Melungeon identity is the most recent emergence in this complex narrative. "I knew no one that referred to themselves as Melungeon prior to 1990 because until recently in some areas it's still a term you don't say out loud — it's a racial epithet," states Isom, who himself became engaged with the grassroots Melungeon movement in the mid-'90s.

Isom asserts that there are actually two kinds of Melungeons: racial Melungeons and cultural Melungeons. While a racial Melungeon is someone from a historically mixed community, Isom explains, a cultural Melungeon is "poor folks — who make up the bulk of people in Appalachia — who might not have racial disparities to deal with, but

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Melungeon Identity

Continued from page 9

share a cultural and economic identity. They understand that even though they might be white and from the mountains, they're still not quite white enough, they're not quite assimilated into the mainstream, they're not marketable."

The idea of racial status forming the basis of identity is a persistent — and harmful — belief. "Race itself is so socially constructed," remarks Tammy Stachowicz, a diversity instructor at Davenport University in Michigan. For Stachowicz, her experience as a Melungeon had nothing to do with her skin tone.

Stachowicz discovered her Melungeon origins while searching for the source of her family's puzzling heritage. She grew up on a farm in Michigan, where her family carefully tended their garden and orchard and raised animals including horses, goats, pigs and chickens. Although she recalls these memories fondly, Stachowicz felt throughout her childhood that there was something about her family that was different.

"Nobody else was so self-reliant — canning, freezing and growing their own food," she says. Other children in the neighborhood made sure that she knew just how unusual this seemed. "We got teased mercilessly. Kids behind us on the school bus would throw spit wads and make animal noises," Stachowicz adds. In her journey to understand her identity, she conducted her thesis work on Melungeons and came to a versatile conclusion: "Nature doesn't make you Melungeon. Nurture does."

Yet despite this conviction — one which she found validated by various Melungeons she spoke with — many people have never stopped trying to pinpoint a firmer genetic source of Melungeons. With the advances of modern technology, this fascination has taken on a new form.

Most recently, researchers published a Melungeon DNA study in the Journal of Genetic Genealogy. The final results examined only a "core group" of Melungeons — one that excluded many self-identified families — and concluded that Melungeons are primarily sub-Saharan African and European. Tucker Davis is unconvinced. "Even if a group of researchers vote on some technical definition of Melungeons, it won't matter," he says. "It won't change what it means to be Melungeon."

William Isom found this undated photograph of his great-great-aunt and uncle, Lillian Isom and Henry Cloud, while searching for information about his family's heritage in northeastern Tennessee. Photo courtesy of William Isom

In a nod to the damaging effects of assigning an identity to others based on race, the American Anthropological Association wrote in 1999 that "humans are not unambiguous or clearly demarcated ... race is an arbitrary and subjective means of classifying groups of people, used to justify inequalities ... and the myths impede understanding of cultural behavior."

This plight is poignantly revealed in Appalachia, which has long struggled to shed stereotypes imposed by others. For Melungeons, this struggle is magnified. Despite sharing the Appalachian cultural heritage — a story of independence and a fighting spirit shadowed by mistrust from generations of exploitation — Melungeons have suffered harsh discrimination from their "whiter" neighbors.

Prejudice against Melungeons has waxed and waned over time, in step with shifting racial perceptions in the United States. Through the emergence of racial slavery in the late 17th century, wealthy landowners sought to keep the poor under control by pitting racial groups against one another. Despite the shared heritage of many Appalachians, the stigma that came to be associated with race led much of the public to speak of "purity." Those who could not conceal a multi-racial background encountered countless civil, educational and economic limitations.

Yet prior to — and even following — the rise of racial slavery and legal segregation, people of all different backgrounds were sharing cultures and marriages, adding to the identity of Melungeons today. As Davis explains, the story of Melungeons is not just one of discrimination, but also of diversity and community. "When I think of Melungeons, I think of unity," he states.

In revealing the legacy of Melungeons, Isom says that he wants to "dispel the myth of Appalachian whiteness and dispel the cut-and-dry story of American settlement in Appalachia: that there was Cherokee, then the Scotch-Irish came, then the TVA, and mountaintop removal — that's Appalachia." He adds, "I want to mess that up as much as I can."

Exactly where Melungeon identity ends and Appalachian identity begins is uncertain. Davis suggests that maybe being Melungeon is just a state of mind. Stachowicz likens it to a venn diagram, pointing out that with generations of Appalachians and Melungeons all living together, "you can't know one without the other." Then again, maybe it's not so surprising that there is no single element that can define the shared experience of identity.

Mountaintop Removal Masquerade

Opponents of Proposed Surface Mine Highway Push for Environmental Review

By Molly Moore

Tim Mullins recalls what Pound, Va., was like in the 1970s — nestled in the commonwealth's mountainous southwestern corner, it was a town of crowded sidewalks, ample schools and nary a parking spot to be found. Today, formerly bustling businesses are dilapidated eyesores, trees are sprouting on the sidewalks and the schools are closed.

Pound's downturn troubles Mullins, a southwest Virginia native who cares deeply about his community. Yet he is adamantly opposed to the Coalfields Expressway, a proposed highway that coal companies and state proponents tout as a solution to the area's lagging economy. For Mullins, the current road plan is a mountaintop removal coal mine in disguise that holds scant economic potential and great environmental peril.

The project was conceived in 1995 as part of a 116-mile, four-lane interstate to connect Pound, Va., and Beckley, W.Va. But the commonwealth determined that the roughly $5 billion project was too expensive and placed the Coalfields Expressway on the backburner.

In 2006, following West Virginia's example, two coal companies — Alpha Natural Resources and Pioneer Group — offered to nearly halve Virginia's construction cost by surface mining a 50-mile section of the route and leaving behind a rough-grade road bed. By creating a "coal synergy" public-private partnership, a new route was proposed, which follows coal seams to maximize coal extraction but skirts local economic hubs near Pound such as Grundy and Clintwood.

"This new route that they've made, it's going to just bypass all these little towns," Mullins says. "It just doesn't make any sense to me because it's just going to make less jobs for people and it's just going to do more damage to our water and our health."

The original proposal, which was subject to a federally required environmental impact statement in 2001, would have destroyed 720 acres of forest and four miles of streams. In comparison, more than 2,000 acres of forest and twelve miles of streams are slated for demolition with the "coal synergy" route, yet no thorough study of the new plan's environmental impacts has been conducted. Instead, in 2012 the state completed a draft of a more cursory environmental assessment, which doesn't address the effects of mining or analyze how the new route will affect local economies.

During the past year, opponents — including Appalachian Voices, the publisher of *The Appalachian Voice* — collected roughly 90,000 public comments and petition signatures asking the Federal Highway Administration to require the state of Virginia to complete a full supplemental environmental impact statement that reflects the route changes.

"We think that if you did a full analysis you would find that there's greater cost, and that the impacts from the mining would be against the law — disposing pollutants into already-impaired streams," says Sierra Club organizer Marley Green, who lives in Wise County, Va. "We feel the impacts of the mining proposed by this route are a violation of the Clean Water Act."

According to Green, an environmental impact statement should also consider how the road would affect the health of nearby communities in light of recent studies that connect health problems to surface mining.

Mullins, who serves as a volunteer and board member with The Health Wagon, a nonprofit that provides healthcare to underserved populations in six southwest Virginia counties, surveyed mountain residents about their health concerns. He estimates that 75 percent of those he spoke with don't trust local water quality. "How do you keep someone from getting cancer who lives along one of these creeks and rivers that has got arsenic in it?" Mullins asks.

Adding to the environmental risk is a legal provision known as the Government Finance Exemption, which would excuse the participating coal companies from complying with federal surface mining reclamation laws.

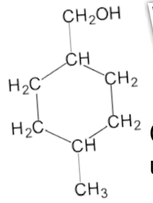
Citizens opposed to the Coalfields Expressway rally outside the Federal Highways Administration offices in Washington, D.C. in December. Photo courtesy of Sierra Club. At right, an aerial image from the Virginia Department of Transportation shows progress on the Hawks Nest portion of the highway.

Jane Branham, vice president of local organization Southern Appalachian Mountain Stewards, forecasts a grim worst-case scenario. "It's going to be left to the taxpayers to reclaim, under the guise of a highway, which the state of Virginia is not equipped to fund," she says. "And the people living there will be just about run out of their homes. If you've never lived or been near a mountaintop removal site it's not a pretty thing. It's very devastating, it's constant coal trucks, machines, blasting, dust — it's not just what you see, it's everything in the air, in the water. It's a scary thing."

Branham warns that by diverting traffic away from small towns, the highway will stymie efforts to boost tourism.

"I see the people around me and other citizens trying to work to create something new because they want to live here and survive as a community, and I don't see any help from [our politicians]," she says. "It's very disappointing, but it comes back down to [the fact that] it's people that make things happen anyway, and then politicians somehow manage to take the credit for it."

"I think that it's time to invest back in Appalachia and [the Coalfields Expressway] is not it," Branham continues. "Another strip job under the guise of a road is not it."



Water Crisis in West Virginia

On January 9, 2014, a chemical called MCHM leaked into the water supply of 300,000 West Virginia residents, causing a crisis unlike anything that America has dealt with before. Following are the stories of the affected as well as those of folks trying to help.

Citizens gathered outside the state House of Delegates chamber to demand that officials pass meaningful legislation to protect residents. Photo by Paul Corbit Brown

Uncertainty Upstream

Appalachian Water Watch Responds to the Spill

By Erin Savage, Water Quality Specialist for Appalachian Voices

When I first heard about the chemical spill in Charleston, W.Va., on the morning of Jan. 9, I emailed the rest of the Appalachian Voices staff and immediately started packing an overnight bag. While I didn't exactly know what I would be doing once I reached West Virginia — or much about what exactly had happened — I knew I might be there for several days.

Information flooded in from news reports and our friends in West Virginia. A substantial but unknown quantity of Crude MCHM — a chemical used to wash coal — had leaked into the Elk River from a decades-old tank at Freedom Industries, a chemical storage facility. The spill occurred just a mile and a half upstream from a West Virginia American Water drinking water intake that serves more than 300,000 people. A state of emergency was declared and West Virginia American Water customers in nine counties were instructed to only use their water for flushing toilets and extinguishing fires.

Since our experience with the coal industry has taught us not to trust a company's self-reported pollution monitoring, I drove to the spill site with the Appalachian Water Watch team to join local groups in collecting independent water samples. Rob Goodwin of the West Virginia organization Coal River Mountain Watch was waiting for us on the banks of the Elk River, where we immediately noticed the distinct licorice-like smell that first alerted nearby residents to the presence of the MCHM. A low fog hung over the river, which might have been unremarkable if not for its strange blue tint.

Along with Goodwin and others, we first paddled downstream to the drinking water intake, and then upstream to just below the spill site, taking samples in both locations. Fumes filled the air as we carefully tried to limit direct contact with the water.

Freedom Industries originally reported a leak of 5,000 gallons, but revised the figure to 7,500 gallons and increased it again to 10,000 by late January. Although the Centers for Disease Control and Prevention initially recommended a safety level of one part-per-million of MCHM, they later advised pregnant women to not drink the water even at the 1 ppm level.

Then, 12 days after the spill — and after the water company had lifted the "do not use" order — Freedom Industries disclosed the presence of PPH, a second chemical. By Jan. 24, the chair of the federal Chemical Safety Board commented that Crude MCHM and PPH should not be in drinking water at any level.

Continued Unknowns

I returned to West Virginia the week after the spill to join several others from local nonprofits and universities taking tap water samples in homes

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Erin Savage of Appalachian Voices collects a water sample from the Elk River downstream from the spill site on Jan. 10. Photo by Eric Chance

Volunteers with the West Virginia Clean Water Hub deliver water in Mammoth, W.Va. Photo by Joe Solomon

Citizen Stories

The WV Clean Water Hub is a community-organized effort that has been supported by volunteers and grassroots groups in West Virginia — including Aurora Lights, Coal River Mountain Watch, Keeper of the Mountains Foundation, Ohio Valley Environmental Coalition, and more — to identify communities in need of clean water and supplies, and to connect affected communities with volunteers and donors.

This inspiring effort is an example of the ways neighbors step up to help their neighbors in Appalachia. It is also a stark reminder of the far-reaching impacts of this preventable disaster caused by industry negligence and lax regulations.

These citizen stories were compiled by Dana Kuhnline for The Alliance for Appalachia in late January.

Fending For Yourself

By William Holsting

We don't have the licorice smell now, but when they started flushing it smelled bad for awhile. I still don't trust the water. You wash your hair and you feel itchy and scratchy about your ears, and I don't know if it's the water or just in my mind. I would feel more comfortable almost putting a pump in the creek and taking a shower from that.

It's awful if you go to brush your teeth and then you forget and you stick your toothbrush under it and then you've messed up, then you've got to find another toothbrush. I don't do it now, but I did at first.

Some people still have their old wells, and I've been thinking about whether it's worth the cost to put a well in, and take the risk that it would be dry or have red water. I really just wish they would fix the water system. West Virginia American Water took a big ad out in the paper saying how safe the water is, but you can't believe the water company because what they're selling is water.

They need independent people checking that water who are not connected with the water company, and the chemical company should have been regulated more years ago. There's enough blame to go around. They were just renegades up there with nobody to look after them.

If you don't stick up for yourself the water company's not going to stick up for you.

William Holsting owns a landscaping business in Ashford, W.Va.

UNFIT TO DRINK: State Delegate Mike Manypenny (D-Taylor Co.) holds a jug of contaminated water he received from West Virginia resident Dustin White, who was prohibited from bringing his father's polluted water into the State Capitol. Manypenny accepted the jug and said he will have it analyzed. Read more about White on p. 14. Photo by Paul Corbit Brown

West Virginia Pride

By Hannah Spencer

Through this disaster I have been reassured that I am proud to be a West Virginian. The folks who make me proud to be a West Virginian are those who haven't had work since the water crisis, but are still at their local fire departments and churches handing out supplies every day.

The folks who make me proud to be a West Virginian are angry about what has happened to their communities and demand something be done to fix it. The folks who make me proud to be a West Virginian live in unaffected areas, but have still worked every day to collect donations and supplies to send to the affected areas.

West Virginians stay strong no matter what happens. We bond together as tight-knit communities and we help each other through times of need.

Hannah Spencer is an emergency relief organizer and president of educational nonprofit Aurora Lights. She lives in Morgantown, W.Va.

How to Help

Donate to this centralized hub to contribute water and baby supplies:
donatenow.networkforgood.org/keeperofthemountains

Volunteer:
- facebook.com/WVCleanWaterHub

Keep informed and take action:
- ourwaterwv.org
- westvirginiawatercrisis.wordpress.com
- facebook.com/friendsofwater14
- facebook.com/AuroraLightsWV
- appalachianwaterwatch.org

Life is Surreal Since the Chemical Spill

By Linda Frame

"That's a First World Problem, Mom," my teenage son told me one day. I can't remember now what trivial thing I was complaining about. Because that was before the chemical spill.

On Thursday evening, Jan. 9, I was where I am a lot of the time, at the grocery store. I noticed people buying large amounts of water and thought to myself, "I hope they recycle all that plastic." Easy for me to say. I have curbside recycling and access to clean drinking water. Then I got in my car and learned about the "do not use" order from West Virginia American Water Company because of the chemical that had been allowed to leak into the Elk River, maybe for hours, maybe for days. No one will say. Still.

Life has been surreal since then. CNN trucks in the work parking lot. A strange licorice smell in our water. Being told we can drink it, oh wait! Don't drink it if you're pregnant. The river's clean. Oh wait! We found a second chemical. School will be open tomorrow. Oh wait! It's closed for the next 5 days.

It's been hard to get away from social media where we have all been sharing our experiences. "Has your zone been cleared for flushing?" "Are you showering with it?" Even in the parking lot at Kroger a woman was talking about parts-per-million with the guy who helped her out with her groceries. A coworker and I decided it's like being in a weird sci-fi flick but no one gave us the script.

The day after our water was deemed safe, I decided first to wash my hands in it. I wanted to take a shower. It had been five days of either not showering or heading out-of-county to the YMCA to use safe water. I turned on the bath faucet. Let the water run. Smelled it. Sat on the bathroom floor and looked at the water. It looked normal. Turned the faucet off. Turned it back on. Smelled it some more. The licorice smell faded and I took the plunge. Again, no one had given us the script.

I survived. But every time I shower or get close to the water I wonder what long-term damage it is causing my family. My pets are drinking bottled water. Surreal.

There is desperation to return to Life Before the Spill. Only now have I realized that there is no such thing. There is no going back. There is no trust. We have been violated and lied to.

That's the silver lining of this catastrophe — it didn't just go after the poor people. It is affecting those of us who are used to only First World Problems. And now some of those folks, those who might have thought caring about the environment was a hobby or a CHOICE or even something to hide, see things differently now. They are mad at Freedom Industries and the bumbling response of the governor and his Department of Environmental Protection.

Let's hope they stay that way. If anything is going to change, we need them.

Linda Frame lives in Charleston, W.Va., with her husband and two teenage sons. She is the communications manager for the West Virginia Center on Budget and Policy.

One Seriously Angry Granny

By Linda Sodaro

Sometime last year, my good friend Kim and I had a conversation about the joys of a hot shower. The perfect temperature, with lovely handmade soap and standing there as long as we liked. She said, "I don't think we're always going to have that."

Kim's prophetic words came to pass Jan. 9, 2014, when Freedom Industries spilled [an initially] reported 6, 251 gallons of MCHM and PPH into the Elk River. My reaction upon hearing the news that Thursday went from zero to fury in the first five minutes. How could this have been allowed to happen? What were these chemicals and what would they do to us?

By Saturday, my anger had not abated and I knew I had to do something, so I sat quietly for awhile, breathing and asking myself what this feeling was about. And the answer rose up clearly before me. The Elk was MY river. My parents brought me home from the hospital to a one-bedroom trailer that was directly across the narrow expanse of the river from the site of the spill. I spent my first ten years in that trailer park, and the river was a constant in my life and a source of magic and wonder. How dare those b------ assault her this way? The wave of grief didn't hit until Sunday morning as I lay in bed after awakening. It was a powerful, cleansing outpouring and I felt somewhat better afterward.

Emotions aside, there remained the practical matters of life without water to be dealt with. Water distribution sites were set up in our town and we didn't have a problem with getting it; however as I write this, distribution centers have been shut down. I am out of step with the new rhythm of life — having to heat water for washing dishes and sponge baths, leaving the house loaded down like a mule to do laundry and shower at a friend's house.

We did the prescribed flushing procedure and it has not worked, in fact it made us feel sick. The water still reeks of what I call genetically modified blueberries. I wake with a daily headache and my nose is bloody most all the time. The thing that scares me most is that I am certain that this was in the water long before residents discovered the spill. I tasted and smelled it around the second week of December, but I just thought the filter on my water pitcher needed to be changed.

How fortunate we are that MCHM has an odor! Otherwise we might never have known this chemical was poisoning our water.

Linda Sodaro is one seriously pissed off granny living in South Charleston, W.Va.

Who Has Priority Over Water?

By Matt Wasson, Ph.D.

CHARLESTON, W.Va. — What do January's Kanawha Valley chemical spill, the Exxon Valdez spill and the Deepwater Horizon incident have in common? All were man-made environmental disasters, disrupting the lives of thousands of people, and all cracked open for public view astonishing examples of corporate and regulatory dereliction.

What don't they have in common? The Exxon Valdez oil spill was 11 million gallons. The Deepwater spill was 210 million gallons. The Freedom Industries spill was something on the order of 10,000 gallons — less than 1/10th of a percent of the Valdez. How could a relatively small chemical spill in one river cut off drinking water access to 300,000 people — 16 percent of the state's entire population — scattered across nine counties?

The first step to understanding this riddle is understanding what many Appalachians know first-hand already: Coal industry activities have been polluting their water supply for a long, long time.

Take, for example, the residents of Prenter in Boone County, W.Va. A few years ago, elevated levels of lead, nickel, arsenic and other chemicals in the tap water was causing skin rashes and dental decay, which could portend kidney and nerve damage and cancer. Residents and scientists believed the pollution came from coal slurry — the waste by-product of removing impurities from coal — being dumped into abandoned mine shafts, where was free to flow through cracks in the earth into groundwater and ultimately the wells of local residents.

Enter the West Virginia American Water Company, which operates the water treatment plant and distribution network that was shut down Jan. 9. In 2010, Boone County partnered with West Virginia American Water on a multi-million dollar project to run fresh water lines out to Prenter and other communities. The project was mostly paid for by a federal grant, with Boone County and the water company making up the difference. Not a penny was paid by the coal companies that polluted the water in the first place.

A paper trail of Public Service Commission filings reveals similar stories happening again and again, as West Virginia American Water gobbled up one municipal utility after another. In one instance in 2004, the state gave approval for the water company to develop the Sharples Water Line Extension in Logan County because a coal company's mining plans were likely to destroy the well water of nearby residents, which had provided a reliable supply of clean water for generations. According to the PSC documents: "Arch Coal's proposed Mountain Laurel Mine ... will potentially dewater the aquifer that is the source for [Logan County's] Sharples system."

While the documents sought to justify the expense on the grounds that the extension would "eliminate the use of local groundwater and provide a more than adequate supply of drinking water that will sustain the expected growth in the project area," nobody seriously expects growth near a massive mining complex in Logan County, where population has been declining for decades. The real motivation for the project is found in the expected economic development benefits section, which reads: "The extension Project will help satisfy mine permitting requirements for Arch Coal's proposed Mountain Laurel mine."

Similar evidence of how public money has been used to benefit the coal industry while expanding the customer base of a private water company runs throughout PSC documents. And so it came to be that West Virginia American Water, consolidating its infrastructure as any profit-driven entity would, wound up with a single water intake on the Elk River — a mere mile and a half downstream from a coal-chemical storage facility — to serve 300,000 people in nine counties.

Gov. Earl Ray Tomblin has been quick to absolve the coal industry of culpability, instead blaming the chemical industry and a particularly bad company. But any attempt to decouple the coal industry from this disaster will surely fail the laugh test, given that the spilled chemical was not only used by mining companies to wash coal, but also had already been leaking into West Virginians' water supply long before Jan. 9, as residents of Prenter and other communities near coal preparation plants can attest.

The fact that so many people are dependent on one facility that is run by West Virginia American Water, a huge multinational corporation focused on increasing its own bottom line, is a central factor in the scale of this disaster that simply cannot be ignored. And, as many West Virginians know and the PSC paper trail demonstrates, the coal industry plays a major role in that as well.

Matt Wasson is program director with Appalachian Voices and holds a Ph.D. in ecology from Cornell University. This op-ed was first published in The Charleston Gazette *on Jan. 18, and his commentary regarding the spill has appeared on NPR, MSNBC and* The Huffington Post.

A SON'S OUTRAGE: I tried to take a Jan. 28 sample of the water from my dad's West Virginia American Water tap — the gallon jug above — into the state capitol to show our politicians the water we are forced to live with. Security told me I could not bring it in, and if I did I would be arrested. One security guard grabbed my arm and pulled me outside. They said it was an "unidentified substance." That's right folks, my father's water is an "unidentified substance" now. If it's not safe to bring into the precious gold dome of the capitol then why the hell is it coming out of our tap!

I really think it's unfair that a retired coal miner and Vietnam veteran who served his country cannot even have clean water right now. At least water is safer where he is right now — in a hospital outside the affected area.

Dustin White is an organizer with the Ohio Valley Environmental Coalition and a resident of Charleston, W.Va. This water was collected in Boone County, where he is helping to care for his ill father.

Uncertainty Upstream

Continued from page 12

and churches. In some locations the water ban had been lifted, while in others water use was still prohibited. Although West Virginia American Water assured residents that their water would be safe after flushing — a long, laborious process that can involve draining hot water tanks and changing filters — the people I spoke with didn't trust the company's claims and continued to drink and cook with bottled water. In some homes, the licorice smell remained even after flushing — though it was hard to tell if it was because the flushing had not worked, or because the chemical was just now reaching their home.

Some residents reluctantly started showering with tap water, but others drove to the homes of unaffected friends and relatives. I met families struggling to keep up with household chores — laundry and dishes piled up, especially for families with young children. And while many officials were treating the problem as solved, residents were having ongoing physical reactions to their water.

As with most of the more than 84,000 chemicals used in commerce today, little is known about the toxicity and risks associated with Crude MCHM, the primary chemical in the spill. It's unclear when — or if — pipes and hot-water heaters will be rid of chemical residue, and it's uncertain whether MCHM is breaking down into the cancer-causing agent formaldehyde or other toxic materials. Hundreds of West Virginians have gone to the doctor with skin and eye irritation and respiratory ailments, while many others are dealing with headaches and rashes at home. The long-term health impacts are unknown.

Four weeks after the event, affected citizens continue to contact our Appalachian Water Watch water pollution hotline and website with reports of health complications from exposure and the lingering smell of Crude MCHM coming from their taps. One report indicated that children in the household had experienced a rash after coming in contact with the water on Jan. 7 — two days before the spill was reported. All callers continue to express uncertainty about the safety of their tap water.

I struggle with what to tell people whose water we tested. Even when the results are clear, I can't be sure that the chemicals won't work through miles of water lines and show up at their houses later. Inevitably, the highest burden of this risk falls on those who cannot afford to move or to continue purchasing bottled water.

Seeking answers, some concerned citizens attended a town hall meeting hosted by a local TV station, while others gathered at the state capitol to protest. On Jan. 30, more than 20 days after the spill, Gov. Earl Ray Tomblin noted that he had requested additional help from the Federal Emergency Management Agency, and also asked West Virginia American Water to continue supplying affected areas with bottled water. "Despite the best efforts of the company and government," he wrote to FEMA, "many people no longer view their tap water as safe and are continuing to demand bottled water to meet their potable water needs. It is impossible to predict when this will change, if ever."

As the aftermath of the spill continues to unfold, neighbors who may not have originally seen eye-to-eye on environmental issues are beginning to talk. Residents are banding together to form new grassroots networks such as the WV Clean Water Hub, and citizens from all throughout Appalachia and beyond are pitching in to help local nonprofits continue to provide water. Although the path ahead is still littered with unknowns, the conversation is reaching a fever pitch as communities in West Virginia — and beyond — stand together to defend the right to clean water.

Erin Savage is a water quality specialist with Appalachian Voices, the publisher of The Appalachian Voice. *She and Eric Chance manage the water pollution alert website appalachianwaterwatch.org and hotline 1-855-7WATERS*

Mason Burns sits by a candle at an Honor the Water vigil in Tornado, W.Va. Photo courtesy of Honor of the Water vigils

CITIZEN STORIES CONTINUED

An Expanded Idea of Leadership

By Jen Osha Buysse

The stories that get me the most are the stories of mothers with children who are sick and asking why the state is not considering it an emergency. Why is the government providing less emergency water every day, even though every day we're learning new, disturbing issues with the water situation?

We've been gathering a lot of liquid baby formula and diaper wipes for the families with young children. We have an incredible group of people working together in unaffected areas to support those affected — local unions, daycares, schools. [One] local pediatrician donated baby supplies and landscape companies have offered their trucks.

I have spoken with many families who haven't been able to work in the weeks since the chemical spill. They can't just not buy water, but they can't buy food or pay heating bills in the freezing weather. They don't want to ask for help, but their income has been cut off.

Everyone can find a way to use whatever skills they have during this ongoing emergency. Someone has a truck, someone knows parents at a school they can organize – we've had to expand our idea of what leadership consists of, and I've witnessed all these incredible people working together to fill truck after truck.

This crisis is far from over and we must all work together to settle into a sustainable level of support that we can maintain as long as needed.

Jen Osha Buysse is an emergency relief organizer, co-founder and board chair of educational nonprofit Aurora Lights. She is a busy teacher and mother living in Morgantown, W.Va.

Wary and Waiting

By Karen Smith Zornes

I didn't have a problem with the spill at first; I thought, "Accidents happen." But when it came time for us to flush, I had an asthma attack from the smell. I went outside for fresh air and tried to flush again later — and had another asthma attack. After our flush, our water still looked blue and still had the smell. So I waited for three days after the flush to shower, and got a skin rash from the water.

After that I called the water company. The man at West Virginia American Water told me the strong smell meant the water was safe to use. I told him about my blisters, and he said it was probably my shampoo, though I've used the same shampoo for years. I asked him about the water discoloration, and he said I must have spilled something in it. He made me feel like an idiot. He told me to keep flushing my lines and that someone would be out to test my water. Four days have passed, and we haven't heard anything.

We've spent hundreds of dollars on new filters for the fridge and the home, bottled water, and gas to drive to get water and supplies. We're spending money we don't have. The money we've spent on water was supposed to pay my electric bill.

Being a three-time cancer survivor makes me wary about the long-term effects of this. I don't think the customers should be the ones to pick up the bill for this disaster.

Karen Smith Zornes is a concerned citizen living in Boone County, W.Va.

Forty Minutes from Fresh Water

By S. Rhodes

My community is partially in Putnam and partially in Cabell County. I have many elderly neighbors, and yes, there are also children and handicapped individuals that need access to clean water. Water distribution in this area was cut off on Jan. 18.

I own a small business that I run out of my home and have been unemployed during this water crisis. Needless to say, driving an hour each day to Charleston for water is causing financial hardship, and is just not feasible for myself and many others here. The closest bottled water distribution available is in Nitro, W.Va., 40 minutes away, and it ends soon.

We are really just getting the chemical heavy in our tap. The smell alone, with no physical contact, is burning our eyes, nose and mouth, and it's causing headaches and even chest pains in myself, my husband and many of our neighbors. Our main water lines have not been flushed, so the multiple times that we have flushed our house is just pulling more chemical into our lines and tanks, filling our homes with that noxious smell.

S. Rhodes is an artist in Putnam County, W.Va.

An Unforgettable Lesson, Forgotten

Five Years After the Kingston Coal Ash Spill

By Kimber Ray

Just after midnight, a thunderous swell of sound peeled apart the silence that had settled onto Harriman, Tenn. A mountain of black coal ash — the waste byproduct of burning coal — descended upon the surrounding neighborhood, snapping trees and ripping three homes from their foundations. The Emory River was choked to a trickle as more than 300 surrounding acres were covered in a toxic sludge.

The 1.1 billion gallons of waste — with a nearly identical cleanup cost — that cascaded from the Tennessee Valley Authority's Kingston Fossil coal-fired power plant on Dec. 22, 2008, marked the largest industrial spill in United States history. When the public took in the sight of 10-foot-high ash piles and dead fish strewn across a hellish scene that morning, no one could have anticipated what would follow.

"Fish Appear Healthy After TVA Coal Ash Spill," reported a headline in *The Chattanoogan* nearly two years after the event. That same year, the Tennessee Department of Health released their final public health assessment: no evidence had been found of drinking or groundwater contamination. While the same cannot be concluded for the impoverished Alabama community where much of the coal ash was shipped, TVA ratepayers found that their wallets suffered more enduring damage than the environment.

"I couldn't believe we weren't finding more impact," says Dr. Shea Tuberty, an associate professor of biology at Appalachian State University. For two years after the spill, Tuberty worked with a team of researchers and environmental stewards assessing the ecological impacts of the disaster.

Despite the magnitude of the spill, nature seemed to work to the advantage of the TVA: fresh sediment swept in from the Emory River, covering the ash not removed during the cleanup, and the Emory joined the massive flow of the Clinch and Tennessee rivers, effectively diluting much of what pollution remained.

Analysis of fish tissue did show elevated levels of selenium, arsenic and heavy metals, exposure to which can cause health effects including cancer, autoimmunity and respiratory illness. But on average, Tuberty says, levels seldom exceeded the toxic threshold dose that triggers these harmful effects. After observing levels of heavy metals in fish peak, then drop off to normal averages, the team decided to conclude their research.

The most overwhelming effect on the environment may have been the initial physical impact: the tsunami of ash and loss of habitat. Even weeks after the spill, Tuberty recalls water with the consistency of a milkshake, and fish with coal-black gills and stomachs full of ash.

But the TVA denied that fish had died. "They were picking up trash bags full of dead fish while they were slurping off all the coal ash," Tuberty remarks. "That level of dishonesty was completely unnecessary."

Aside from this, Tuberty says, the TVA also took some samples upstream from the site of the spill and — due to a mistake in their analysis — reported lower levels of heavy metals in fish than many outside studies. Given the diluting power of the rivers combined with sustained cleanup efforts, it seemed the TVA was scrambling to hide an environmental fallout that never came to pass.

The black liner covering the coal ash containment cell, above, will be topped with two feet of soil and grass when the Tennessee site is converted to a park. Photo by Cat McCue. The Tennessee Valley Authority purchased 180 surrounding properties after the catastrophic landslide of coal ash in Harriman, Tenn. Photo credit: Appalachian Voices.

But while the efficiency of the remediation was unexpected, the spill itself was not. The holding cell for the coal ash was never built right. Sitting on a tenuous water foundation, its 60-foot-high walls were made of recycled coal ash sediment and lacked any reinforcing steel or concrete. Residents had reported seeing workers fix leaks in the wall several times in the decade leading up to the spill.

According to a report filed by TVA Inspector General Richard Moore in 2009, engineering consultants had warned the utility in 1985, and again in 2004, that the wall might fail. Yet due to a lack of state or federal regulations regarding coal ash — an absence that still exists today — the TVA was able to exercise their liberty to ignore these predictions.

Costs in the aftermath of the spill have been enormous — both economically and psychologically. Many residents chose to build their lives by the Kingston plant because of the area's natural beauty. The adjacent reservoir was a popular birding area where you could see "huge populations of great blue herons and ospreys like pterodactyls landing on the trees in the spring," recalls Tuberty. But for most residents, the damage and lingering fears of contamination were too great to allow them to remain in the homes they had grown to love.

The current price tag of remediation efforts has already exceeded $1 billion and, according to a TVA budget report released last fall, could rise to as much as $2 billion. These costs encompass site repair and cleanup, compensation to property owners and converting TVA's other high-risk wet-storage facilities — where coal ash is mixed with water and stored in massive ponds — to safer dry-storage landfills that cannot break out in a catastrophic flood.

Ratepayers will shoulder most of this financial burden. Beginning in October 2009, more than nine million residents throughout TVA's service territory experienced a rate increase of 69

Continued on page 17

Continued from page 16

cents per month. In order to foot the bill, this will continue through 2024.

Damage Displaced to Alabama

The cost of the spill was not limited to the Tennessee Valley. More than 300 miles away in Perry County, Ala., the social and environmental burden of more than four million tons of the 5.4 million-ton spill is borne by residents living in the small, rural community of Uniontown. Between 2009 and 2010, hundreds of trainloads of dry coal ash were shipped here — the heart of Alabama's "Black Belt" — where more than 75 percent of residents are African American and nearly half live in poverty.

According to a study conducted in North Carolina, landfills are 2.8 times more likely to be sited in areas where the minority population exceeds 50 percent. This is a phenomenon known as "environmental racism," and Dr. Robert Bullard, dean of the School of Public Affairs at Texas Southern University and a founding voice for the environmental justice movement, believes this was at play when the Kingston coal ash was relocated from a predominantly white to a predominately black community.

Bullard adds that shipping the coal ash to Uniontown was only an extension of the initial injustice: the opening of the landfill in 2007 despite widespread opposition from the community. In both instances, residential concerns were ignored by elected officials and the U.S. Environmental Protection Agency.

When the coal ash came, Bullard says, "Newspapers reported that the landfill was in an isolated location, there was no community opposition, and it would bring economic development." A public hearing for residents to voice their concerns was held only after the permit for the landfill had already been signed. As for economic development, it was a hollow promise from the start. Jobs that arrived to help unload the coal ash are long gone — disappearing with the last train's shipment.

Although there have have been no published studies on the human and environmental impact of the coal ash in Uniontown, the effect is palpable. The coal ash here was not subject to the same level of precaution as the remaining coal ash stored at Kingston; mounds of dry ash are visible above the tree line, lacking a protective cover to prevent dust from blowing into the neighborhood. It rises from the landfill to coat the cars and clotheslines of nearby residents.

"Landfills don't make good neighbors," Bullard says. "Before the landfill came, this land was basically farms, cattle fields and trees. People enjoyed working outside, but [now] you can smell the landfill. It's destroyed their life, and it might destroy the land and their livelihood. And they've been powerless to stop it."

With the help of attorney David Ludder, as well as attorneys from the environmental law firm Earthjustice, residents of Uniontown have filed a discrimination complaint with the EPA's Office of Civil Rights. The office agreed to investigate the complaint this past July, but since then there has been no significant action.

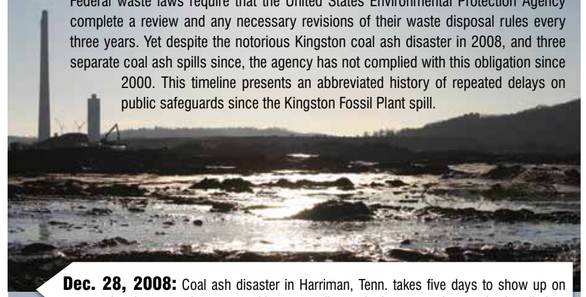
This lack of action has been true for much of the national debate as well. The now-notorious Kingston coal ash spill shined a harsh spotlight on the absence of federal coal ash standards. It was not until October 2013 when a federal judge sided with environmental groups — including Appalachian Voices — that the EPA was ordered to comply with a congressional mandate to establish coal ash regulations. On Jan. 29, 2014, the EPA announced that these regulations will be published by Dec. 19, 2014. The strength of the forthcoming rules remains uncertain.

At the Kingston plant, the TVA is just a year away from bringing their site remediation efforts to a close. TVA Spokesman Scott Brooks says the disaster site will be converted to a park, with ballfields and a green space. "We're going to leave the area around the spill as an asset to the community," he adds.

Yet it would be no surprise if residents are not inclined to offer thanks for this "asset." Much of the enormous cost for the Kingston coal ash spill has been passed off to the community. And with the debate about how to handle coal ash still unresolved, Kingston is at risk of becoming nothing more than a notation in an ongoing timeline of preventable accidents.

A History of *In*Action on Coal Ash

Federal waste laws require that the United States Environmental Protection Agency complete a review and any necessary revisions of their waste disposal rules every three years. Yet despite the notorious Kingston coal ash disaster in 2008, and three separate coal ash spills since, the agency has not complied with this obligation since 2000. This timeline presents an abbreviated history of repeated delays on public safeguards since the Kingston Fossil Plant spill.



Dec. 28, 2008: Coal ash disaster in Harriman, Tenn. takes five days to show up on most national news outlets; spurs citizens to strike up the banner against coal ash pollution.

2009

JANUARY: A second coal ash spill takes place at a TVA plant in Alabama.

JUNE: EPA reveals the locations of 44 "high hazard" coal ash dams — meaning collapse would likely cause loss of human life — previously kept a secret.

2010

JUNE: EPA issues two draft coal ash rules; thousands of Americans attend public hearings, and more than 450,000 comments are submitted.

SEPTEMBER: Samples taken near a Duke Enegy coal plant reveal arsenic levels 25 times higher than the federal limit for drinking water.

OCTOBER: Largely under industry pressure, EPA re-opens the public comment period, effectively delaying coal ash rules.

2011

FALL: EPA starts yet another public comment period, causing further delays

OCTOBER: Coal ash spills from Oak Creek Power Plant into Lake Michigan just days after the EPA tripled the number of coal ash ponds on its "high hazard" list.

DECEMBER: EPA list of sites contaminated by coal ash reaches 157.

2012

MARCH: EPA sends draft coal ash rule to the Office of Management and Budget, where it sits unaddressed.

APRIL: Data from 49 coal plants show arsenic, cadmium, lead and other toxins exceeding federal health and state groundwater standards.

JUNE: EPA reveals existence of 451 more coal ash dumps, bringing the known total to 1,161. Almost half are unlined.

OCTOBER: EPA announces that it needs more time to review coal ash toxicity data; they expect revisions to take six months to one year to complete.

2013

JULY: The U.S. House pass a bill that, like a similar measure in 2011, sought to prevent the EPA from regulating coal ash.

OCTOBER: Federal judge rules in favor of environmental groups — including Appalachian Voices — and orders EPA to present a timeline by Dec. 29 for finalizing coal ash rules.

2014

JANUARY 2: Federal judge extends the deadline for a rule timeline to Jan. 29.

JANUARY 29: EPA ordered to submit final coal ash rules by the end of the year.

Adam Hall: A Defender of West Virginia

By Kimber Ray

Depressed towns and waters laced with toxic chemicals have been handed down to West Virginia in the wake of mountaintop removal coal mining, yet many in the community leave these grievances unspoken. Adam Hall, the son of a strip miner in Glen Daniel, W.Va., was once among those who were voiceless on the subject: his father described his work as a paycheck and a roof, avoiding all other details.

But no roof could muffle the deadly reverberations of the Upper Big Branch Mine disaster in 2010, an explosion that left 29 miners dead. The event spurred Hall to break his silence and support efforts to restore communities damaged by coal.

Hall began volunteering with local nonprofit Coal River Mountain Watch. A dedicated member since, he contributes to several ongoing initiatives. One project involves cultivating a community garden to show how local farming can offer a viable economic alternative to mining. He also works on the Tadpole Project, promoting water quality through stream and roadside cleanups. By contributing directly to the community, he hopes residents will see that environmental advocates are not trying to take away jobs; they're trying to create new ones.

Over time, Hall decided that his work with CRMW still "wasn't enough," and so, he says, "I took up direct action as a means of raising local awareness."

An opportunity to expand his involvement arrived this past October when Hall was attending the Mountain Justice Fall Summit, a gathering where participants cultivate skills and strategies to resist mountaintop removal coal mining. He was leading a workshop on economic justice when members of Hands Off Appalachia — a campaign to end financial investment in companies supporting mountaintop removal — approached him to pitch an idea.

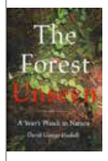
The goal was to hold a peaceful protest at the Stamford, Conn., headquarters of the largest funder of mountaintop removal: the Union Bank of Switzerland. Hall was not initially sure if he would take part in the protest, but after joining HOA members for an unproductive meeting with the UBS head of environmental risk management, he sensed that "they didn't even care people were dying" and "their policies were just a shield to escape liability."

On Nov. 25, nearly 30 people gathered at the UBS headquarters. Hall stood blocking the entrance to UBS while inside, other activists chained themselves to the stairs and hung a large banner: UBS Stop Funding Mountaintop Removal. Several others had climbed a nearby crane at dawn to unfurl another banner with the same message. Although Hall was not among the 14 protesters arrested, he has been encouraging others to donate to their legal defense fund.

He knows the fight is far from over, but the only thing he's tired of is the injustice in his community. Given the entrenched clout of the coal industry, he says that "no change will come in a short amount of time." Until then, he's ready to "dig in deep and stay for the long haul."

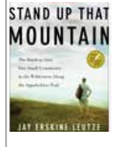
Adam Hall speaks to a group of environmental advocates about the diverse ecology at risk of destruction from mountaintop removal. Photo courtesy of Adam Hall

Appalachian Bookshelf



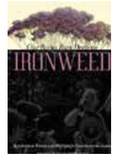
The Forest Unseen: A Year's Watch in Nature
By David George Haskell

In a circle of Cumberland Plateau old-growth forest roughly the size of a hula hoop, Haskell finds reasons for awe and wonder in the anatomy of a flower or the heartbeat of a chickadee. Inspired by both the place-based writings of Thoreau and the meditative practice of contemplating small, impermanent spaces known as mandalas, the University of the South ecologist and evolutionary biologist records his observations and musings with the eye of a scientist and the words of a poet. — *Molly Moore*



Stand Up That Mountain: The Battle to Save One Small Community in the Wilderness Along the Appalachian Trail
By Jay Erskine Leutz

In Avery County, N.C., a handful of locals are pitted against a large-scale gravel mining company whose illegal practices threaten to destroy their home. Intent on stopping the mine, the author and a ragtag group of locals embark on a four-year legal battle, garnering attention from top environmental lawyers, scientists, activists and, ultimately, the U.S. government. Leutze's first book and the precedent-setting legal case raise questions about the power of government to regulate industry, the integrity of national parks and the value of natural beauty.
— *Rachel Ellen Simon*



Our Roots Run Deep as Ironweed: Appalachian Women and the Fight for Environmental Justice
By Shannon Elizabeth Bell

A combination of oral history and sociological commentary, Bell presents extensive interviews with 12 Appalachian women engaged in environmental justice work. Bell's analysis goes beyond the traditional view that women's activism is grounded in their identification as mothers; rather, Bell argues that these women assume a broader "protector identity" to safeguard not just their families, but also their culture, communities and physical environment. Thirty percent of proceeds will be donated to environmental justice organizations in central Appalachia. — *Rachel Ellen Simon*

Appalachia's Political Landscape

By Brian Sewell

IN THE STATES:

Kentucky:

Gov. Steve Beshear did not mention coal much in his Jan. 7 State of the Commonwealth speech, but he did put the spotlight on S.O.A.R, an initiative to provide economic assistance to eastern Kentucky counties suffering from coal's downturn. Coal mining communities could also receive an economic boon from a bill in the state House to allocate 100 percent of severance taxes collected from mining back to those communities; currently 50 percent goes to the state. Several bills have been introduced that would restrict the use of eminent domain to in-state oil and gas producers, just months after citizens petitioned Gov. Beshear to oppose the practice for the proposed Bluegrass Pipeline in northern Kentucky. And for the fourth consecutive year, Rep. Mary Lou Marzian reintroduced a bill that would require utilities to meet a portion of demand with energy efficiency and renewable energy over time.

North Carolina:

One year into his first term as governor, Republican Pat McCrory continues to call for North Carolina to "get off the sidelines" and become an energy producer. Although the legislative session does not begin until May, speculation has begun about more reforms related to environmental rules and energy development. Another push to repeal the state's renewable portfolio standard is expected, and more cuts to the Department of Environment and Natural Resources are also ahead. Meanwhile, the N.C. Mining and Energy Commission faces an Oct. 1 deadline to propose recommended rules for hydraulic fracturing in the state, but regardless of the commission's suggestions, state lawmakers can approve their own regulations.

Tennessee:

For the seventh year in a row, a broad coalition of environmental, public health and faith-based groups will rally to support Tennessee's Scenic Vistas Protection Act, a bill that would ban surface mining techniques such as mountaintop removal on peaks above 2,000 feet in elevation. In the 2013 session, the Senate Committee on Energy, Agriculture and Natural Resources deferred the bill without discussion. In an editorial announcing its opposition to mountaintop removal, the *Knoxville News-Sentinel* wrote that, "An objective, dispassionate review of the economic and environmental issues surrounding the bill should lead to only one conclusion — it is time for the bill to become law." Rep. Gloria Johnson and Sen. Lowe Finney, lead sponsors of last year's bill, reintroduced the legislation.

Virginia:

New Democratic Gov. Terry McAuliffe has brought a renewed sense of optimism to progressives in the commonwealth, but the state legislature remains largely unchanged. Several bills this session aim to stifle the McAuliffe administration's regulatory power. One bill would require any oil or gas drilling permit on state-owned lands to allow fracking, and another would fast-track Appalachian Power's plans to build a natural gas plant by declaring it to be in the public interest. At the same time, several other new bills would support clean energy, including one that would require utilities to adopt on-bill financing programs for energy efficiency retrofits. Another would require Dominion Virginia Power to meet a portion of its target with renewable energy produced in Virginia — a reform advocacy groups have pushed since 2007.

West Virginia:

On Jan. 8, in his State of the State address, Gov. Earl Ray Tomblin touted the economic prospects of natural gas and finding new markets for coal, and promised to never back down from the U.S. Environmental Protection Agency because of its misguided policies on coal. But, Tomblin said, "there are other types of investments we often take for granted," mentioning schools, water and sewage infrastructure and broadband internet. To support those investments, the Friends of the Future Fund are again pushing for the establishment of a permanent natural resource trust fund by the state.

The day after the governor's speech, however, the chemical spill that left 300,000 West Virginians without water was discovered, quickly realigning the legislature's priorities. Within days, the state Senate passed a bill to require regular inspection of chemical storage facilities and to require public water systems to develop emergency plans to respond to water contamination. A bill to provide low-interest state loans of up to $15,000 to businesses affected by the water crisis is also being considered.

ON CAPITOL HILL:

House Budget Bill a Loss for the Environment, a Win for Coal

A $1.1 trillion budget bill unveiled by Rep. Hal Rogers (R-KY) and swiftly approved by Congress and signed by President Obama contains a host of anti-environmental riders aimed at crippling the Obama administration's plans to address coal and climate change.

Among other provisions favorable to the coal industry, the law prevents the U.S. Army Corps of Engineers from changing the definition of "fill material" under the Clean Water Act, allowing companies using mountaintop removal coal mining to continue dumping waste in rivers and streams. According to the EPA, "valley fills" associated with mountaintop removal mines have covered an estimated 2,000 miles of Appalachian streams.

The Army Corps has not announced plans to rewrite the rule, but Rogers claims "the EPA and the Corps have been crafting a rule behind closed doors" that would essentially ban new mining projects under the Clean Water Act. According to Rogers, the pro-mountaintop removal provisions were added to help the coal industry.

The budget also includes $46 million for the Army Corps to speed up its permitting process for valley fills associated with mountaintop removal, and requires the Army Corps and EPA to provide monthly reports to Congress on permitting and projects under review.

Washington Responds to W.Va. Chemical Spill

The disaster that left 300,000 West Virginians without safe water led to a rare collaboration between three politically divided Democrats. Senators Barbara Boxer (D-CA), Jay Rockefeller (D-WV) and Joe Manchin (D-WV) introduced the Chemical Safety and Drinking Water Protection Act at the end of January.

Similar to legislation introduced in West Virginia, the bill would require states to regularly inspect aboveground chemical storage facilities like the one owned by Freedom Industries where the Charleston, W.Va., spill originated. The bill would also require industries to develop state-approved emergency response plans.

113TH CONGRESS: Below are recent congressional bills and amendments on environmental issues and how regional central and southern Appalachian representatives voted. To see other recent votes, or for congressional representatives outside of the five state area, visit scorecard.lcv.org/recent-votes. ✓=pro-environment vote ✗=anti-environment vote

HOUSE	Kentucky			Tennessee				North Carolina			Virginia			West Virginia		
	T. Massie (R) KY-04	H. Rogers (R) KY-05	A. Barr (R) KY-06	P. Roe (R) TN-01	J. Duncan (R) TN-02	Fleischmann (R) TN-03	S. Desjarlais (R) TN-04	V. Foxx (R) NC-05	P. McHenrey (R) NC-10	M. Meadows (R) NC-11	R. Hurt (R) VA-05	B. Goodlatte (R) VA-06	M. Griffith (R) VA-09	D. McKinley (R) WV-01	S. M. Capito (R) WV-02	N. Rahall (D) WV-03
H.R. 2279, The Reducing Excessive Deadline Obligations Act, amends the Resource Conservation and Recovery Act and the Superfund law, weakening the ability of the federal government to ensure proper cleanup of toxic waste sites. 225 AYES, 188 NOES, 8 NV **PASSED** Senate is unlikely to consider after White House veto threat	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
H.R. 2642, The Federal Agriculture Reform and Risk Management Act, a.k.a the Farm Bill, authorizes nearly $1 trillion in spending on farm subsidies and conservation programs and expands support for energy efficiency, which led us to consider this broad bill a pro-environment vote 251 AYES, 166 NOES, 15 NV **PASSED** Senate had not voted at press time	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓

State Department Issues Keystone XL Report

An assessment released by the U.S. State Department on Jan. 31 concludes that President Obama's ultimate decision to approve or deny construction of the Keystone XL tar sands pipeline is unlikely to affect the rate of extraction of the carbon-heavy fossil fuel in Alberta, Canada. In a speech last year, Obama said the pipeline will get his OK only if it does not "significantly exacerbate" the problem of carbon pollution. If constructed the pipeline would carry 830,000 barrels of tar sands from Canada to Texas refineries daily.

Duke's Energy Savings in the Carolinas

Environmental groups including the Southern Alliance for Clean Energy are commending Duke Energy Carolinas' new "shared-savings" program launched January 1 as a successor to the company's Save-a-Watt program.

While the previous program rewarded Duke for investing in energy efficiency measures, the new "shared-savings" method stipulates that Duke's compensation be tied to customer savings.

Wind Power Becomes Increasingly Reliable

A report by the National Renewable Energy Laboratory found that in addition to supporting the electric grid, wind power is increasingly dependable as a primary power source and can be economically feasible as new technologies reduce intermittency.

Wind energy is one of the fastest-growing sources of electric generation nationwide and was recently credited with preventing blackouts in Texas and the Midwest during the polar vortex.

OSM Investigates WV Mining Law Enforcement

By Brian Sewell

The federal Office of Surface Mining Reclamation and Enforcement announced on Dec. 30 that it will investigate West Virginia's surface coal mining regulatory program.

The announcement comes six months after the Citizen Action for Real Enforcement campaign — a coalition of 18 state and national organizations — held a press conference and delivered a nearly 100-page petition to the OSM's Charleston, W.Va., office. The petition alleges that the state's chronic failure to enforce the Surface Mine Control and Reclamation Act of 1977 demands federal intervention.

Of the 19 complaints included in the petition, OSM will investigate five, including flooding caused by runoff, surface mining law violations on sites where Clean Water Act violations exist, and parts of the state's reclamation program.

Criticism of inadequate regulation at the state level escalated after the coal-processing chemical spill by Freedom Industries left 300,000 West Virginians without safe water. The groups have drawn attention to the spill to strengthen their case against the DEP.

A petition on MoveOn.org by the CARE Campaign to the Office of Surface Mining demanding an enforcement program "that is accountable to the people of West Virginia" had more than 28,000 signatures at the end of January.

Southeastern States May Need to Reduce Air Pollution

By Kimber Ray

The Supreme Court heard arguments this past December on the U.S. Environmental Protection Agency's Cross-State Air Pollution Rule, a case that has been debated for more than two years.

The challenges of addressing interstate air pollution have confounded regulators for decades. Due to natural wind patterns, pollution from upwind states — particularly Rust Belt and Appalachian states — typically blows downwind into the Northeast, where it results in federal air pollution fines and rising healthcare costs.

The rule seeks to address the fact that downwind states have needed to install more expensive pollution controls than upwind states in order to deal with their neighbors' wind-borne pollution. Federal regulations would be based on cost-effectiveness rather than measured contribution to pollution. This would allow the EPA to impose regulations on upwind state industries where control mechanisms may cost less than $500 per ton of pollution, versus upwards of $10,000 in downwind states.

Although a federal appeals court ruled in 2012 that a cost-based approach to regulation exceeded the authority of the EPA, the Supreme Court is reconsidering the case in light of the complexity of interstate air pollution. *The Washington Post* and *The Wall Street Journal* reported that the court appears inclined to rule in favor of the EPA. A final decision is expected in June.

Municipal Water To Reach Most Families Along Mill Creek

By Molly Moore

The 94 families living along Mill Creek in Letcher County, Ky., have gone years without safe water for drinking or household use due to water pollution from poorly reclaimed coal mines. Due to persistence on the part of local activists, however, 70 families now have municipal water and another 23 are slated to receive water lines.

Elaine Tanner, a resident at Mill Creek, has been meeting with state and federal officials for 10 years in her push to get clean water to the area. Water testing by the Sierra Club, Appalachian Voices and Kentuckians For The Commonwealth revealed illegally high levels of arsenic and other toxins in residents' wells.

Tanner and allies filed a petition for new funding under the federal Safe Drinking Water Act in February 2013. Despite the progress, one residence on the other side of a railroad route was not included in the recent arrangement so Tanner is continuing the effort.

Unaddressed Concerns Keep Fracking in the Forefront

By Brian Sewell

Nationwide, stories regarding natural gas-related water contamination, waste disposal and property rights concerns keep bubbling up, bolstering arguments used by opponents of fracking.

And as natural gas prices rise due to cold weather and a slowdown in drilling, the fuel's supporters are questioning how long claims of affordability will last. Increased demand this winter sent natural gas prices surging to levels not seen since 2010.

According to the *Wall Street Journal*, prices typically spike to between $40 and $50 per million British thermal units in periods of cold weather. But in mid-January prices soared to as much as $135 in some areas.

Regardless of price, however, natural gas' desirability as an energy source is suffering from largely unaddressed environmental concerns related to drilling and transportation.

Despite evidence that fracking has contaminated water — cases in Pennsylvania, Ohio, Texas, and West Virginia were recently confirmed by the Associated Press — natural gas continues to be a significant component of America's energy policy and portfolio.

Fracking is regulated on a state-by-state basis and, according to a report by the EPA Inspector General released at the end of 2013, the U.S. Environmental Protection Agency is unlikely to step up enforcement efforts due to budgetary constraints and a lack of political will.

Fracking Appalachia

The proposed Bluegrass Pipeline, which would transport natural gas through northern **Kentucky**, led to the introduction of several bills clarifying when, and by who, eminent domain can be used for energy-related projects.

North Carolina's Mining and Energy Commission recently finalized chemical disclosure rules opting to allow natural gas companies to maintain "trade secrets" related to chemicals used during drilling.

The **Pennsylvania** Senate Appropriations committee approved a measure to limit the liability of drilling companies that use acid mine drainage to replace fresh water used in fracking.

The U.S. Forest Service is considering allowing fracking in **Virginia**'s George Washington National Forest despite a 2011 management plan that prohibited drilling in the forest.

Landfills in **West Virginia** can now accept an unlimited amount of solid waste from fracking operations after regulators quietly changed a rule in order to ease waste problems related to the practice.

EPA Publishes Carbon Rule for New Power Plants

On Jan. 8, the U.S. Environmental Protection Agency published a draft rule to limit carbon emissions from new power plants. Under the rule, new coal-fired power plants can emit 1,100 pounds of carbon dioxide per megawatt-hour, around 35 percent less than the average coal plant produces. New natural gas plants are limited to 1,000 pounds of carbon dioxide per megawatt-hour.

The EPA faces a June 1 deadline to release a draft rule for existing power plants, which are responsible for 40 percent of carbon pollution in the U.S.

Patriot Coal CEO: Ending Mountaintop Removal Mining a "Win-Win"

After emerging from bankruptcy, Patriot Coal CEO Bennett Hatfield said in an interview with SNL Energy that the 2012 settlement over selenium pollution that forced the company to begin phasing out mountaintop removal proved to be a "win-win." Even before the settlement, Hatfield said, Patriot was finding it "increasingly undesirable to deploy mountaintop removal operations anyway" because of regulatory resistance and the likelihood that new permits would be met with litigation from environmental groups.

Solar Power Can Strengthen Economies, Researchers Say

A new report says that while the solar industries in neighboring states have generated thousands of jobs, West Virginia's policies are holding the state back. Released by the West Virginia-based Downstream Strategies and The Mountain Institute's Appalachia program, the report found that in Ohio, Pennsylvania and Maryland there are approximately 9,000 jobs associated with solar. West Virginia, however, ranks 51st in solar jobs per capita, at just under 100 jobs. The report focuses on five specific recommendations — including third-party financing, tax credits and other incentives for residential and commercial solar power — to address barriers preventing West Virginia from establishing an economically viable solar industry.

Absentee Corporations Still WV's Largest Landowners

By Brian Sewell

Land ownership patterns in West Virginia, a state with a reputation for being influenced by large absentee corporations, have remained largely unchanged for the past century, according to a report by the West Virginia Center on Budget and Policy and the American Friends Service Committee.

The report, titled "Who Owns West Virginia?" finds that not one of the state's 10 largest private landowners is headquartered in West Virginia, and that large energy and land-holding corporations continue to control much of the resource-rich acres in the state. In five counties in the state's southern coalfields – Wyoming, McDowell, Logan, Mingo and Boone – the top 10 landowners own at least 50 percent of private land. Researchers noted that during the last few decades, the number of major timber management operations on the list of the largest landowners has increased.

Hoping to raise awareness of the role that absentee and local land ownership has played in West Virginia's economic development over time, researchers recommend policymakers devote resources to counties with the highest concentrations of land ownership and ensure that large landowners are adequately taxed.

To help accomplish this, the West Virginia Center on Budget and Policy has led a movement to establish the "Future Fund," a permanent mineral trust fund to help asset-poor communities grow using revenue from coal and natural gas severance taxes.

Smart Savings: Increasing Energy Efficiency in the Southeast

Appalachian Voices Energy Policy Director Rory McIlmoil coordinates our energy savings campaign

By Rory McIlmoil

As we reach the end of one of the coldest winters I have ever experienced, I have been thinking a lot about how the periods of deep freeze have impacted residents across the region. Two managers of rural electric cooperatives recently told me that they have seen record-high energy costs for many of their residential customers.

These costs are an ongoing burden for many in Appalachia, where rural and low-income residents often live in homes that waste significant amounts of energy. The high electric bills that result can inhibit a family's ability to meet even basic needs. In fact, energy costs can consume 80 percent of a family's income during some months.

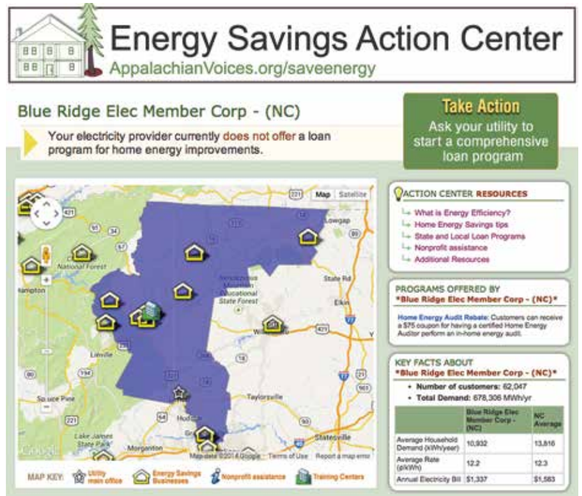
This problem is rooted in the inability of residents to afford the upfront cost of making needed energy efficiency improvements in their homes, such as adding insulation, repairing air ducts and conducting basic weatherization. This is the problem that our Energy Savings for Appalachia campaign aims to address.

Through this innovative campaign, we are promoting "on-bill financing" home energy loan programs that rural electric cooperatives should be offering to help residents finance the cost of home energy improvements. Such programs are proving to be highly successful in South Carolina, where residential participants reduced their electric bills by an average of 34 percent, and Kentucky, where participating homeowners have achieved an average energy savings of more than 20 percent.

Cutting energy costs not only helps alleviate poverty by increasing the amount of income families have for meeting their basic needs, but also can boost rural economies. The new savings can be spent in the community, and the increased demand for local energy services — such installing energy-efficient heating systems — supports new businesses and job creation.

Employing energy efficiency can also have significant environmental benefits. By cutting energy waste, we can reduce demand for coal that is extracted through mountaintop removal coal mining and for natural gas that comes from fracking wells. The simple act of insulating a home is one more step toward building resilient and sustainable communities.

We need you to get involved if we are going to achieve our goal of seeing strong home energy loan programs offered by every electric cooperative in the region. One way you can do that is by visiting our Energy Savings Action Center at appvoices.org/saveenergy and sending a letter to your electric utility requesting that they develop an on-bill financing loan program. After taking action, help build the movement by spreading the word about the Action Center and our campaign for saving money and energy (and the environment!) in Appalachia.



The Appalachian Voices Energy Savings Action Center, above, provides a one-stop resource for residents in eight southeastern states. Users can enter their address and learn what energy savings programs and loans are available, find local energy services businesses and nonprofits, glean energy-efficiency tips, and contact their electric cooperatives. Below, AmeriCorps member Sarah Kellogg discusses home energy use in Sugar Grove, N.C., at our first Energy Savings Information Session. To find a community meeting near you, visit appvoices.org/energysavings/events

Pushing for Effective Coal Ash Rules

On Jan. 29, the U.S. Environmental Protection Agency was ordered to finalize the first-ever federal regulations for disposal of coal ash by Dec. 19, 2014, following a lawsuit brought by environmental and public health groups — including Appalachian Voices — and a Native American tribe. The settlement requires the agency to release a rule by the deadline, but will not influence the content of the rule. Read more about coal ash regulation on p. 16

In North Carolina, seven conservation groups, including Appalachian Voices, filed suit to participate in state law enforcement measures against Duke Energy. The utility's illegal pollution of groundwater, lakes and rivers supplying drinking water for local communities spurred lawsuits from environmental and public health groups as well as the North Carolina Department of the Environment and Natural Resources.

Following a proposed settlement between the state and Duke Energy that does not require Duke to clean up its coal ash pollution, almost 5,000 citizens and organizations submitted comments opposed to the flawed agreement. Southern Environmental Law Center filed the motion in late January on behalf of the environmental organizations.

INSIDE APPALACHIAN VOICES About Our Program Work

MEMBER SPOTLIGHT: Connie Hale

Dedicated to Sustainable Business

By Meredith Warfield

"Stick to what you believe in, and don't deviate," Appalachian Voices volunteer Connie Hale advises those of us pursuing big ideas. As a passionate restaurant and farm owner, she believes it is worth it to follow your dreams, and that doing what you think is right reaps the best reward.

Originally from Galax, Va., Connie graduated from Radford University with a degree in nutrition and began working as an independent contractor with FedEx, but she knew that this would not be the extent of her career. "Something that I had always wanted to do was own a restaurant," she says.

What started as a distant idea became a reality when Connie opened Buffalo and More in Riner, Va., just outside of Christiansburg. The menu follows a farm-to-table method, bringing in fresh dishes sourced from from Connie's buffalo farm just next door. "I wanted to run a business that was sustainable and did everything in a green manner," she says.

At first, Connie and her business partner, Carla George, purchased bison for the restaurant from surrounding farms, but it became clear that raising buffalo of their own needed to be the next step. The decision to take on their own herd was a major milestone in creating the business Connie envisioned. She and Carla located a group of 50 buffalo in Greeneville, Tenn., and embarked on a mission.

Over the course of just a few days Connie's crew transported the animals to their new home on Brush Creek Buffalo Farm. The process was no walk in the park, Connie recalled, but the reward was priceless. "It was intense, but opening that trailer and seeing those buffalo run out into the field and play and jump and be happy — that was a very memorable moment," she says. "They are incredible animals."

Today Connie works as the chef while Carla looks after the farm. The two have toiled at the rigorous restaurant pace for a few years now, enjoying the daily warmth of regulars and tourists alike. Connie firmly values the importance of community and hopes that Buffalo and More plays a positive role in the lives of her customers and employees.

"[Appalachia is] absolutely, positively the only place that I would ever want to live," she says. "From the people to the beauty, it's wonderful."

Connie has been a generous volunteer at Appalachian Voices since the opening of Buffalo and More, helping to distribute 2,000 copies of *The Appalachian Voice* at her business every other month. She was first introduced when she picked up an issue at the restaurant she eventually bought. Having been inspired by it, and seeing how customers enjoyed the publication, Connie decided to keep *The Appalachian Voice* tradition going once she opened Buffalo and More.

Visit Connie's restaurant online at buffaloandmore.com

Protecting Tennessee's Scenic Vistas

The Volunteer State once again has an opportunity to stop mountaintop removal coal mining from destroying more beloved mountains. The Tennessee Scenic Vistas Protection Act, sponsored by Rep. Gloria Johnson (D-Knoxville) in the state House and Sen. Lowe Finney (D-Jackson) in the state Senate, would prohibit high-elevation surface mining techniques such as mountaintop removal. Appalachian Voices Tennessee Coordinator Ann League and allies across the state are asking legislators to stand up for Tennessee's mountains.

Visit appvoices.org/take-action to support the Tennessee Scenic Vistas Protection Act!

Fighting for Virginia's Clean Water

Appalachian Voices, Southern Appalachian Mountain Stewards and the Sierra Club — represented by attorneys from Appalachian Mountain Advocates — filed a lawsuit against Penn Virginia Operating Company in late January regarding selenium pollution from abandoned mines near the southwest Virginia town of Appalachia.

Water monitoring by SAMS members uncovered major selenium problems in Callahan Creek and its tributaries, which pass by several coal mines. Selenium is toxic to fish at low levels, triggering reproductive failure, deformities and death.

Welcome, Hannah!

We are proud to introduce new Virginia Campaign Coordinator Hannah Wiegard. This Old Dominion native first participated in environmental advocacy when she helped resist the construction of a coal-fired power plant in Surry Co., Va.

In her first weeks with Appalachian Voices, she publicly questioned new Virgina Gov. Terry McAuliffe's vision of the state's energy future. To join Wiegard in creating a more sustainable commonwealth, visit wiseenergyforvirginia.org

Join the movement for a cleaner Appalachia! Sign up for action alerts at AppVoices.org

Appalachian Voices is committed to protecting the land, air and water of the central and southern Appalachian region. Our mission is to empower people to defend our region's rich natural and cultural heritage by providing them with tools and strategies for successful grassroots campaigns.

The slopes of Big Bald Mountain, which straddles the border of North Carolina and Tennessee, were cushioned in soft heaps of snow on this perfect "powder day." Former Appalachian Voices intern Megan Naylor descended on her snowboard, with her dog Bella close behind, and her boyfriend Bo Wallace captured this photo. For those who prefer a slower pace, snowshoeing offers another way to enjoy the winter landscape. *Read more on p. 6*

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