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The Appalachian VOICE

June/July 2017

Hidden Treasures

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on Lands Scarred by Mining

Larry Keel on Fishin' and Pickin' | Carbon Offsets in Appalachia

Special Section
Appalachian Voices
Celebrates
20 YEARS



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About the Cover



A.P. "Tony" Gouge came to photography later in life, but says that the pursuit has allowed him to rediscover nature in a different way. While on a camping trip in Great Smoky Mountains National Park this spring, he made this image of a stream alternately known as Tremont and the Middle Prong of the Little River. This quick-flowing waterway is known for its fly fishing.

View more of Gouge's work at Facebook.com/APGougePhotography

A note from our team

On weekend mornings, my 18-month old son and I walk our long gravel driveway — he watches out for puddles to splash in, and I watch him against a backdrop of mist rising from the ridgelines above our home. The connection between these ancient mountains, this child, the six generations of our family who have lived in this holler and the generations to come is profound.

Appalachian Voices' work here in Southwest Virginia reflects these connections — we're nurturing something new and energizing against a backdrop that's old and familiar.

Solar energy is critical to achieving a clean energy economy. But the clean energy revolution can't create a 21st-century economy in Southwest Virginia unless it reaches the deepest hollows of Appalachian coal country. America can repay the people and places that gave the most to our nation's economic rise by ensuring that mountain communities can share in the benefits of a clean energy future.

We're working to accelerate the development of the solar industry in Southwest Virginia.

In May, we co-hosted a Solar Fair in Wise County to showcase the benefits of solar and launched "Solarize Wise" to make it cheaper and easier for people in the county to install solar panels on their homes.

Along with local partners, we're identifying solar projects for schools, low-income housing and other sites and developing workforce and supply chain solutions

A note from our executive director

This year, Appalachian Voices celebrates our 20th anniversary. In the center section, we recognize our accomplishments and reflect on the work ahead to protect Appalachia's natural treasures while fostering a just, healthy economy.

The effort to bring the benefits of clean energy to communities impacted by coal is already underway. Below, Adam Wells, our New Economy program manager, shares his perspective on our exciting solar progress in Southwest Virginia.

For the future, *Tom*
Tom Cormons, Executive Director

to keep wealth here in Southwest Virginia. Our innovative approach is gaining traction at the local, state and federal levels — we've received grants this year through the Appalachian Regional Commission's POWER Initiative and the U.S. Department of Energy Solar in Your Community Challenge to further these efforts.

Coal country isn't the easiest place to make this happen, and we're facing plenty of hurdles. Yet there is a growing recognition that our region is at a historic crossroads. Many in my community are eager to diversify the economy and see an ever-widening path forward. We hope you'll join us in the movement to build a just, clean future for the region.

For our communities,



Adam

Adam Wells
New Economy Program Manager

GET INVOLVED environmental & cultural events

See more at appvoices.org/calendar

Roan Mountain Rhododendron Festival

June 17-18: Celebrate the beautiful annual blooming of rhododendrons, and enjoy food, local crafts and music. Roan Mountain State Park, Tenn. Free, parking by donation. Call 423-772-3303 or visit roanmountain.com/rhododendron-festival

Walking the Line into the Heart of Virginia

June 17-July 2: Witness first-hand the land threatened by the Atlantic Coast Pipeline by walking along the path of the proposed route. Bath County, Va. Free, registration required. Call 434-4270-3434 or visit walkingtheline.org

Appalachia Barnraising

June 24-25: Discuss issues threatening the region in a "unconference style" meeting meant to inspire collaboration and ideas. Morgantown, W.Va. \$50. Contact 504-358-0647 or visit publiclab.org/Barnraising

No Pipeline Concert

June 25, 12-6 p.m.: Join Friends of Augusta for live music and drinks at Seven Arrows Brewing Company while standing up against the proposed pipelines. Waynesboro, Va. Free. Visit tinyurl.com/NoPipelineConcert

Firefly Gathering

June 29-July 2: Learn about methods of eco-friendly living with classes and demonstrations, on-site camping and nightly entertainment. Leicester, N.C. Ticket prices vary. Call 828-777-8777 or visit fireflygathering.org

Museum of Appalachia Independence Day Celebration

July 4: Participate in traditional celebrations, including the shooting of the anvil, colonial living demos and old-time music. Clinton, Tenn. \$20 for non-museum members. Call 865-494-7680 or visit museumofappalachia.org/events

The Future of Ginseng and Forest Botanicals Symposium

July 12-14: This three-day symposium focuses on the most current research of American ginseng and other botanicals in the Appalachian area. Morgantown, W.Va. Prices vary, registration required. Call 740-742-3455 or visit tinyurl.com/FutureOfGinseng

Whippoorwill Festival

July 14-16: Learn about sustainable living practices in Appalachia through a weekend of workshops and activities. Beattyville, Ky. Ticket prices vary. Visit whippoorwillfest.com

SustainFloyd and Apple Ridge Farms Energy Fair

July 15: Adults and children are welcome to explore exhibits about clean and renewable energy, including off-grid classrooms and sustainable farming. Floyd, Va. \$3 single tickets or \$5 family. Call 540-745-7333 or visit sustainfloyd.org/event

Hike-a-thon 2017

July 22, 9 a.m.-2 p.m.: Part of a summer series, enjoy a guided hike along Clear Creek Hollow Trail. Pine Mountain State Resort Park, Ky. \$10. Visit parks.ky.gov/parks/resortparks/pine-mountain or call 606-337-3066.

SWVA Museum Historical State Park's Kids' Summer Fest

July 29, 10 a.m.-4 p.m.: Bring the kids out for a day of hiking, crafts and a tour of the museum and grounds. Big Stone Gap, Va. Free. Call 276-523-1322 or visit swvamuseum.org/calendarofevents

Southeastern Permaculture Gathering

August 4-6: Come learn about innovations and trends in permaculture, with countless workshops and educational opportunities. Celso, N.C. Ticket prices TBD. Call 303-931-7586 or visit southeasternpermaculture.org

Across Appalachia

Environmental News From Around the Region

Communities Push Back Against White Supremacist Groups

By Lou Murrey

On April 29, citizens of Pikeville, Ky., Central Appalachia, and beyond showed up clad in red bandanas on the streets of downtown Pikeville in opposition to the white supremacist hate groups that had converged in Eastern Kentucky for the "Take a Stand for White Working Families" rally.

The Traditional Workers Party planned the rally intending to work with other white-supremacist groups, including the National Socialist Movement and the League of the South, to create a "National Front" in order to strengthen racist organizing in the United States. All three of those groups are designated as hate groups by the Southern Poverty Law Center.

Citizens of Eastern Kentucky had been vocal in their opposition to the presence of hate groups in their community from the time the rally was announced. A University of Pikeville student organized a counter-demonstration, the "Rally for Equality and American Values" to be held simultaneously across town, but it was cancelled due to threats.

Threats didn't keep close to 200 counter-protesters from outnumbering and drowning out the speakers and attendees of the white-supremacist rally with noisemakers, chants and signs

such as "Rednecks against Racism."

At the rally, one local Pike County woman told a reporter from the independent media network Unicorn Riot, "We didn't really plan on coming down here, but once we were watching it from afar and we just started thinking about it and we're like, we can't just stand here and not go, that's just as bad as [the Nazis], so we came down here." She continued, "It's surreal, modern-day Nazis. I think they thought they were welcome here but they're not."

Pikeville isn't the only place in Appalachia resisting messages of hate. On May 15 in Charlottesville, Va., hundreds of people gathered for a "vigil against hate" in response to a rally protesting the removal of a statue of Robert E. Lee the night before, which was led by known white supremacist Richard Spencer.

The response to the presence of white supremacists in Appalachian communities has been varied in tactics but unified in message: "hate is not welcome here." As one local organizer of the Pikeville counter-protest who wishes to remain anonymous wrote, "We can't give in to their scare tactics. We won't let Nazis terrorize our community. Together we can show that Appalachians stand together for a world where all are equal."

Residents Allege Herbicide Spraying Caused Health Problems

A group of citizens in Sharps Chapel, Tenn., believe that excessive spraying of herbicides by Powell Valley Electric Cooperative in June of 2016 has caused major health problems for them and their pets.

Residents report that they have experienced painful rashes and kidney issues. When asked by the Knoxville News Sentinel to comment, PVEC General Manager Randell Meyers denied that these health issues were caused by the spraying of herbicides. However, on March 10, a couple from Sharps Chapel filed a civil lawsuit claiming that Powell Valley Electric

Cooperative was negligent in its use of toxic chemicals to clear brush from the cooperative's electric poles.

The spraying lawsuit is the second lawsuit filed against PVEC this year. In January of 2017, the cooperative's director of accounting and finance filed a wrongful termination suit with Powell Valley. According to the Claiborne Progress newspaper, the lawsuit alleges that the employee was fired after alerting the auditing committee that PVEC was possibly engaging in illegal activities. — Lou Murrey

Agricultural Runoff Defiles Shenandoah River

By Carl Blankenship

On April 26, the watchdog group Environmental Integrity Project released a report saying the Shenandoah River had been polluted by livestock production and sections of the river were unsafe for recreation.

The report, which is based on information from the Virginia Department of Environmental Quality, says E.coli pollution levels have exceeded more than 100 times the limit for safe water recreation in certain parts of the river, and Virginia authorities have failed to notify people who intend to recreate in the river.

Manure from livestock in the area surrounding the river is used as fertilizer, but it is applied in excess and leaks into groundwater to later be washed into waterways, contributing to the in-

creased levels of phosphorus and E.coli.

Algae growth due to high phosphorus levels from the runoff can severely harm wildlife in waterways, and consuming water with high concentrations of E.coli can make humans ill, including vomiting and diarrhea.

The state of Virginia is supposed to advise the public not to recreate in the water when 10 percent of sampling exceeds safe levels of E.Coli. Of the 58 regular sampling sites on the Shenandoah, 53 exceeded the safe threshold between 2014 and 2016.

The report recommends Virginia develop a system to manage manure, require farms to have nutrient management plans, tighten inspections and enforcement on cattle farms and increase the frequency of bacteria monitoring.

Mascara Wands to the Rescue for Appalachian Wildlife

A donation program, Wands for Wildlife, has gone viral along with images of small animals being combed with mascara wands.

The "Wandraiser" collects mascara wands, which Appalachian Wildlife Refuge uses to clean fly eggs and larvae from the fur of rescued animals. The volunteer, nonprofit refuge coordinates wildlife rehabilitation efforts in Western North Carolina.

The Wands for Wildlife program has garnered more than 20 articles in state, national and international media outlets, and millions of views on videos created for Facebook by media outlets like The Dodo and Yahoo.

Appalachian Wildlife Refuge has started a crowdfunding campaign to raise \$15,000 needed to open a triage facility for injured animals.

The organization encourages peo-

ple to host their own local "Wandraisers" to benefit the project, and provides a printable "Wandraiser" poster and forms for mailing the wands. — Carl Blankenship

New Entrance Fee for WV State Parks and Forests

An entrance fee to seven West Virginia state parks and forests was put into effect on Memorial Day Weekend.

According to the West Virginia Division of Natural Resources, the fee will include a \$2 charge per vehicle, or a \$12 annual fee that guarantees access to all seven parks.

The purpose of the fee is to provide the agency sufficient funding for park conservation and upkeep. — Rachel Pressley

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Tennessee Broadband Law Brings Opportunities and Restrictions

By Lou Murrey

On May 16, Gov. Bill Haslam signed the Tennessee Broadband Accessibility Act, which will provide \$45 million in grants and tax credits for private companies like AT&T and Charter to subsidize the buildout of rural fiber networks.

William Isom of the Sustainable Equitable Agricultural Development Taskforce, a group working on getting community-owned broadband to rural areas, describes the law as "a good first step, but funding broadband infrastructure is really a billion dollar problem."

One-third of Tennesseans are underserved or underserved by high-speed internet, yet this law restricts municipal, publicly owned broadband networks, like the Gig in Chattanooga, from expanding beyond their service footprint.

The newly signed bill does, however, allow Tennessee's rural electric

cooperatives to provide broadband where previously they were restricted. Isom particularly sees potential for electric cooperatives to connect rural areas to internet access.

"We have good working relationships with the utility boards and we're excited about an opportunity to engage with our electric cooperatives in Tennessee," he says.

The cooperatives seem ready to engage too. Volunteer Energy Cooperative devoted the first page of their April newsletter to the issue of broadband. SEAD held three informational workshops in Cumberland County for Volunteer Energy members in early May.

Even the Tennessee Valley Authority wants to get in on the broadband opportunity. The federally owned utility announced in May that they plan to invest \$300 million in installing 3,500 miles of fiber optic across their seven-state region.

Timber Rattlesnake Sightings Wanted

West Virginia's state reptile, the timber rattlesnake, is in decline and the state Dept. of Natural Resources is requesting help from citizens to learn about the snake's population distribution.

They grow up to four feet long, have a banded appearance and a rattle on the tail.

If you have observed a timber rattlesnake in West Virginia, there is a short survey online in which the department asks for the longitude and latitude coordinates where the snake was sighted, a photograph of the snake and the observer's name with contact information. Access the survey at wvdnr.gov/rattlesnakereport. — Rachel Pressley



Art Exhibit Raises Awareness of New River

By Adrienne Fouts

An art exhibit at the Turchin Center for the Visual Arts in Boone, N.C., aims to raise awareness about protecting the New River. Entitled "Collective Vigilance: Speaking for the New River," the exhibit is also intended to get people thinking about their connection to the watershed.

A graduate class taught by Tom Hansell in the Appalachian Studies program at Appalachian State University partnered with the New River Conservancy, an environmental group, and other organizations last fall for the project.

The comprehensive exhibit includes a display of trash that the class helped collect from the New River, as well as images by local photographers, a mural of native plants, a digital timeline of the New River Conservancy's

history, hand-drawn maps and other components.

"We want people to understand that we're all connected to the watershed and our actions, the materials we consume, all will find a way into the watershed," says Hansell. "It's also amazing looking at all of the trash and thinking about how much stuff we use that we actually don't need."

"Collective Vigilance" is on display until July 29. The exhibit is also designed to travel. The mural in particular is meant to be taken to schools in the area after the exhibition ends.

"I'd like to work with educational institutions, art galleries or places along the river who are interested in doing something similar," says Hansell. "They can sponsor their own river cleanups and get people to be part of more advocacy efforts to improve water quality."

Wildlife Officials Propose Reducing Black Bear Population in Virginia

By Rachel Pressley

The Virginia Department of Game and Inland Fisheries implemented a controversial proposal to expand black bear hunting in order to reduce the population in seven of the 22 Bear Management Zones in western Virginia. The change is meant to limit the impact of bear behavior on humans.

At the board meeting on May 24, the agency finalized changes for the next two hunting and trapping seasons.

A three-day open early season was added to 37 counties during the week before the statewide archery season. The start date of bear hound training season was changed to Aug. 1. An additional

week of muzzleloading in 34 counties was not approved as it had previously caused a 14 percent decrease in the bear population within five years.

The wildlife agency's Black Bear Management Plan is based on public input, the bear's role in the ecosystem, human-bear interactions and bear-related attraction and tourism.

The Wildlife Center of Virginia, a hospital for native wildlife, opposed the reduction proposal. Instead, the organization advocated for lessening human-bear interaction through public education about how to prevent attracting bears, potentially by managing trash responsibly.

For more information, visit virginia-bearhunters.org/news.php.

STAY Summer Institute Offers Opportunities for Regional Youth

Registration is open for the Stay Together Appalachian Youth Project's STAY Summer Institute! The institute will be held at the Appalachian South Folklife Center in Pipestem, W.Va., July 6 to 9.

Young folks aged 14 to 30 living in East Tennessee, Western North Carolina, Eastern Kentucky, Southwest Virginia and

West Virginia are encouraged to join the STAY Project for a weekend of learning, art, music, action and cultural sharing in an autonomous youth space.

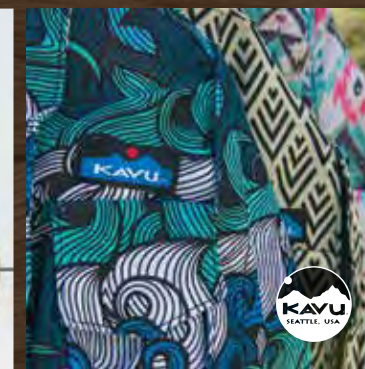
Visit the STAY Project's website at thestayproject.com to register or submit a workshop proposal. — Lou Murrey

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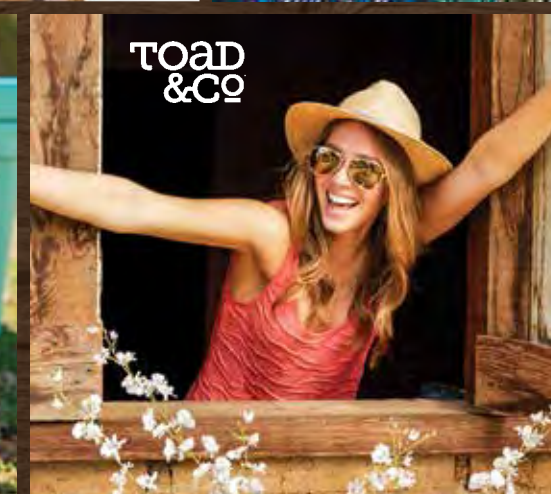
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Fishin' n' Pickin'

Musician Larry Keel uses fishing to unwind and access inspiration

By Eric J. Wallace

For going on five years now, world-renown progressive bluegrass guitarist Larry Keel has spearheaded intimate, three-day and four-night “Bass n’ Grass” and “Trout n’ Tunes” events combining the guitar hero’s foremost passions: fishing and picking.

Held in idyllic settings at waterfront locations like Goose Lake in Georgia and on the Elk River in West Virginia, these one-of-a-kind affairs feature a slew of acclaimed bluegrass musicians and master anglers — including, but not limited to, Keel, Steve McMurry, Jeff Mosier, David Blackmon, Gove Scrivenor, and award-winning bass fisherman and banjoist, Will Lee. The events provide participants with a long weekend of instruction in both the fine art of bluegrass music and freshwater bass or trout fishing.

“We wanted an atmosphere that would lead to a real intimate and laid-back experience,” says Larry Keel, who is 48 years old and lives in Lexington, Va. “Music-wise we have workshops, Q&A forums, nightly shows, constant jam-sessions and tons of hands-on instruction.”

“I try to fish everywhere I go, because, for me, being on the water is a main source of power — like, spiritual power. I try to gather that power to be used when needed through the course of living and creating.”



Meanwhile, out by the water, there are seminars on fishing techniques — how to tie flies, what kind of bait to use, how to understand various fish habitats and so on. With campers typically numbering under 50 and concert-goers around 100, the events are designed to create close interactions between participants and staff.

Keel has 15 original albums under his belt and has shared the stage with greats like Tony Rice, Vassar Clements, Sam Bush, the Yonder Mountain String Band, Keller Williams, Del McCoury, the Infamous Stringdusters and New Grass Revival co-founder Curtis Burch. What led the legendary flat-picker to invest the time and energy into helping put on small-scale events that have as much to do with fishing as music? For Larry Keel, the activities are inextricably interwoven — his family was rooted in Southwest Virginia for generations and he was



Larry Keel, left, says this 10-pound brown trout is the prettiest brown he’s ever caught. He reeled in this specimen along Idaho’s Snake River with guide Travis Rydberg. Above, Larry Keel stands with his band Natural Bridge. From left: banjoist Will Lee, guitarist Larry Keel, mandolinist Mark Schimick, and Jenny Keel on the bass. Photos courtesy of Larry Keel

raised in an environment strongly influenced by mountain culture.

“Fishing is a total Zen experience, it always calms and centers me,” he says, adding that, while he loves all forms of fishing, he has a special passion for Appalachia’s native brook trout and prefers the catch-and-release experience.

“Like music, it’s spiritual, it’s metaphysical, and I can’t live without it ... I try to fish everywhere I go, because, for me, being on the water is a main source of power — like, spiritual power. I try to gather that power to be used when needed through the course of living and creating.”

Growing up in rural Fauquier County, Va., this relationship between music and angling was established early on. “There were three ponds just steps away from our house, so I fished every day of the summer from a really early age, just because it was so convenient and close and safe,” he says. “Mom didn’t mind a bit: I caught fish all the time and we ate what I brought home!”

Then, for his seventh birthday, Larry’s older brother, Gary, gave him a guitar. Encouraged by Gary and his father — both of whom played guitar, with the latter also playing banjo — to join bluegrass picking sessions, Larry got hooked quick. “I burned to learn how to play like them and excel on my instrument, I couldn’t put it down,” he says. From that moment on, pickin’ and fishin’ became the two constants in his life.

That is, until he met his wife Jenny. Married for 21 years, with Jenny

Keel playing bass in almost all of Larry’s touring groups, the Keels joke they’ve been joined at the hip since they began dating in the mid-90s. “I’m not exaggerating when I say that Larry and I have wanted to do everything together since the minute we hooked up,” says Jenny.

“Although I’d never fished before I met him, I was eager to try it,” she says. “He showed me how to put the lure on the line and cast and was with me when I caught my first fish—a little rock bass on the Maury River, in Rockbridge County, Va. Fishing with Larry feels like all the things we do together, it’s just wonderful to share the experience with my best friend.”

Over the course of the past two decades, the couple has fished together in a variety of settings throughout the country and beyond. “I try to fish everywhere I go, especially when there’s a special spot I want to check out, or when time allows in the middle of a touring schedule,” says Larry. “But we also make time to go on purely pleasure-based fishing trips that aren’t associated at all with music or touring.”

Along with recent forays in Mexico and Hawaii, some of his favorite outings were on the Chilkoot River near Haines, Alaska, and on Idaho’s Salmon and Snake rivers. Closer to home, he loves to fish the upper James River, the Maury River and, in North Carolina, a favorite is the French Broad.

However, the guitarist counts

Fishin’ n’ Pickin’

continued from previous page

the Outer Banks of North Carolina as his go-to haven. “Unless there’s a hurricane or a crazy storm hitting the area, I find it really serene and mystical there,” he says. “But really, I have to say that every time I fish, no matter where I am, it’s a special and soul-enriching experience.”

On the road, the Keels say they frequently view the sport as a relaxing social event. Indeed, on top of meeting great locals and fisherfolk, Keel says he’s gotten every band member he’s played with over the last 15 years onto the water and has been known to write or play music while sitting in a johnboat on a quiet lake.

Keel likes to recall a particular misadventure with mandolinist Mark Schimick and Leftover Salmon’s current banjo player, Andy Thorn. Along with Jenny, the three were playing a music festival in southern Florida under the banner of Keel’s longtime band, Natural Bridge, and had paused to enjoy an afternoon of fishing on a nearby lake. Situated in a small johnboat, they glided through the water with Keel playing captain, Thorn at the bow and Schimick in the middle.

“Andy was particularly excited about the fishing, and we were all reeling in some beauties,” Keel recounts with an ominous chuckle. “He kept casting pretty wildly, back-casting a little too long and a little too powerfully to be in such close quarters with two other anglers in a little boat. Well, one of those back-casts landed smack in the back of my head, just below the band of my hat.” When Thorn went to follow-through with the cast, the hook set.

“He was using a huge treble-hook-style lure with nasty barbs and it dug deep into the back of my head. Now, you can’t just pull those things out; the hooks are designed to grab hold of the inside of whatever they attach to. They were totally embedded in my scalp, almost to the bone!”

To the local urgent care the band went, where, after a minor surgical procedure and a tetanus shot, the doctor handed Keel a specimen jar housing the lure. “I gave it to Andy as a souvenir and a reminder to check his wild casting when in a boat with other people,”



Bluegrass guitarist Larry Keel keeps an active touring schedule and is working on his sixteenth studio album. At right, he reels in a bass on Georgia’s Goose Lake. Photos courtesy of Larry Keel

Keel laughs. “It’s funny because, when I was visiting him a couple of months back in Boulder, Colo., I saw he still has the jar—it’s on display in his music room!”

In addition to viewing fishing as a conduit to recharge their creative energies and a means of bonding with friends, the Keels say angling is a perfect excuse to connect with the natural world. In the past, talking to them about nature and fishing elicited quiet musings punctuated by heavy doses of laughter, some penchant tall tales, and a healthy dose of mysticism thrown in for good measure. However, faced with a Trump administration that they feel is bent on the eradication of environmental protection standards for waterways and just about everything else, the connection is something they feel obligated to emphasize.

“I’m for nature first, since mankind can’t really do without it here on planet Earth,” says Keel. “It’s just common sense that we need to pay close attention to our natural world, take care of it, be stewards of it instead of just reckless users. Then it will continue to provide good stuff for us. You know, inconsequential things like clean air and water! It’s just common sense that we have an intrinsic relationship with our natural world — like a family member, it’s something that takes care of you and out of love and respect you take care of it back.”

This summer, from Aug. 31 to Sept. 5, Larry and Jenny will again be publicly celebrating the relationship between music, fishing, creativity and the environment by headlining another pickin’ n’ fishin’ festival in Idaho, “Pickin’ on the Middle Fork.” As the name suggests, the event will be held on the Middle Fork of the Salmon River in a national park wilderness area, which is

“It’s just common sense that we need to pay close attention to our natural world, take care of it, be stewards of it instead of just reckless users.”

known for its excellent fly-fishing.

Until then, with Larry currently working on writing material for his sixteenth studio album, there will be many a day spent fishing. “The music I’m writing right now is sophisticated and experimental, playful, dark, exhilarating,” he says.

“But I can’t ever get too far away from my own Appalachian roots. It’s in my personality... I was born here in



Virginia and all my closest family are still here, so it’s natural for me to stay near to what’s always been special and meaningful to me. Jenny and I continue to live in this area because it just calls to us. Of all the places in our travels, the Blue Ridge Mountains are the most purely spiritual, magical and inspiring to our hearts. Being here always soothes us and restores us when we’re road-weary.” ♦

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continued on next page

Hidden Treasures

Fishing and Swimming Spots

The hundreds of streams that criss-cross the Appalachian Mountains and feed the region's many rivers also provide countless swimming holes, waterfalls and places to fish. Here, we explore a sampling of these fishing and swimming hotspots.

While the brook trout is the only game fish native to Appalachia, the popularity and economic power of fishing

has led state agencies to maintain populations of non-native rainbow and brown trout in Appalachian streams as well. The balance between recreation, sport and ecology is delicate and sometimes troubled. A complex set of fishing regulations governs each state's waters, and licenses are required. Doing your homework before packing your tackle box will ensure smooth encounters

with local game wardens.

Anglers, hikers and swimmers alike are drawn by the beauty of the woods and the allure of refreshing, clean water. Respect local trails to minimize erosion, and don't leave trash behind. That way, future adventurers can enjoy the pristine splendor of Appalachia's watering holes, too — and these special places will be preserved for your next visit!



Exploring the South Toe River

Photo by Gary Peeples/USFWS

Flowing from Mt. Mitchell, the South Toe River in North Carolina is filled with rainbow, brown and brook trout.

The river stems from a slew of creeks and tributaries that are also fishable: Big Lost Cove Creek, Little Mountain Creek, Hemphill Creek, Colbert Creek and Neals Creek, to name a few. The river is accessible via the Blue Ridge Parkway near milepost 352 by turning onto Forest Road 472 (S. Toe River Rd.), which follows a

five-mile stretch of the river.

Near Burnsville, the river can be fished year-round, but the area is quieter during the winter months due to fewer fish and the parkway's more frequent winter closings. It can be fished more successfully in the spring. Sections of the water, including a mile-long stretch that flows through Black Mountain Campground, are catch-and-release and only allow artificial bait. — *Carl Blankenship*



Fishing the North Fork of the Cherry River

Photo by Tim Kiser, Wikimedia

The North Fork of the Cherry River is a small stream that flows through Monongahela National Forest near Richwood, W.Va. Because it starts in higher elevations, the temperatures of this pristine mountain stream stay cooler for longer in the year, making it a good habitat for wild trout.

A catch-and-release, fly-fishing only section of the North Fork extends almost two miles upstream from a water supply dam in Richwood to the state Route 39 bridge. Since Route 39 runs alongside much of the river, fishing spots are easily

accessible to anglers.

"The North Fork's a nice little stream," says Jason Starcher of Four Seasons Outfitters in Richwood. "It's shaded a lot, and people like it because it's smaller than a lot of the streams around."

While the catch-and-release section is not stocked, on the other side of the bridge the river turns to general regulation fishing and is stocked with brown, rainbow and golden rainbow trout in addition to the native brook trout. — *Adrienne Fouts*



Fly Fishing the South Holston and Watauga Tailwaters

South Holston, Photo by Dan Grogan

When it comes to fly fishing spots in the Southeast, some of the best are the sister tailwaters of the South Holston and Watauga rivers. Both are located in eastern Tennessee and flow from dams at South Holston Lake and Wilbur Lake, ending up in Boone Lake. These dam-released waters from mountain lakes are always cold—ideal for trout fishing.

These rivers maintain optimum water temperatures year-round," says Robert King, shop manager and guide at South Holston River Fly Shop. "That makes it an outstanding trout habitat. The trout can range from five to 20 pounds, and insect life is extremely prolific."

What lures most people to fish at the tail-

waters is the thriving brown trout population, with around 11,000 fish per mile in the South Holston, and the rivers' famous sulphur hatch. "Sulphurs" is the common term for the mayfly species that hatch on these rivers from May to October, which the trout feed on. People love to fish with dry flies here, King says, especially in the middle of the summer when there are daily sulphur hatches.

In addition to brown trout, the South Holston River contains rainbow trout, and the Watauga River has populations of rainbow and brook trout.

Anglers should make sure to check the dams' generation schedules before planning a trip. — *Adrienne Fouts*



Gorge Fishing at East Fork of Indian Creek

Photo by Brenda Walker Photography, brendawalkerphotography.zenfolio.com

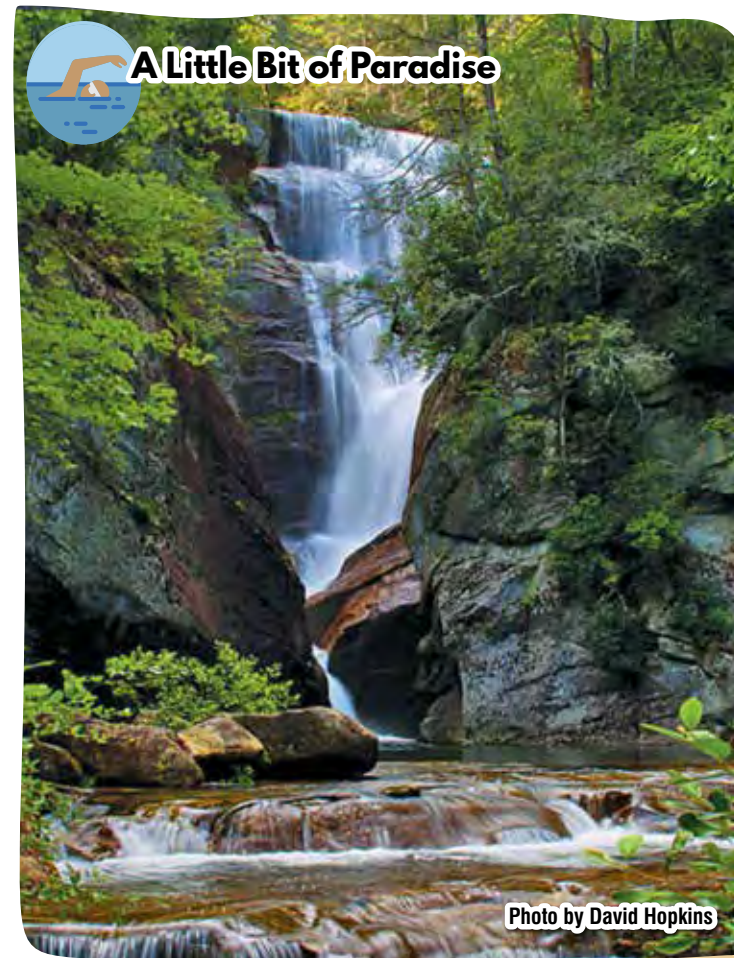
The East Fork of Indian Creek in Miffee County, Ky., offers anglers an exceptional stream trout fishing experience in the middle of the scenic Red River Gorge area.

From April through September, the stream is under statewide fishing regulations, but from Oct. 1 to March 31, this 5.3-mile section of the creek is catch-and-release only. The East Fork is stocked with 4,500 rainbow trout throughout the year, as well as 400 brown trout — more fish than trout

streams of its size usually receive, according to Scott Barrett, a biologist at Minor Clark Fish Hatchery.

Anglers can also combine their fishing trip with other outdoor activities that the Red River Gorge area is well-known for, including camping, hiking and rock climbing.

"It's in a beautiful area, down in the gorge," Barrett says. "That's probably the biggest thing that sets it apart from other trout streams." — *Adrienne Fouts*



A Little Bit of Paradise

Photo by David Hopkins

On Hwy. 281 near an unofficially marked roadside trailhead in Wolf Creek, N.C., the Nantahala National Forest hosts a remote and natural hidden treasure known as Paradise Falls.

The falls are surrounded by trees and concealed in a mini slot canyon below Wolf Creek Lake. The lake is one of multiple dammed lakes that make up the headwaters of the East Fork of the Tuckasegee River.

The release of the dams affects the amount of water flowing down the falls, which can be dangerous during heavy flows. For safety, check the latest water levels before visiting. In addition, the dates

for water release are available at tinyurl.com/nantahala-dam-release.

The steep 1.5-mile trail climbs within and around a gorge, leading to Paradise Falls. Two popular swimming holes are hidden within the gorge, one below and one above the falls. Once at the base of the falls, hikers can swim across the pool to the entrance of the canyon, climb a rope up the rocks and witness the falls flowing into the chasm.

At this location, there is no cellular service available. Due to the rough terrain and slippery cliffs, water resistant shoes with good tread are recommended. — *Rachel Pressley*



From the Archives

Upper, Little Stony Falls, Photo courtesy USDA/Forest Service

Little Stony Falls



Snorkeling the Conasauga River

Photo by USFS/ Holly Krake

Snorkeling might not immediately come to mind when thinking of summer activities in Appalachia, but a stretch of the Conasauga River in Tennessee's Cherokee National Forest offers visitors the opportunity to do just that.

The clear pools in this section of the river are perfect for swimming and viewing a wide array of fish and freshwater life. Watersheds in the southeastern United States such as the Conasauga River are some of the most biologically diverse in the world, and at least 45 different fish species have been identified in this snorkeling area alone,

including freshwater drum, bass, darters and shiners. Snorkelers may also happen upon turtles, tadpoles or even the hellbender salamander.

Visitors wanting to snorkel can access the river from the Conasauga River Trailhead (#61) parking lot in Polk County, about an hour and 15 minute drive from Chattanooga, Tenn. Individuals can snorkel on their own here or in other streams in Cherokee National Forest. Larger groups can schedule a guided snorkeling experience with gear and lifeguards by calling the U.S. Forest Service at 423-476-9700. — *Adrienne Fouts*



Emerald Pond: A Hiker's Reward

Photo by Clark Spittler

A hidden oasis in Virginia's George Washington National Forest awaits those who are willing to hike for it. Emerald Pond, aptly named for its crystal-clear green water, is spring-fed and relatively warm for a mountain pond, making it an inviting swimming hole, as well as a good spot to relax.

The hike to Emerald Pond begins a few miles east of New Market, Va., at the abandoned Massanutten Visitors Center on U.S. Route 211. For 0.3 miles, hikers take the white-blazed Wildflower Trail from the parking lot until it intersects with the orange-blazed Massanutten South Trail. The trail climbs steeply through a boulder field until it reaches the top of the ridge, where hikers are greeted with vistas of the Harrisonburg Valley. Hikers veer

right at the intersection with the white-blazed Bird Knob Trail, and at slightly over 3 miles total, they reach Emerald Pond. They can then follow a forest service road, which is also part of the Massanutten South Trail, back to the Bird Knob Trail junction and retrace their steps back to the parking lot, making the hike a little over 8 miles round trip.

The Emerald Pond Hike is perfect for a summer's day — the trail's overlooks and the beautiful waters of the swimming hole make the moderate challenge of the hike worthwhile. Emerald Pond even has a campsite on its banks for those wishing to make the hike an overnight trip. For more details about this hike, visit hikingupward.com/gwnf/emeraldpond. — *Adrienne Fouts*

The 2.8-mile Little Stony National Recreation Trail, located in the Jefferson National Forest in Virginia, follows Little Stony Creek and passes by three waterfalls. A fairly easy hike, this trail is a good alternative to the more strenuous Devils Fork Loop nearby. Hikers can begin at either a parking lot on Forest Road 701 or on the other end of the trail at Hanging Rock Picnic Area.

From the Forest Road 701 parking area, Little Stony Falls is just a quarter mile down the trail. Here, a 24-foot vertical waterfall cascades into a 10-foot pool below. This spot offers many scenic views and is a whitewater kayaking

destination for very advanced boaters. A bridge stretches across the top of the falls, allowing hikers to stand directly above the rushing water. The pool below is brisk, making it a great spot to cool down in the late summer months. Further along, the trail also passes two beautiful smaller waterfalls.

For hikers seeking a more challenging trip, the trail connects to the Chief Benge Scout Trail, an 18.7-mile trail that encompasses seven different trailheads including High Knob, an iconic Appalachian lookout. — *Anna Norwood, updated from version published in August/September 2012*

Shrinking Carbon Footprints

Offset programs aim to counter climate change while providing other benefits

By Carl Blankenship

Changing diets, recycling more, driving less and upgrading building efficiency are all ways to reduce one's impact on the environment. But in 2017, while there are plenty of ways to limit that impact, it is extremely difficult for individuals to eliminate their entire environmental footprints.

That is where carbon offsets come in. Carbon offsets are programs that help eliminate the greenhouse gases from the atmosphere that are causing climate change. There are a number of types of programs that offset carbon. Some of the most effective ones have a local impact and produce other benefits.

Carbon Neutral Commuter

Appalachian State University's Office of Sustainability runs the Carbon Neutral

Commuter offset program in Boone, N.C. Students and faculty who purchase parking on campus can opt into the program and pay \$8 annually to offset all of their commuting emissions. These emissions make up about 20 percent of the school's carbon footprint at about 17,000 metric tons of carbon dioxide per year.

Appalachian State runs its program through Sterling Planet, a commercial offset provider that has operations nearby.

Sterling Planet has several programs, but the university opted for methane destruction. While methane is not carbon dioxide, it also has significant impact on global warming. Sterling Planet's methane destruction program involves wicking methane off landfills and combusting the gas before it can be absorbed in the atmosphere. Methane is produced in large quantities at landfills as a byproduct of trash breaking down.

The university's program began in 2014 and has enjoyed above-expected participation rates; 17.5 percent of commuters in 2015 and 12.5 percent in 2016 have bought into the program. Those numbers exceeded estimates from Sterling Planet by one to three percent, in spite of a lack of marketing.

"People here really have an appetite for this sort of thing," says Jim Dees, the data and assessment specialist for the Office of Sustainability.



Participants in Appalachian State University's Carbon Neutral Commuter program display these stickers on their cars. Photo by Carl Blankenship

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Solarize Wise is a community program to make it easier and cheaper to go solar. Solarize Wise is open to homeowners, farmers and small businesses in or near Wise County, Va.

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Commuters who buy into the program receive bumper stickers that can be stacked on top of each other, leaving the date exposed. The organizers hope that people will participate year after year and have a collection of stacked stickers, showing each year they participated in the program, on their cars that will passively boost the program's visibility around campus.

When asked about the kind of person who was interested in contributing to the program, Dees said he believes it is good samaritans who recognize the issue of climate change and are compelled to take action and do something positive to make amends for their contributions.

Carbon Neutral Commuter was started as an independent program, but its success has encouraged Dees and Sarah Hooper, a recent graduate assistant, to prepare to expand offsetting to other university activities, such as energy purchases, landfill waste and university-sponsored air travel.

The long-term goals of emission reduction programs are to both lighten the university's footprint and educate students so they can take what they learn into the larger world.

"If people don't know what they're doing, how can they lower their emissions?" Hooper says.

The greatest impact the university can have on the environment comes from educating students regarding emissions, according to Dees.

"If [Appalachian State] went carbon neutral tomorrow, or by next Thursday, it would be great, but it would be a very small impact globally," Dees says. "But if we are cranking out students year after year after year after year for the next 25, to 30, to 40 years that understand [global warming is] death by a thousand cuts ... and we need to do everything



Over the long term, Isaac Dickson Elementary School stands to save \$3.5 million in electricity costs through a solar array donated by Appalachian Offsets. Above, Isaac Dickson students rally for the sustainability of their school. Photo by Pat Barcas

we can to avoid that, that's where I see the impact."

Appalachian Offsets

The move to expand carbon offsetting through tangible local projects is not unique to Appalachian State. The Asheville-based Western North Carolina Green Building Council, a nonprofit organization, started Appalachian Offsets in 2007.

While the program failed to gain much traction in its early years due to the 2008 recession, it raised about \$40,000 in the three years following its creation and finished a couple of projects with that money. It was revived in 2016 due to renewed interest in the program and a pair of grants from the Ray C. Anderson Foundation and the Kendeda Fund.

"It was a combination of enthusiasm from our board and our membership," WNC Green Building Council Executive Director Sam Ruark-Eastes says. "Realizing that we could play an active role in supporting energy efficiency upgrades for non-profits and in schools."

When the project relaunched it did so with a new, sleeker website — cutmycarbon.org — with a more intuitive carbon calculator that allows users to determine their carbon footprint in a few minutes. The calculator can tell how many tons of carbon a household produces annually and how much money they need to contribute to the program to offset their total tonnage.

The program focuses on building projects that both offset carbon and

continued on next page

Carbon Footprints

continued from previous page

benefit the community. Appalachian Offsets has contributed to programs that have eliminated nearly 3,000 metric tons of carbon emissions since its inception.

Appalachian Offsets is currently working on two Asheville-area projects: A lighting retrofit for Opportunity House, a cultural and performing arts center, and a solar array that will have long-term benefits for Isaac Dickson Elementary School.

Lighting retrofits replace older incandescent bulbs with new LED light bulbs, which are more energy efficient and have much longer lifespans. The Opportunity House project will offset over 40 metric tons of carbon emissions annually. Roughly \$26,000 has been raised for the project through a combination of public crowdfunding and corporate contributions.

The effort to provide solar-powered electricity for Isaac Dickson Elementary School is much larger, with a price tag over \$1 million.

Appalachian Offsets is raising \$220,000 from individuals and groups, and investors are contributing \$800,000. The investors will each share use of the array based on how much money they put into the project and receive tax credits for their contributions. After seven years the array will be donated to the school to serve the remainder of its 25-year lifespan, saving at least \$3.5 million for the school over that time period.

WNC Green Building Council Community Engagement Director Cari Barcas says the program targets nonprofits and schools that stand to benefit most from these kinds of sustainable upgrades but are often unable to afford them.

"Our program is really designed as a bridge to bring together these companies and individuals who are looking to offset their emissions along with organizations that need support in upgrading their facilities and reducing their energy costs," Barcas says.

Clinch Valley

Trees also offset greenhouse gas emissions by absorbing carbon dioxide from the atmosphere during photosynthesis. The Nature Conservancy's Clinch Valley program, currently covering about 23,000 acres, is preserving a tremendous amount of trees.



High school interns with The Nature Conservancy remove an invasive plant known as tree-of-heaven in Russell County, Va. At right, a view of Wards Cove in Tazewell, Va. Photos courtesy of The Nature Conservancy



Since the program began in 2002, these trees have absorbed 474,737 metric tons of carbon dioxide, which has been certified by a third party. Program Manager Greg Meade says they expect approximately 75,000 more tons of offsets to be certified soon.

The program is doing more than offsetting emissions, it is also protecting forested areas in the Clinch River Valley of Southwest Virginia and East Tennessee. The Nature Conservancy, a national land conservation organization, manages the forest, which in turn helps maintain the health of the Clinch and Powell river systems, both part of the Tennessee River Basin.

Clinch Valley Program Director Brad Kreps says the rivers are two of the most biologically important in the country, hosting a large number of rare species.

"A big part of keeping those rivers healthy is to protect the forests that surround the river and influence all the headwater streams that feed into the river," Kreps says.

He notes that there are over 40 species of freshwater mussels in the Clinch and Powell system, half of which are federally endangered, and more than 130 types of fish in the rivers. In total the Clinch River hosts the largest number of imperiled species in any United States river.

"Historically the Tennessee River system supported a wide variety of fish and freshwater mussel species," Kreps says.

On top of the inherent value of species, Kreps says protecting mussels is important because they are filter feeders that help clean the waterways, benefit-

Kreps says the forests and rivers also offer recreational value, which directly benefits the local economy.

The Nature Conservancy operates on private land and pays the landowners annually in exchange for rights to manage the land and timber. Funding for the project is generated through timber harvesting — done in a way that aims to be ecologically responsible — and additional funds from The Nature Conservancy.

"What we're doing is carrying out, basically, scientifically sound silvicultural [forestry] practices," Meade says. "Which doesn't really sound like a big deal, but in absence of us being involved in these projects, business as usual in the Central Appalachian zone on private land is typically mismanagement of the forests."

Like other conservation forestry programs and other carbon offset programs, these projects are capable of creating positive impacts in the areas they serve beyond reducing the greenhouse effect. Funding for these projects can produce educational benefits, save money and help preserve natural areas. ♦

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Duke Energy Wants to Raise Rates to Pay for Coal Ash Cleanup

By Elizabeth E. Payne

In a long anticipated move, Duke Energy announced its intention to raise the rates of customers in North Carolina, in part to cover the cost of cleaning up its coal ash impoundments.

Coal ash is a byproduct of burning coal for electricity. The utility has stored millions of tons of ash in 34 impoundments across the state for decades. These unlined ponds have been proven to leach toxic compounds harmful to humans into nearby groundwater.

On May 2 the company submitted a statement to the North Carolina Utilities Commission voicing its intent to apply for a rate increase on or before June 1. The filing applied specifically to Duke Energy Progress, a division of the company that serves central and eastern North Carolina, as well as the Asheville area.

Duke stated in a press release that the rate increase would pay for modernization of the state's electric grid, investments in clean energy, costs associated with Hurricane Matthew and "costs associated with the ongoing

management of coal ash and the safe closure of ash basins."

In preparation of its request to seek rate increases, Duke Energy also asked the commission to allow it to account for any coal ash related costs in the future rather than admitting them as losses now. This move would also pave the way to pass the costs on to ratepayers.

According to the Charlotte Business Journal, denying this request would "play havoc with [the company's] financial reports."

Once completed, cleanup costs are projected to exceed \$5 billion.

Many have objected to this accounting maneuver, including the office of the state's attorney general.

"The coal ash costs that Duke Energy seeks to recover are out-of-the-ordinary and very concerning because they may result in large rate increases for consumers," wrote Assistant Attorney General Margaret Force in a recent filing with the commission. "There are important questions that need to be addressed about whether all of the costs that Duke Energy

seeks to recover were reasonably and prudently incurred."

In April, lawyers for the company justified its accounting for these costs by saying that "The federal government and state of North Carolina have adopted significant new legislation and regulatory requirements obligating [Duke Energy] to spend significant amounts to comply," according to the Greensboro News and Record.

But in comments filed with the commission in March, NC WARN, a nonprofit focused on fighting climate change, viewed the impact of the state legislation differently.

"Although compliance with state and federal regulatory requirements should be part of the normal operations of an electric company, mandatory requirements to clean up after violations and criminal convictions should not."

Once Duke Energy formally submits its request for a rate hike to the state utility commission, a series of



When a Duke Energy coal ash pond failed in 2014, waste entered the Dan River through this pipe. Photo by Appalachian Voices

public hearings and comment periods will be scheduled, after which the commission will decide what, if any, rate increase the utility can enact.

Duke Energy is also asking the N.C. Utilities Commission to change the terms under which it pays for the solar energy it purchases. Among other technical requests, the company is asking to shorten the term of its contracts with independent solar producers from 15 years to 10 and to make the payment levels variable, resetting every two years.

Each of these requests would draw money away from the solar producers and make investments in solar energy more risky and expensive. ♦

Special Section

AppalachianVoices

Celebrating 20 years of defending the mountains, watersheds and communities of Appalachia

20 YEARS

A Letter from Our Board Chair

When I joined Appalachian Voices' board of directors in 2014, I knew I was coming into a trusted organization with a reputation for getting things done. The group had long been at the forefront of the fight to end mountaintop removal coal mining by helping to build a nationwide movement from the ground up. With your support, we've become so much more.

Today, Appalachian Voices is working at the nexus of America's energy transition. This organization is a leading force accelerating the shift from fossil fuels to clean energy, healthy communities and more sustainable local economies.

Our community-first approach has been fundamental to Appalachian Voices' work throughout our 20 years of fighting to protect the land, air, water and economic future of Central

and Southern Appalachia. The well-being of local communities remains the soul of our mission and informs our strategies going forward during this most critical time for the region.

By engaging deeply in impacted communities, our team earns the respect of local leaders, state and federal officials, and members of Congress. Those relationships allow us to transcend the boundaries that have hindered progress in Appalachia for far too long.

Although the coal industry has begun loosening its grip on Appalachia, mining continues to endanger communities and the environment. Emerging threats to natural resources are also on the horizon in the form of massive natural gas pipelines that cost billions of dollars, often crossing pristine mountain heritage lands.



The Appalachian Voices team in August 2016.

To counter that threat, Appalachian Voices is putting forward a positive vision for the region's future and the role it can play in America's energy transition.

Appalachian communities deserve to share in the benefits of the new, clean energy economy. It's a testament to this organization's nimbleness and staying power that, while continuing the fight against fossil fuels, Appalachian Voices is now also recognized as a champion of clean energy sources that generate

local jobs and community wealth, and that sustain Appalachia's incomparable natural heritage.

After two decades of innovative and successful campaigns, we are well-positioned to help lead the region toward a healthy, prosperous future.

Please join me in supporting this remarkable organization.

On behalf of the Appalachian Voices Board of Directors,

James (Kim) Gilliam



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Staff conduct water quality monitoring in Central Appalachia.



Photo by Kent Mason

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of Action, Innovation and Collaboration

By Cat McCue, Appalachian Voices
Director of Communications

This year, Appalachian Voices is celebrating two decades of bringing people together to stand up for the mountains, for clean rivers and drinking water, for farms, forests and wildlife, and for healthy communities across the Appalachian region.

It's been an amazing journey so far, marked by significant victories as well as a few bumps in the road. We've grown stronger and wiser, staying nimble and tackling pressing issues as they've emerged, yet remaining true to our vision of ensuring a vibrant and just economy in Appalachia that sustains our region's natural treasures.

Appalachian Voices formed in 1997 as an outgrowth of *The Appalachian Voice* newspaper, established the year before in Boone, N.C., to cover environmental issues. The paper's founders, including Harvard Ayers, soon realized the urgent need for a nonprofit advocacy organization devoted solely to Appalachia.

Our first campaigns aimed to protect private forests and public lands, cut toxic air pollution from coal-fired power plants, and fight mountaintop removal coal mining. We helped stop the proliferation of massive wood chip mills that threatened native forests, and championed the North Carolina Clean Smokestacks Act, one of the strongest air laws in the country.

As we connected more deeply with impacted citizens, our strategies evolved to better address the challenges they faced. We doubled down on our campaign to stop mountaintop removal, building our expertise on water law and coal

markets to stand toe-to-toe against industry lobbyists. As a co-founder of The Alliance for Appalachia, we helped move the issue to the national stage with the iLoveMountains.org website (for which we were named a "Google Earth Hero") and with the Appalachian Treasures road tour under the guidance of our grassroots organizing mentor, the late Lenny Kohm.

Our discovery of tens of thousands of violations of the Clean Water Act started a five year battle with one of Kentucky's biggest coal companies that resulted in a landmark legal settlement in 2015.

When a massive TVA coal ash impoundment near Kingston, Tenn., failed in 2008, we arrived on site soon after, testing for pollutants and documenting the disaster to hold the guilty parties accountable.



The inaugural Southwest Virginia Solar Fair was a success.



The beauty of the West Virginia highlands. Photo by Kent Mason

home improvements, and are making inroads with several others in Western North Carolina and East Tennessee.

We also launched our New Economy for Southwest Virginia program, opening an office in Norton in early 2015 and expanding our work to promote a more diverse economy. Appalachian Voices is advocating for federal investment to repurpose old coal mines for sustainable activities, and we're a leading partner in a burgeoning effort to establish Southwest Virginia as a hub for the solar industry.

After 20 years of action, innovation and collaboration, Appalachian Voices is on solid ground as we continue this amazing journey over the next 20 years — and beyond.

Looking ahead...

Appalachian communities are on the frontlines of America's shift from fossil fuels to cleaner sources of energy — a critical transition fraught with challenges as well as opportunities. Current politics threaten to stall that shift, leaving the region behind. Appalachian Voices is standing strong,



A northern parula. Photo by Frode Jacobsen

undeterred in our mission to advance a sustainable, equitable economy that is powered from the ground up.

Our staff now numbers 32, and has the credibility, expertise, guts and dedication needed to make an impact. We work in partnership with more than 100 local, state and national organizations. And we are fortunate to have the support of our members, donors and philanthropic foundations. Currently, we are working to:

- ▶ Build public and political support for growing a solar industry in Southwest Virginia
- ▶ Partner with local citizens to investigate the environmental abuses of coal companies and to hold regulators accountable for enforcing the law;
- ▶ Challenge new proposed mountaintop removal mining permits;
- ▶ Defeat two massive fracked-gas pipelines proposed in our re-

gion — the Mountain Valley Pipeline and Atlantic Coast Pipeline — which would cut 900 miles through farms, streams and private property and worsen climate impacts;

- ▶ Hold North Carolina's governor to his pledge to rectify the state's coal ash problems and ensure that citizens have safe drinking water; and
- ▶ Motivate more electric co-ops to provide debt-free financing for energy efficiency, which would particularly help low-income families.

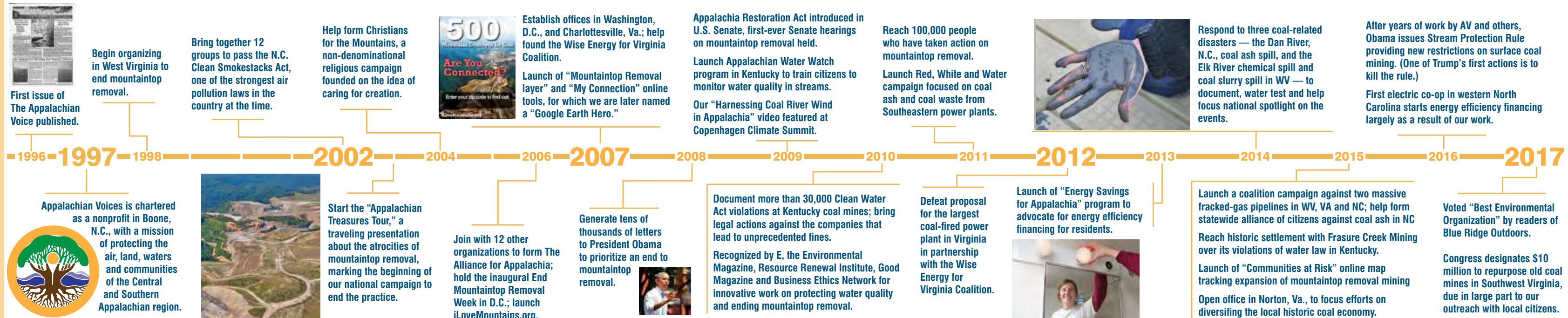
Over 20 years, our roots in this region have only grown deeper. Our connection to the land and people sustains us in everything we do, and will guide our work going forward. Whether in the halls of Congress, in a courtroom or on a riverbank, we take a stand on behalf of citizens throughout the region. We'll be sticking around for a long time to come. ♦



Citizens examine plans for a walkway and clean up of an abandoned coal tippie along the Guest River. Photo by Fred Ramey



Hiking the mountains. Photo by Kent Mason



A Toast to Our "Top 20"!

As a grassroots organization, Appalachian Voices is deeply connected to the folks who live in and love the Appalachian region. Our work is driven by your connection to this place, and we draw inspiration every day from people who stand up to defend the mountains, waters and communities — especially in the face of powerful corporate and political interests. In short, we couldn't do it without you, our members.

And so, on the occasion of our 20th anniversary year, we are delighted and honored to recognize our "Top 20" longest-standing supporters. We're indebted to you.

- Kent Walton and Susan Tyree**
Boones Mill, Va.
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Join the Movement

Protect our natural heritage and help build a sustainable, just future in our Appalachian Mountains. There are many ways to get involved.

Photo by Kent Mason

Take action

- Sign up at appvoices.org/signup to receive action alerts and monthly updates about our work.
- Research your state and federal representatives' views on fossil fuels and environmental protections. Add their phone numbers to your contact list, and call to let them know where you stand.
- If you live in Central Appalachia, report and track incidents of water pollution via Appalachian Water Watch. Visit appalachianwaterwatch.org or call 1-855-7WATERS to submit a report, or subscribe to text-message alerts about water contamination in your area.



At a North Carolina home, volunteer Sadikshya Aryal replaces a CFL lightbulb with a more efficient LED one.

What You're Saying

"Appalachian Voices is by far the most strategic and effective organization working on the issues of climate and energy in the region." — Heidi Binko, Executive Director, Just Transition Fund

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"When it's time to defend America's beauty from the oil-spillers, from the clear-cutters, from the mountaintop removers ... Appalachian Voices is right there, on the front lines." — Van Jones, Activist, Commentator and AV Advisory Council Member



AmeriCorps member Katie Kienbaum speaks with the public at a film screening.

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Photo by Kent Mason

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Reclaiming Mined Mountains



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After half a century of surface mining, roughly 1.2 million acres have been flattened by mountaintop removal coal mining across Central Appalachia. Since 1977, federal policy has required that coal companies take steps to return the land to its original form, but this reclamation work rarely prepares the land for other beneficial uses.

Some nonprofit groups focus on reforestation, such as Green Forests Work, which recently celebrated the planting of its two millionth tree. And across the region, others are seeking to restore the land through agriculture, renewable energy projects and efforts to rebuild damaged streams.



The reclaimed mine land above is the future site of AppHarvest's 2 million square foot greenhouse. Photo courtesy of AppHarvest.

At left, Lola Cline and Joe Duncan, both former coal miners, work with site crew chief James Russell (left) to plant seedlings on reclaimed mine land in Mingo County, W.Va. Photo by Nathan Hall/Coalfield Development Corporation



New Growth on Former Coal Mines

By Elizabeth E. Payne

Throughout an entire summer, Brian Hubbard gathered rocks from the land in Pound, Va., where he planned to plant blueberries.

"What I did is I had a tiller and I plowed it," he says. "And I had to go as slow as it would go, and I plowed up rocks and I gathered rocks. And then I plowed it in the opposite direction and I gathered more rocks."

He estimates he pulled 50 tons of rock out of his land that summer.

Rocky soil that has been compacted with heavy machinery is just one of many challenges facing farmers who want to plant their crops in the reclaimed mine lands of Central Appalachia.

But Hubbard is one of a growing number of farmers who see potential in this land and are willing to put in the effort to rehabilitate the land for planting. Across the region, projects large and small are restoring the landscape and reimagining the future of Appalachia: rethinking how to care for the land, where to find work and how to put food on the table.

Reshaping the Market

A new agricultural project called AppHarvest is set to break ground in July, and project planners hope the



Jonathan Webb of AppHarvest tours a former mine with members of Dalsem, the company designing a greenhouse for the site, and with officials from Pikeville, Ky. Photo by AppHarvest

endeavor initiates a change in where Americans get their produce.

The project would entail constructing a 2 million square-foot greenhouse on 60 acres of reclaimed mined land in Pikeville, Ky., where tomatoes, bell peppers and other produce will be grown using hydroponic techniques. This type of agriculture involves growing plants in nutrient-rich water solutions instead of soil.

AppHarvest Founder and CEO Jonathan Webb has generated funding for the endeavor through traditional bank financing, as well as from private funds and investors. He hopes his project will be the first of many large-scale

greenhouses to be built in Central Appalachia.

"We've got 1.2 million acres of reclaimed mine land," Webb says. "We have the acreage. We've got [tens of thousands of miners] that've been laid off in the coal industry in the past five years. All the dots are lining up on this."

In addition to growing produce, AppHarvest anticipates creating 140 jobs, mostly in the greenhouse, which Webb describes as a "hub for innovation, sustainability and conservation."

Webb promises to pay his workers at least \$12 to \$13 per hour, and thinks his produce will be able to compete with fruits and vegetables coming from Mexico despite the higher labor cost because of his proximity to the market: Pikeville is within a day's drive of 65 percent of the United States population. "They're trucking it five days, we're trucking it a day. Our cost to produce is higher, our cost to truck is lower, and we're coming in at about the same price," he says.

The current political environment

may also help.

"The 'America First' strategy is forcing large entities in this country to rethink, do they want to buy domestically, or do they want to gamble and continue to buy questionable products from outside of our borders. So, for us, it has helped so much."

Reshaping the Ecosystem

Nathan Hall has a big vision too, but he envisions a rebirth of the ecosystems destroyed by mountaintop removal coal mining.

Hall is president of Reclaim Appalachia, a branch of the West Virginia-based Coalfield Development Corporation, a not-for-profit organization focused on jobs training and community building. Together with their partner branch Refresh Appalachia, Hall is overseeing a pilot project in Mingo County, W.Va., that he also hopes can serve as a model for others to follow.

He is working with four former coal miners and a site crew chief who are actively managing eight acres of former mine land. This spring they are planting an orchard of fruits and medicinal herbs well-suited for the poor soils found on the site. Crops include blackberries, raspberries, pawpaws, lavender and echinacea.

continued on next page

New Growth

continued from previous page

Adapting practices he learned while working at the mine reforestation organization Green Forests Work, Hall has arranged for machinery to rip narrow swaths through the compacted, rocky soils, and then for each year-old bare-root seedling to be dipped in a beneficial microorganism mix and then planted with compost in the rocky earth.

Going forward, the group plans to integrate rotational grazing of small livestock that will further nurture the soils.

"The approaches we implement there," Hall says, "we'll learn how to do it correctly and work the kinks out, and then have a model we can expand to a larger scale across many different mountaintop removal sites."

The funding for this pilot project has come from two rounds of federal POWER grants, and Hall says that he'd like to see the project expand to at least 30 acres, with up to 10 full-time employees working on the site. From there the methods they develop could be implemented on even larger sites, both older reclaimed sites and possibly even sites that coal companies have failed to reclaim, with even more jobs created.

"Our goal is to take those pretty undiverse, arrested succession areas, and by doing this ripping and replanting, as well as intensive rotational grazing management, we can convert the species mix to something that's much more native, much more varied," Hall says. "So we can create much more ecological niches, we're generating more organic matter, therefore carbon sequestration. And at the same time, we're creating profitable business enterprises. There's a huge amount of land that this would be applicable on."



Southfork Farm grows blueberries on two acres of reclaimed mine land in Pound, Va. Photo courtesy of Southfork Farm. J. Morgan Leach, executive director of the West Virginia Farmers Cooperative, plants hemp seeds. Photo courtesy of WV Hemp



Solutions Crop Up

On numerous farms across the region, individual farmers, as well as cooperatives, are working to grow specific crops on reclaimed mine lands.

Blueberries

One such undertaking is the Southfork Farm in Pound, Va., which grows blueberries on two acres of reclaimed mine land. Brian Hubbard, who farms the land with his family, is a former coal miner who initially planned to plant apple trees until he discovered that their soil's pH levels were better suited to blueberries.

His land was mined in the late '70s and early '80s, and Hubbard sees advantages to this. First, he has a relatively flat piece of land in the mountains. And second, he says, all those rocks he pulled out that first summer weren't as large as those found in land reclaimed more recently.

Challenges he's encountered on the mine land include the invasive and pervasive autumn olive trees, that were planted during reclamation and are now extremely difficult to eradicate, and the inconsistency of the soil.

"The biggest advice I would do is to do plenty of soil tests," Hubbard says. "Because, especially on something that's been reclaimed, you might have one type of soil here, and a certain spot a hundred yards away, or two hundred yards away, it might be completely different soil."

Despite finding few resources available online, Hubbard has developed strategies to manage the three different soil types he has in his blueberry fields, and as his plants reach maturity he says he's optimistic this will be his most successful season yet.

The farm also grows sorghum for molasses and maple trees for syrup.

Hemp

The 2014 federal farm bill and legislation in several states has restored a long-abandoned crop as an option for some farmers: industrialized hemp. Once prized for its fibers, the plant was later banned because of its relation to the marijuana plant.

According to J. Morgan Leach, the executive director of the West Virginia

Farmers Cooperative, many of his conversations begin by explaining that hemp does not share the intoxicating characteristics of its cousin and cannot be abused. Now, he says that local reaction to growing hemp is broadly positive.

Leach notes the potential value of the plant's seeds, oils and fiber, each of which has its own market niche as nutritious food additives or as fiber for textiles, paper and other products.

"Our overarching goal is to help diversify the economy and provide some new opportunities to make money in this state, so we don't have this mass exodus of young folks," Leach says. "Maybe there'll be new and exciting jobs within hemp processing, manufacturing, value-added production, retail sales. There's a lot of auxiliary industry that goes along with it."

The co-op is also exploring how the plant can grow on reclaimed mine land with a test season being grown this year on Zachary Drennen's family land.

Drennen is president of Strong Mountain Communities, another branch of Coalfield Development Corporation that focuses on entrepreneurship. He has a background in organic farming and is eager to try planting hemp on three acres this season.

Drennen's extended family owns about 3,000 acres in Kanawha County, W.Va., much of which has been mined repeatedly since the early 20th century.

His expectations for this year's crop are modest, but he sees promise over the long term.

"The future of southern West Virginia, I think, is going to be a lot of these small scale industries," he says. "And I think agriculture being one of them. And

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Kentucky Coal Mine Has Brighter Future as Solar Farm

By Kevin Ridder

There's no denying that the once-lucrative coal industry in Appalachia is now a dying one. Approximately 44 percent of coal mined in the United States comes from companies that have declared bankruptcy over the past few years. Recognizing the changes taking place in the energy market, one coal company has found a way to stay relevant in the energy conversation.

Berkeley Energy Group, in partnership with EDF Renewable Energy, plans to turn a strip mine site just outside of their Pikeville, Ky., headquarters into what could be one of the biggest solar farms this side of the Mississippi. While it's too early to tell the exact size of the farm or how many jobs it will support, Berkeley Energy estimates their project could produce between 50 and 100 megawatts of solar power, depending on EDF's geotechnical analysis. Construction could begin by late 2018, once mining ceases on the site.

As for the labor force, Berkeley Energy Project Development Executive Ryan Johns highlighted an unusual condition in the project proposal: to hire displaced coal miners in every phase of construction possible.

"This area has been hit probably the hardest in the country from the coal downturn on a per capita basis, and the area is still feeling the results of it," Johns says. "Seven years ago we were producing 90 million tons out of the Appalachian region, last year we produced 16 million tons. ... There's a lot of fear and anxiety in the area."

Former Kentucky State Auditor Adam Edelen says he helped his long-time friend Johns come up with and enact the idea for the solar farm by partnering with EDF, an international company with over 30 years experience and 9,000 megawatts of wind, solar, bioenergy and electric storage developments under its belt. Edelen, who now heads Edelen Strategic Ventures, a management consultancy firm in Lexington, Ky., sees the over \$100 million dollar project as a win-win

situation for the economy and the environment.

"This was two Kentuckians who had a vision for a new approach in terms of job creation in Appalachia, and [who] were able to enlist the support of a global powerhouse in helping make it a reality," Edelen says. He notes that big companies like Toyota are moving to renewable energy on their own, and states looking to attract those businesses to their area would benefit from being able to provide green energy.

According to Edelen, Kentucky is way behind the curve when it comes to energy; it is one of just 13 states in the nation that does not require or incentivize utilities to purchase renewable energy. This makes it more difficult to sell solar power directly to utilities. Instead, Berkeley Energy will use a utility's transmission lines to transfer the power generated by their solar panels to a regional grid operator, where it can be purchased by corporations looking to reduce their carbon footprint.

"I think when government fails to lead by example it creates a vacuum," Edelen says. "I see this as a historic step toward establishing a renewable energy foothold in Appalachia."

"A small incremental project would be easier to do, but it wouldn't have the economic or leadership impact that our project will," Edelen continues. "And we think that when we open the door and walk through it, there will be many who follow our lead."

Gil Hough, renewable energy manager at Restoration Services, Inc., and founding member of the Tennessee Solar Energy Industries Association, thinks the initial project has potential.

"Abandoned and reclaimed strip mines often don't have much use afterward due to the acidity of the soil and location and all that, so turning a large mountaintop removal strip mine site into a solar farm is an excellent use of land, potentially," Hough says. "The



The company that mined this site for coal intends to convert it to a solar farm. Photo by Berkeley Energy

devil's in the details in these projects."

Hough has looked into building a solar farm on a former strip mine site in the past, but he ran into two common problems: the site was too far away from transmission lines and the ground too uneven despite some flattening from the mountaintop removal process.

Berkeley Energy's site, however, has transmission lines able to handle the load nearby, and their partner EDF determined the land to be flat enough for development. And with Berkeley Energy's extensive land holdings in Kentucky, Virginia and West Virginia, Johns doesn't anticipate this to be their last foray into renewable energy if the project turns out to be successful.

Matt Wasson, director of programs for Appalachian Voices, the publisher of this newspaper, is glad to see a coal company diversifying its portfolio. But he also expresses skepticism that this is the best way to bring the solar industry to Appalachia.

"This project is a good thing in general, definitely a good thing for East Kentucky too," Wasson says. "But it's

not nearly as good as it could be."

For Wasson, the ideal model is to build a solar industry from the ground up in collaboration with business leaders, nonprofits, universities and community colleges, similar to the organization's efforts with the Solar Workgroup in Southwest Virginia (read more on page 26). He believes these types of projects will be more beneficial long-term than solar projects run by larger energy companies, which have historically held power in the region.

"If the state developers and local governments were really paying attention on how to build a solar industry for the long term in the region, then there are ways that this could have a much greater economic impact," Wasson says.

But for Johns and Edelen, this project is a chance to offer hope to a region desperate for jobs and economic diversification.

"It's not just about our involvement," Edelen says. "This is about the opportunity for economic transition for a region that desperately needs it." ♦

BUILDING BETTER SPONSORED BY



Ventilating a Well-Sealed Home

In our last article, we discussed the need to press forward with more energy efficient homes and appliances, regardless of the current political climate. With a nod towards this, we would like to highlight ventilation, which is one facet of your home where it is easy to do better than the standard.

Ventilation standards in the regular residential code are not quite keeping up with the trend towards building tighter houses. Updated information is available, such as ASHRAE 62.2 and the ICC Green Building Standards, but isn't widely used

ABOUT SUNNY DAY HOMES: Sunny Day homes is a small, family-owned general contracting firm that has been incorporated since 1997. They built the first certified green home in North Carolina's High Country in 2008 and have been advocating for non-toxic, environmentally responsible and energy-efficient building ever since. Call/text (828) 964-3419 or visit sunnydayhomesinc.com

because it is hard to decipher and is not enforced.

The home that we completed at the end of last year had a super-tight "envelope" to separate conditioned air from unconditioned spaces and had very little air leakage. We knew this would be the case so we planned up front to install a Heat Recovery Ventilator, which is comparable to an Energy Recovery Ventilator.

These types of ventilation systems are ducted, balanced air supply systems. They not only exhaust stale air out of a house, they bring fresh air in at the same rate. You

can set the amount of air for it to bring in and out based on the tightness of the home.

These are great devices to plan into a new home. They are especially helpful in climates that have intense heating or cooling needs because a good part of the year the house will be sealed due to the cold or hot weather. Therefore, occupants will not be getting fresh air via open windows and doors. These ventilation systems bring in not only fresh air but fresh conditioned air, which not only leads to better air quality for occupants but a healthier and more sustainable environment for the structure as a whole.

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Restoring Streams and Forests

Reclaiming Space for Native Plants and Beekeepers

By Dan Radmacher

Elevation and topographical changes aside, reclaimed mountaintop removal sites look nothing like what was there before. Natural forests are gone, replaced mostly by grasslands and non-native vegetation. While these plants grow quickly and help stabilize the land that was stripped bare and compacted during the mining and reclamation process, they don't provide anything close to the same type of habitat or ecological value of the forests they replace.

A new nonprofit organization, born out of the bankruptcies of Alpha Natural Resources and Patriot Coal, is hoping to bring native forests back to these lands, and restore streams that can support native aquatic life and insects.

"We are planning to restore approximately 250 acres over the next three to four years on unreclaimed mine sites, or sites that have been reclaimed but aren't successfully growing native forests," says Mike Becher, an attorney working for Appalachian Headwaters.

Appalachian Headwaters launched last year, funded by bankruptcy settlements with Alpha and Patriot to ensure

those companies would live up to their environmental cleanup obligations.

Appalachian Headwaters is working with fellow nonprofit groups Green Forest Works and the Canaan Valley Institute on the reclamation projects. "Chris Barton from the University of Kentucky and Michael French with Green Forests Work are our technical experts," Becher says. "They've developed techniques to make land conducive to regrowth of natural forests."

The first step is to loosen soil on the reclaimed sites. Former reclamation standards required soil to be compacted to help control erosion. But compacted soil makes it difficult for roots to penetrate. The plan is to use bulldozers and other equipment fitted with ripping bars or teeth to loosen the soil to a depth of three feet.

The technique also involves adding nutrients and other additives to change the pH of the soil to make it more conducive to tree growth.

Then workers will plant thousands of trees — 300 to 400 trees per acre, Becher says.

The three nonprofit groups also jointly secured a \$1.5 million grant from



The Twin Star Mining Complex straddles the Virginia and West Virginia state line. Image courtesy Google Maps, accessed May 25, 2017.

an Appalachian Regional Commission economic diversity initiative. That grant is funding work to bolster the region's bee and native plant population.

This project will help train displaced Appalachian miners and other workers as beekeepers and provide financial startup assistance to get them started, as well as processing, marketing and packaging honey and other products. Others will be employed to collect seeds and grow native plants that aren't available in most regional nurseries.

Becher says the bee and native plant project will also help with the reclamation initiative. Returning pollinators to the area is an important step, Becher says. "So much of the land has been disturbed and so much vegetation removed on these sites that pollinators have largely been eliminated," he says.

Beekeepers will be encouraged to establish apiaries — bee yards — on the reclaimed sites.

In addition to bringing back native

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Canaan Valley Institute Rebuilds Waterways Destroyed by Mining

By Lorelei Goff

What took nature millennia to create, greed destroyed in a mere century. The coal industry has devoured more than 500 thickly forested mountaintops in Central Appalachia, costing the most biologically diverse ecosystems outside of the Amazon Rainforest more than a million acres. The disfigured geography, pollution and excess sedimentation fouled the once-pristine mountain streams or obliterated them completely.

The coal industry is declining, but ugly scars remain — visible even from space — and the mountains' ecosystems are often too severely damaged to heal themselves. Across the region, communities and government agencies are searching for ways — and money — to undo the damage.

A small nonprofit in West Virginia recently completed what it says is one of the most comprehensive watershed restoration projects in the state's history. Canaan Valley Institute restored the Lower Dempsey Branch, a tributary of the Guyandotte River, located in Logan County, W.Va.

The project encompassed a 1500-acre watershed subjected to contour mining before a federal surface mining law that requires reclamation of mined land went into effect. Contour mining removes wide swaths of a mountain, forming flat shelves that cut off stream flow. The Lower Dempsey Branch watershed was badly damaged by a contour mining shelf that sliced through 30 headwater streams and altered the flow of groundwater.

The Canaan Valley Institute re-

stored normal hydrologic function to the watershed by reconnecting headwater streams and recreating natural ephemeral streams — transient streams formed by rainfall runoff rather than by groundwater — that had been buried by fill from the mining process.

More than six miles of ephemeral and headwater streams and 51 acres of native vegetation along the waterways were restored. Canaan Valley Institute also removed approximately 25 miles of unused road beds that altered the course of rain runoff and eroded slopes and streams, washing excess sediment downstream.

"We reconnected streams, which spread water across the surface the way its supposed to, absorbing it back into the soil and restoring a more natural water cycle for that watershed," explains Jennifer Newland, executive director of the institute.

Newland describes it as a holistic approach to stream restoration, rather than just trying to patch a stream to make it work.

"Our designer called it 'reconnecting the plumbing of the watershed,'" she says.

Streams are interconnected ecosystems with varied features and needs. When planning a restoration, stream designers look to healthy streams with similar geography and habitats to the distressed one and use the information they collect to try to mimic nature.

"We're trying to make sure that we build streams that are the right size for the size of the valley they're in, for the slope of the valley," says Newland. "Steeper headwater streams look very different than a flat, lower valley stream, and they have

continued on next page

Canaan Valley

continued from previous page

different widths and different depths."

Much of the restoration of Lower Dempsey also focused on repairing riparian zones — the natural vegetation growth that buffers stream banks and protects them from erosion — by planting saplings and seeds.

Newland says large trees have disappeared from stream banks due to clearing land for farms and timber harvesting, which means there are no fallen logs in the streams to form habitat for aquatic life. So logs are brought in, adding the debris missing from the system, and saplings are planted to provide future habitat.

Funding Streams

The funding stream that makes restoration projects such as the Lower Dempsey possible is often as complex as the streams that are restored.

"It's not cheap," says Newland. "One of the most difficult things is that there's never enough money to do everything that we want to do. We cobble together funding sources from all over the place. Most of the time it's grants."

But funding for the Lower Dempsey restoration came from a "model that's outside of our normal channels," Newland says: a "mitigation bank" that uses private investment money to restore wetlands and streams in one area as a way to offset the destruction of similar water resources in another area.

Regulators assign a restoration project a certain number of credits. When a company wants to do some kind of development or resource extraction, it submits its plan for review. Their impact

on the environment in that location is assessed and they're assigned a certain number of debits. They pay a private company that's already paid to have restoration projects done to buy the credits they need to take care of their impacts.

In this case, a company can now purchase credits from Ecosystem Investment Partners, which has already paid Canaan Valley Institute and other organizations for the restoration work in the Lower Dempsey Watershed.

The overall project, including the acquisition of the Lower Dempsey Watershed project property by EIP, resulted in tens of millions of dollars of investment in the area.

"It's a pretty complex system, but it's actually a lot better than the old system," says Newland.

Newland says mitigation banks are a win-win, streamlining the process for both companies and the environmental impacts.

"In the past, a company would come in and propose a restoration project they'd either do simultaneously with the impact they were making or even afterwards. If it wasn't successful, then you have this big delay in actually getting the restoration appropriately done." She adds, "This way, all of it is done, approved ahead of time, and we know we're getting good restoration work."

According to the Canaan Valley Institute website, the organization has completed nearly two dozen restoration projects. Work is currently underway in the Monongahela National Forest, where the institute has been doing restoration for the past nine years. The



Before restoration, deteriorating roads and culverts, above left, disrupted the flow of Lower Dempsey Branch and caused erosion problems that damaged downstream areas, below left. In the restored sections, such as the one at right, seedlings have been planted to provide shade and erosion control for the stream. Photos courtesy of CVI

40,000 acre project site sits atop Cheat Mountain in West Virginia, which was logged and strip mined in the 1980s.

The Monongahela project includes the restoration of native red spruce forests and reduction of sediment pollution in the Shaver's Fork River. With help from partners like the U.S. Forest Service, they have decommissioned four miles of unnecessary roads from the tract, created and enhanced wetlands, removed unwanted non-native species, decompacted the soil, replanted native trees and restored streams.

Canaan Valley Institute's restoration projects lay the foundation for restored streams and watersheds in the future. It takes time for trees to grow

and for streams to fully develop their natural ecology. Newland stressed that those are long-term results.

"Newly restored streams are never going to be as good as the streams that are not impacted," Newland says. "We need to be clear about that. We're not magicians. We are careful practitioners, and we're very dedicated and experienced at what we do. But a restored stream, it may take a hundred years before it has the same ecological function as a stream that wasn't messed up to start with."

But without restoration, the ecology might continue to deteriorate. Canaan Valley Institute restores streams to the best possible condition they can, and then lets Mother Nature take her course. ♦

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New Growth
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hemp, as a crop, is the one showing the most promise right now. Lavender is another one."

He also sees potential for agricultural projects on family-owned mine land such as his family's land, and he hopes that successful growing operations can inspire some of these families to lease their land to farmers.

"These families probably are interested in giving back to West Virginia or Appalachia in some way," Dennen says. "And they are interested in finding a role in the economic diversification. ... I do think that the family-owned corporations and landholding companies, certainly in West Virginia, would be very open and kind of excited about the thought of hemp and lavender and crops like that, and that kind of activity happening on their property."

An Organic Focus

Tammy Owens operates a 110-acre farm in Dickenson County, Va., which



Foxfire Farm, left, is a 110-acre farm in Dickenson County, Va., where Tammy Owens grows medicinal herbs. Photo by Adam Wells. Lola Cline, right, used a tractor to break up compacted soil on a reclaimed mine land site in Mingo County, W.Va. Photo by Nathan Hall



includes land stripmined in the '70s and '80s.

"[At] Foxfire Farm, our focus is actually reclaiming this stripmine land, to where it's thriving, vital soil that can be used in a multi-layered or multi-faceted way, to bring ... a truly diverse sustainable income."

Owens is frustrated by the condition of her land but overflowing with optimism at its potential. While her land was reclaimed according to the law, it is far from healthy. But she believes that it can be healed using organic practices.

"We're left with land that has multiple problems, and multiple problems that have never been fully addressed by the people that set the standard for reclamation," she says. "It's important to me to start finding those different standards and setting those standards and showing, okay, we've done this and this works, and spreading that around."

Owens' farm specializes in medicinal plants such as goldenseal and cohosh, and forest farming is a central part of her approach.

Since beginning her operation in 2011, Owens says she can already see improved vitality in her soils through her use of compost, incorporation of sheep and other practices.

"I want this land, this farm with the projects that we're doing here, just like we did with the organic farm out in Kansas,

to become like a model that it's actually possible," she says, referring to her experience converting a traditional farm, where chemicals were used and genetically modified crops were grown, into an organic farm. "So, we can do that same thing here, with the stripmined land and bring it back to what the land used to be before the stripmining happened."

Appalachian Grown

Agriculture, whether on a large or small scale, offers many opportunities for the people of Central Appalachia and for the lands scarred by coal mining, including job opportunities, locally sourced produce and restored ecosystems.

"If we can tell our story about how we sourced locally, how we're providing jobs for farmers and processors and manufacturing, I think that motivates companies to be more willing to take a look at using our raw materials opposed to what they currently use," says Leach, referring to the hemp grown by farmers in his co-op.

Owens of Foxfire Farm wants to restore not only the soils but also the culture of Appalachia.

"When you think about what Appalachia is, when you think about what our culture is, or was before coal hit, we were all of those things. We were organic, we were multi-diversified, we were sustainable."

"Let's build that new model, let's build that new reality, let's build that vision and make it happen," she says. ♦

Reclaiming Space

continued from page 20

hardwood forests, the reclamation project will also work to restore streams on these sites. Often, natural streams have all been destroyed, replaced by drainage ditches filled with loose stone. Margaret Palmer, a biology professor at the University of Maryland and a stream restoration specialist, will be the technical expert for that part of the project.

The stream restoration will focus on lowering the conductivity of the water. This measure of how well water conducts electricity turns out to be a good indicator of how badly it has been polluted by strip mining. The goal is to lower pollution levels to the point that streams can support aquatic life and native insects.

The forest restoration will aid the stream restoration, Becher says. A re-

newed canopy will help maintain the correct water temperature in streams, and the trees will help filter pollutants out of the water. "If the forests are healthy, the water will be healthier," he says.

Project planners hope to begin reclamation this summer at the Pine Flats Surface Mine in Boone County, W.Va., and at the Twin Star Surface Mining Complex in McDowell County, W.Va., and Buchanan County, Va.

Kate Asquith, director of programs for Appalachian Headwaters, is excited by the potential of the reclamation project. "These forests will never be the same," she says. "The streams will be impaired for generations. We can't make it what it was, but we can do a much better job than what has been done in the past."

"We want to try to restore the environment as much as possible to what was there, and to benefit the environment and the future of Central Appalachia." ♦

Appalachia's Political Landscape

Bill Could Boost Funding to Reclaim Abandoned Mines

By Molly Moore

In Mingo County, W.Va., efforts are underway to restore five acres of former mine land in order to raise fish and grow produce in an aquaponics facility powered by solar panels and geothermal energy from a nearby abandoned underground mine. In addition to providing healthy food, the project also intends to deliver workforce training to the area.

Several hundred miles away in Washington, D.C., lawmakers and officials are faced with policy decisions that could either help create more projects like this or prolong the delayed cleanup of abandoned mines.

The funding behind the Mingo County aquaponics effort comes from a pilot program run by the U.S. Office of Mining, Reclamation and Enforcement that helps states saddled with abandoned mine lands repurpose these places for projects that could benefit the economy and local communities.

The pilot program was first authorized by Congress in December 2015, and the budget deal negotiated this spring expanded its reach.

In 2016, the program provided \$30 million each to Kentucky, Pennsylvania and West Virginia — the Appalachian states with the most high priority abandoned mine sites. The spending bill passed in April added Alabama, Ohio and Virginia to the list, and adjusted the funding figures for 2017 to \$25 million each for the original three states and \$10 million each for the new states.

The pilot program tests the policies included in the proposed RECLAIM Act, a bill that would take existing money from

the Abandoned Mine Lands Fund and put it toward reclaiming sites that can be used for economic and community-oriented projects. The funds can be used across the nation, but particularly in places hit hard by the coal industry's downturn.

Since 1977, when a federal law that governs coal mining and cleanup was enacted, coal companies have had to pay a fee to the Abandoned Mine Land Fund on every ton of coal mined. That fund then distributes payments to clean up mines abandoned before the passage of the law. Reclamation of these abandoned mines is prioritized based on safety hazards and the types of environmental damages at each site.

But communities affected by the coal industry's latest bust have increasingly called for accelerated AML cleanup and funding to remediate sites that can be repurposed in ways that help local residents. After 28 local governments and representative bodies across four Appalachian states passed resolutions of support for the concept, the RECLAIM Act was first introduced by Kentucky Rep. Hal Rogers in 2016.

As of this spring, the bill is again in play in the new Congress. Rep. Rogers and Sen. Mitch McConnell of Kentucky have introduced a version of the bill in their respective chambers, and West Virginia Sen. Joe Manchin reintroduced the original version in the Senate.

"The RECLAIM Act will build on the momentum generated by the pilot and make countless new job-creating projects a reality," Rogers said during a House subcommittee hearing held on the RECLAIM Act in April. "This bill represents a real investment in coal

country — one that will provide much needed resources to clean up the environment, create jobs and strengthen these communities from the ground up."

But while the version introduced by Rogers and McConnell — H.R. 1731 — would still accelerate the restoration of abandoned mines, the current text includes a few key differences from the original.

During the April hearing, Fritz Boettner of the environmental consulting firm Downstream Strategies testified that, "H.R. 1731 as written does not sufficiently promote the second stated goal of the RECLAIM Act: spurring economic diversification on reclaimed sites."

That's because H.R. 1731 specifies that only sites ranked Priority 3 would need to meet the bill's criteria regarding economic development. According to Boettner, Priority 3 sites, which pose an environmental risk but no direct threat to

humans, comprise roughly a quarter of the national unreclaimed mines by cost.

H.R. 1731 also no longer incentivizes states to involve community stakeholders in shaping projects on Priority 1 and 2 sites, which the original RECLAIM Act did. Those Priority 1 and 2 sites pose environmental or safety hazards that can threaten human health.

The AML pilot program, on the other hand, requires an economic component to all projects and encourages local public engagement.

"At this crucial time in rebuilding our economies, we cannot limit our opportunity for real change," Boettner told the congressional subcommittee. "The aquaponics project is a prime example of a High Priority AML site that will be reclaimed and the site reused to create long-term jobs. There is significant potential for creating permanent jobs with projects like this one." ♦

Congress Passes Budget Deal

In a last minute deal to avoid a government shutdown, Congress passed a compromise budget in late April that will fund federal obligations through September 2017.

The priorities set by the budget deal were in stark contrast to the Trump administration's vision for funding the executive agencies and national defense, which was released in mid-March.

While Trump proposed eliminating nearly 20 agencies completely — including the Appalachian Regional Commission, an economic development agency that invests in workforce training and infrastructure needs like broadband — the budget deal retained these programs, even increasing the budget for the ARC by \$6 million.

The deal also included a provision to fund health benefits for more than 22,000 retired

coal miners. These benefits had been negotiated away during coal companies' bankruptcy hearings and were set to expire at the end of April. The miners' pensions remain unfunded.

The passage of this spending package provides a reprieve for numerous government programs the Trump administration sought to cut, including the Environmental Protection Agency, which enforces the federal Clean Water and Clean Air Act.

On May 23, President Trump released his 2018 plan for the three-quarters of the federal budget not covered by the plan released in March, largely anti-poverty measures. While this plan is unlikely to pass through Congress unchanged, it proposes significant cuts to programs such as food stamps, children's health insurance and Medicaid. — Elizabeth E. Payne

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H.R. 953, the Reducing Regulatory Burdens Act, would prohibit the EPA and any state from requiring a Clean Water Act permit for discharge of a pesticide into navigable waters if the discharge is approved under the Federal Insecticide, Fungicide, and Rodenticide Act. 256 AYES 165 NOES 9 NV PASSED	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SENATE	M. McConnell (R)	R. Paul (R)	L. Alexander (R)	B. Corker (R)	R. Burr (R)	T. Tillis (R)	T. Kaine (D)	M. Warner (D)	J. Manchin (D)	S. M. Capito (R)						
H.J.Res. 36 nullifies a Bureau of Land Management rule that requires owners of federal oil and gas leases to better detect and repair methane leaks and prevent methane gas flaring. 49 YEA 51 NAY FAILED The bill passed the House in February.	X	X	X	X	X	X	✓	✓	✓							X

Utilities Face Legal Challenges in Ongoing Coal Ash Cleanup

By Zach Kopkin

On April 5, Virginia Gov. Terry McAuliffe signed a bill putting a one-year moratorium on coal ash pond closures in the state. Prior to the moratorium, Dominion Energy was in the process of draining water from impoundments at its shuttered Possum Point power plant, intending to cap more than 4 million tons of coal ash in place along the Potomac River.

Two families living near the plant found heavy metals in their wells, which they believe came from Dominion's ponds. In May, they filed two lawsuits totaling \$9 million against Dominion. And in March, a federal court ruled that Dominion's storage of coal ash near the Elizabeth River violated the Clean Water Act by illegally leaking arsenic into groundwater and the river for years. Those issues, combined with the moratorium, are leading the company to reconsider its method of burying the ash at Possum Point.

In North Carolina, the Roanoke River Basin Association has filed a lawsuit alleging that Duke Energy is making unpermitted discharges of coal ash waste from its Roxboro power plant in Person County. Duke Energy filed a countersuit

against the environmental group on May 11. Duke seeks to close the Roxboro coal ash ponds by removing the water and capping over 6 million tons of dry ash in the existing unlined impoundments.

On March 31, North Carolina's Chatham County Superior Court ruled to revoke two of Duke Energy's mine reclamation permits to dump coal ash in newly excavated pits in Chatham and Lee counties. The ruling overturns a previous decision appealed by three local groups. Duke may still dispose of coal ash in the former Brickhaven and Colon clay mines, but only in previously excavated areas that have liners and systems to collect leaching water. The coal ash originates from Duke's Dan River, Sutton and Riverbend impoundments, which must be excavated due to their high risk levels.

In Kentucky, new coal ash regulations took effect on May 5. The new permit-by-rule program for dry coal ash landfills "would allow utilities to go ahead and design and construct the landfill without state oversight," Louisville's WFPL radio reported. Kelley Leach, who lives next door to Louisville Gas & Electric's Trimble County Power Plant coal ash landfill, has filed a lawsuit challenging the controversial new regulations.

Coal Plant Waste Standards Put on Hold by EPA

On May 25, U.S. Environmental Protection Agency head Scott Pruitt proposed the delay of Obama-era effluent limitation guidelines that required coal power plants to use new and innovative technologies to reduce the pollution of waterways.

Many power plants had started implementing changes to reduce the amount of

harmful toxins, such as lead and mercury, in the liquid waste released from their plants. But they now can continue to release toxic waste with few limitations.

While Earthjustice has already filed a lawsuit against the postponement, the final rules and regulations for the guidelines remain in question. — Meredith Abercrombie



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Water Quality Permits and the Pipelines

By Elizabeth E. Payne

On May 24, Virginia's state environmental regulatory agency conceded that information it had provided about how it would evaluate the potential water quality impact of two natural gas pipelines was inaccurate.

In early April, the Virginia Department of Environmental Quality announced that it would require the Atlantic Coast and Mountain Valley Pipelines to detail the impact of each individual stream or wetland crossing. Now, it says that the U.S. Army Corps of Engineers will assess the crossings.

The change worries many citizens and environmental groups concerned about the impact of the proposed pipelines.

The Sierra Club filed a petition asking the State Corporation Commission to

determine whether Dominion Virginia Power's purchasing agreements for natural gas from the Atlantic Coast Pipeline are subject to the Virginia Affiliates Act.

The law stipulates that public service corporations must obtain permission from the state before doing business with an affiliated company. The law may apply because Dominion Virginia Power's parent company, Dominion Resources, is a partner in the Atlantic Coast Pipeline.

In West Virginia, the state's Department of Environmental Protection denied a request to hear an appeal filed by three citizens and Appalachian Mountain Advocates, an environmental law firm. The appeal challenged DEP's certification that the Mountain Valley Pipeline wouldn't violate the state's water quality standards.

Regional Utilities Don't Plan to Return to Coal

By Elizabeth E. Payne

On March 28, President Donald Trump signed an executive order instructing the U.S. Environmental Protection Agency to unravel the Obama administration's Clean Power Plan, which would have limited the amount of carbon dioxide emissions allowed from coal-fired power plants.

Despite the president's promise to bring back coal, CEOs from electric utilities across the region have stated that they have no intention of returning to coal.

"Our statutory duty is to produce electricity at the lowest feasible rate," Bill Johnson, CEO of the Tennessee Valley Authority, the nation's largest public utility, told the Associated Press in mid-April. "And when we decided to close the coal plants, that was the math we were doing. We weren't trying to

comply with the Clean Power Plan or anything else. What's the cheapest way to serve the customer? It turned out to be retiring those coal plants."

Similarly, Duke Energy will move steadily away from coal. The company's CEO Lynn Good told the Charlotte Business Journal, "Our strategy will continue to be to drive carbon out of our business."

Appalachian Power's new president, Chris Beam, also said that his company didn't have plans to expand its coal use either, despite local pressure from coal company owner and West Virginia Gov. Jim Justice.

"The governor asked me, 'I'd like you to burn more coal,'" Beam said, according to the Charleston Gazette-Mail. "Well, we don't have any more coal plants. We're not going to build any more coal plants. That's not going to happen."

Study Finds Link between Fracking and Infant Mortality

An April 2017 peer-reviewed article published in the Journal of Environmental Protection suggests that drinking water contaminated by fracking for natural gas is driving significant increases in early infant mortality in the five most highly fracked counties in northeastern Pennsylvania.

The study shows that in these counties the number of infant deaths within the first 28 days climbed from 36 deaths between 2003

and 2006 to 60 deaths from 2007 to 2010. The number of fracking wells in Pennsylvania increased 6,500 percent between these two date ranges. The authors of the study also compared northeast Pennsylvania counties, which have a much greater reliance on water wells, to highly fracked southwest counties with lower rates of water well use. They found greater infant mortality in the areas most reliant on well water. — Zach Kopkin

Empower Kentucky Plan Would Create Jobs, Boost Energy Efficiency

By Elizabeth E. Payne

On April 19, Kentuckians For The Commonwealth, a social justice grassroots organization, released its Empower Kentucky Plan, outlining how the state could transition to clean energy.

The plan seeks to create jobs and improve health and climate outcomes by focusing on energy efficiency and renewable energy and by charging a fee for carbon dioxide pollution.

The initiative also calls for a \$1 fee per short ton of carbon dioxide beginning in 2018 and increasing to \$3 over the next 15 years. The fee would deter burning coal for electricity and it would provide up to \$2 billion by 2032 that could be invested in energy efficiency initiatives that would boost employment and ensure that vulnerable populations are not burdened by the transition.

KFTC also released an Environmen-

tal Justice Analysis of the proposal. The assessment demonstrated the strong correlations that exist between the proximity of vulnerable populations to energy extraction and hazardous waste sites, which can cause negative health effects.

The Empower Kentucky Plan focuses much of its attention on improving the situation for these at-risk communities, defined as low income, minority and elderly individuals, as well as those with less than a high school education.

Synapse Energy Economics, a research and consulting firm, analyzed the plan and projected that if it were implemented it would create 46,300 more jobs in the state by 2032 than if it were not. This analysis assumes passage of the Clean Power Plan, so projections may vary now that President Trump has directed the U.S. Environmental Protection Agency to dismantle and replace the Obama-era plan.

Mountaintop Removal on Coal River Mountain

By Willie Dodson

Citizens continue to fight mountaintop removal mining happening in West Virginia. Republic Energy, a subsidiary of Alpha Natural Resources, has been moving forward with a large mountaintop removal mine on Coal River Mountain in Raleigh County. The mine consists of five permits so far, some of which have been granted for years and others that have just been issued or are still pending approval. The mine complex includes the Long Ridge permit, the Middle Ridge permit and the Eagle 2 permit.

On May 9, the West Virginia Surface

Mine Board decided not to hear an appeal of the issuance of Republic's Long Ridge permit. Coal River Mountain Watch, a local nonprofit organization, had appealed the new mining permit due to concerns about the health impacts of surface mining and Alpha's poor track record.

The Surface Mine Board stated that they dismissed the appeal because it was filed after the deadline. However, Coal River Mountain Watch had based the timing of their appeal on information provided by the state Division of Mining and Reclamation.

Fighting for Reclamation Around Kanawha State Forest

On April 4 in Kanawha County, W.Va., members of the Kanawha Forest Coalition accompanied staff of the West Virginia Dept. of Environmental Protection on a site visit to the KD #1, Rush Creek and Rush Creek #2 surface mines operated by Keystone Energy. These mines are all in the process of being reclaimed.

During the visit, members of the coalition identified widespread problems with sediment control, erosion, reclamation failures, acid drainage and other issues. The organization submitted a report detailing their findings to the state agency, and requested a meeting

to discuss enforcement and mitigation plans.

Keystone Energy was required to bring the now shut-down KD #2 surface mine into compliance with the terms of a consent decree signed by the company and the DEP by April 27. The Kanawha Forest Coalition conducted an aerial inspection of the site on April 28, which disclosed large areas without vegetative cover, erosion and sedimentation of streams, unpermitted discharges and other problems demonstrating that Keystone Energy is not in compliance with the consent decree.

— Willie Dodson

Construction on Rover Pipeline Halted After Spills

On April 13, more than two million gallons of drilling fluid spilled into Ohio wetlands along the Tuscarawas River as a result of construction work for the Rover Pipeline. The drilling fluid contains large quantities of bentonite, a clumping agent, which makes cleanup difficult.

The Rover Pipeline is projected to begin transporting natural gas in mid-2017, but, in a letter sent May 10, the Federal Energy Regulatory Commission prohibited Rover Pipeline from beginning any new drilling activities until third-party contractors have fully analyzed drilling activities and FERC has approved a

stronger plan for environmental compliance. Non-drilling activities have not been halted.

On May 17, approximately 100 organizations sent a letter to FERC asking that it halt all Rover Pipeline construction and reopen the environmental review process.

The \$4.2 billion underground pipeline project is operated by Energy Transfer Partners, the same company involved in the Dakota Access Pipeline. It is expected to span 713 miles, crossing parts of Ohio, West Virginia and Pennsylvania before terminating in Michigan. — Zach Kopkin

Virginia Takes Lead in Efforts to Reduce Carbon

Stepping in where federal action has stalled, in May Virginia Gov. Terry McAuliffe directed the state Department of Environmental Quality to develop a market-based plan to limit carbon emissions from power plants. Under the new policy, the DEQ will cap emissions in a way that is compatible with existing multi-state cap-and-trade programs.

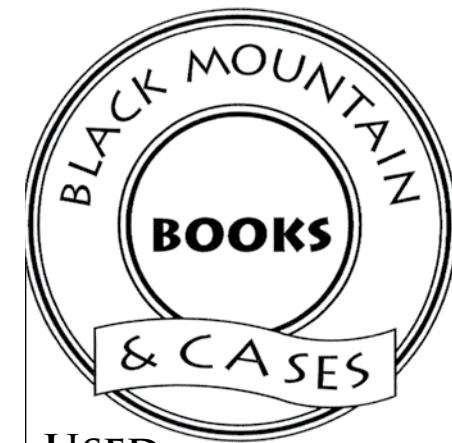
By putting a price on carbon emissions, this move creates financial incentives for the state's electric utilities to shift toward low- and zero-carbon energy resources, while providing industries such as wind and solar a competitive advantage.

McAuliffe's directive concludes a process begun in June 2016 when he signed

his Executive Order 57, which established a work group to study the problem and seek input from stakeholders. Appalachian Voices was a stakeholder that provided input to the workgroup.

Republicans in the state legislature have spoken out against this action.

— Elizabeth E. Payne



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Southwest Virginia Sunshine

On May 9, Appalachian Voices was proud to co-host the Southwest Virginia Solar Fair. Together with our partners in the Solar Workgroup of Southwest Virginia, we brought community members and industry leaders together to highlight how a clean energy future could also bring jobs to our region.

Attendees enjoyed hands-on demonstrations of solar projects, fresh asparagus and popcorn cooked by the

sun, and live music courtesy of the Empty Bottle String Band.

The day also saw the launch of Solarize Wise, a program to help make solar installations easier and more affordable for homeowners, businesses and farmers in Wise County.

Appalachian Voices also awarded two \$500 grants to local high school teams who developed Solar in Your School project proposals. The Eastside High School Ecology Club from Coe-



Our Southwest Virginia Solar VISTA Lydia Graves rallies the crowd at the Solar Fair.

burn, Va., submitted a plan to build a solar phone charger and received approval for installation from their school board. Ridgeview High School's robot-

ics team from Clintwood, Va., plans to create a solar powered robot to help educate their peers and community about solar energy.

The Solar Fair and the 2017 Southwest Virginia Economic Forum at UVa-Wise the following day served as an opportunity to showcase the progress made on more sizable projects in Southwest Virginia. As members of the Solar Workgroup, we are also working on a handbook for actionable steps toward solar economic development in far Southwest Virginia.

Testifying Before Congress on Mine Reclamation

Thom Kay, our senior legislative representative, testified before Congress in May regarding reclamation of former coal mines, giving comments on the draft proposal of the Community Reclamation Partnership Act. He advocated for more input from community members and against creating loopholes that would allow coal companies to re-mine on these sites without restrictions.



Thom Kay speaks before legislators.

If passed, the act would amend the federal law governing reclamation of coal mine sites to allow states and non-governmental groups to work together to restore the impacted land and streams.

The hearing was held by the U.S. House Committee on Natural Resources' Subcommittee on Energy and Mineral Resources in Washington on May 24.

Meanwhile, our team also continues to fight against new mines. We stood beside Coal River Mountain Watch in support of their appeal of a permit for the Long Ridge mine, which the West Virginia Surface Mine Board declined to hear (read more on page 25).

On May 23 in Logan, W.Va., the

National Academy of Sciences held its second public hearing studying the health impacts of surface coal mining.

Ally groups CRMW, Ohio Valley Environmental Coalition and Keepers of the Mountains presented their experiences fighting mountaintop removal in West Virginia. Erin Savage, Matt Hepler and Willie Dodson of our Central Appalachian team were on hand to provide comments and support community members.

Two additional hearings will also be held, one in mid-July in D.C. and another in late August that will likely take place in Kentucky.

Marching for Science and Climate

This year on Earth Day, members of our staff joined hundreds of thousands others in Washington, D.C., and at sister sites across the nation to march for science. Appalachian Voices was a sponsor of the D.C. event.

"We all depend on science so fundamentally, for our health and well-being and economic well-being," says Matt Wasson, our director of programs.

Other members of the team marched in Charlottesville, Va., and in Asheville and Raleigh, N.C.

The following weekend, Appalachian Voices joined more than 300,000 people for the People's Climate March in Washington, D.C. We helped increase turnout among community members in North Carolina and Virginia through phone banks and by sponsoring buses.



Peter Anderson marched with residents opposed to new fracked-gas pipelines.

New Report Supports Financing Energy Efficiency in Western N.C.

Appalachian Voices released a study on May 3 that demonstrated how an "on-bill" finance program could lower monthly bills for thousands of families in western North Carolina while creating jobs, strengthening local economies, and protecting natural resources and public health.

The report focuses on the French Broad Electric Membership Corp. service area and

was prepared by Rory McIlmoil, our energy savings program manager. If the co-op adopted such a program that pays for the upfront cost of home energy improvements for residents of all income levels, regardless of whether they own their home, participants could save \$1,000 or more over 10 years, and more than \$500 a year after that. Read more at appvoices.org/fbmc-report

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Steadfast Supporter and Nature Lover

Member Spotlight Judy Newton Scurry

Judy Newton Scurry credits her father with first introducing her to nature as a small child when he would take her fishing. That love of the outdoors, and especially the Appalachian Mountains, came into full bloom during youthful summers spent at Camp Yonahlossee near Boone, N.C.

"I grew up going to the mountains, and loving the mountains. And I feel like the years I went to camp were a real influential period of my growing up years," she says. "I've just always loved the mountains."

While visiting her daughter, who was a student at Appalachian State University, the native North Carolinian returned to Boone and picked up her first copy of *The Appalachian Voice* around 2001.

"It was just a small group, and I could be supportive of a small group," Judy says of her early engagement with Appalachian Voices. "Whatever they did in the mountains, it was going to be for the good of the mountains."

And for the last fifteen years, she has maintained an active, continuous membership with the organization.

Judy is a former middle school science teacher, the mother of two and grandmother to six. She's proud that she's been able to instill in her

children a love of nature, and she wants to protect the natural resources and beauty of Appalachia so that it can be enjoyed by future generations.

A resident of Winston Salem, N.C., Judy volunteers for the educational programs at the Reynolda Gardens of Wake Forest University, including their Young Naturalist Summer Program. This allows her to convey a love of nature to the next generation, through nature walks, gardening and bird watching, which is one of Judy's favorite ways to enjoy the outdoors.

She grew up mostly in Wilkesboro, N.C., and she remembers when construction of the Blue Ridge Parkway was completed in that area. Her family would take picnics along the scenic route, and it remains one of her favorite places.

One time, about 10 to 15 years ago, Judy joined a group of residents that successfully blocked a real estate development that would have encroached on a public park near her home. The land that would have been developed is now a public greenway.

"At that point, someone said, 'It doesn't matter how small your group is, when you feel strongly about some-



thing and are determined, you can make a difference.' And I just kind of remembered that through the years."

When asked to reflect on why she's been reading this newspaper for so long, Judy said, "Over the years, I feel like you've expanded into so many different areas. And I just feel like you keep the area up-to-date on what's going on in the mountains. Some people may not care, but I care."

We're so glad you care, Judy. And thank you for subscribing to the newspaper and supporting Appalachian Voices since April 2002!

(Re)Introducing AppalachianVoices.org

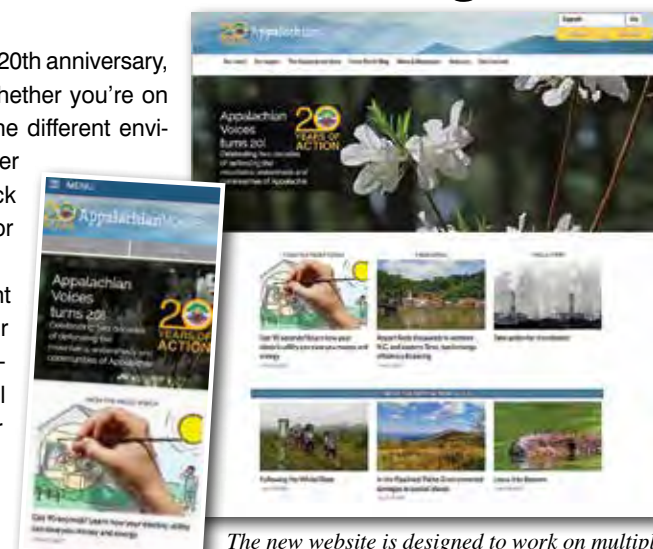
AppalachianVoices.org has gotten a bit of an upgrade!

Our fresh new website, launched in conjunction with our 20th anniversary, is designed to perform better on devices of all sizes. So whether you're on a phone, computer or tablet, you can easily learn about the different environmental issues we work on, take action, and discover other ways to get involved. We also have seventeen years of back issues from *The Appalachian Voice* publication available for your perusing and reading pleasure.

To follow the latest developments, check out our Front Porch Blog — or, better yet, subscribe to receive daily or weekly blog updates and new online editions of *The Appalachian Voice* in your inbox. You can also join our email list at appvoices.org/signup to receive action alerts and our monthly e-newsletter.

Check out the new website, and send us your feedback at comms@appvoices.org.

See you online!



The new website is designed to work on multiple devices and screen sizes.



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.

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"I love photographing sunrises and sunsets because they're different every day," says Carrie L. Hayes, a native of Boone, N.C. She captured this image from behind Caldwell Community College in Watauga County, N.C. She nearly left, but her patience that July evening paid off. "The whole sky lit up," she says. Carrie is our graphics intern this summer. To see more of her work, visit carriellhayesphotography.com.



20
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