

West Virginia Highlands Conservancy
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The Highlands Voice

The Monthly Publication of the West Virginia Highlands Conservancy

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The process begins

Federal Energy Regulatory Commission Begins Study of Big Pipeline

By John McFerrin

The Federal Energy Regulatory Commission wants to hear from you. It is about to launch into a study of the environmental impact of Dominion Resources' proposed pipeline from northern West Virginia to North Carolina. It wants to know what the public thinks it should consider.

The Project

There are two projects involved in this study. The first is the Supply Header Project. It would involve the construction and operation of approximately 38.7 miles of pipeline and the modification of existing compression facilities in Westmoreland and Green Counties, Pennsylvania, and Harrison, Doddridge, Tyler, and Wetzel Counties, West Virginia. This Supply Header Project would involve modifications to existing pipelines to increase their capacity.

The other—and more controversial—project is the Atlantic Coast Pipeline Project

involving construction and operation of facilities by Atlantic Coast Pipeline, LLC (Atlantic) in West Virginia, Virginia, and North Carolina. It would involve:

- approximately 295.6 miles of 42-inch-diameter pipeline in Harrison, Lewis, Upshur, Randolph, and Pocahontas Counties, West Virginia; Highland, Augusta, Nelson, Buckingham, Cumberland, Prince Edward, Nottoway, Dinwiddie, Brunswick, and Greensville Counties, Virginia; and Northampton County, North Carolina;
- approximately 179.9 miles of 36-inch-diameter pipeline in Northampton, Halifax, Nash, Wilson, Johnston, Sampson, Cumberland, and Robeson Counties, North Carolina;
- approximately 75.7 miles of 20-inch-diameter lateral pipeline in Northampton County, North Carolina; and Greensville, Southampton, Suffolk, and Chesapeake Counties, Virginia; and

- approximately 3.1 miles of 16-inch-diameter natural gas lateral pipeline in Brunswick County, Virginia.

In addition to the planned pipelines, Dominion plans to construct and operate three new compressor stations totaling 108,275 horsepower of compression. These compressor stations would be located in Lewis County, West Virginia; Buckingham County, Virginia; and Northampton County, North Carolina.

If approved, the two projects would be capable of delivering 1.5 billion cubic feet of natural gas per day to seven planned distribution points in West Virginia, Virginia, and North Carolina. If approved, construction of the projects is proposed to begin in September 2016

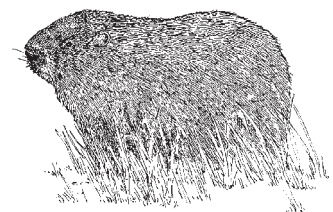
The Process

Before Dominion may build its proposed pipeline it must get approval from the Federal Energy Regulatory Commission

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**A month after his big day, you decide:
 Prognosticator or Charlatan?**

Ramblin' the Ridges

By Cynthia D. Ellis

Divest!

On February 11, 2015, photos and videos rolled in from around the world as an event known as Global Divestment Day commenced. Locations as diverse as Kalamazoo, Viet Nam, Nepal, and Burkina Faso---300 in total--- all sent visual evidence of citizens taking action. Crowds of people took to the streets with banners and slogans proclaiming support for institutions and for individuals divesting themselves of stocks connected with fossil fuel extraction. They all seek to help address climate change. <https://www.youtube.com/watch?v=ckJ9M56Ftbq>

Efforts to encourage divestment began on college campuses. Students, energized by the desire to stop mountaintop removal mining, partnered with some nationally-recognized environmentalists and together they focused on divestment. The movement then came to encompass other extractive fuels. The push, away from fossil fuel investments, has experienced steady growth and now can claim these commitments to divesting:

In the U.S....

- 27 colleges in California, Maine, Vermont, New York, Ohio, and North Carolina
- 30 U.S. cities in California, Washington, Colorado, Oregon New Mexico, Wisconsin, Pennsylvania, New York, Massachusetts, and Connecticut 2 counties

Nationally and internationally...

- a long list of churches and religious

organizations

- numerous foundations, including Sierra Club, Ben & Jerry's Foundation and, under "other institutions" [British Medical Association](#), [Great Old Broads for Wilderness](#) [a personal favorite]

Most of the divestments in the United States have been in the north and Pacific west, but Brevard College in North Carolina made a divestment announcement one week after the global big day. There is also a "Divest" group at Tulane University. Detractors try to portray the movement as futile, with limited goals and outcomes. But supporters draw parallels between this movement and those against apartheid and Big Tobacco...and point to the successes of those campaigns.

A measure of their success is the reaction by industry. One PR group released a cartoon called, "Breaking up with Fossil Fuels is Hard to Do," which was somewhat widely characterized as "clumsy." <http://350.org/breaking-up-with-fossil-fuels-is-easy-to-do/>

While some say these efforts promote discussion and force institutional boards to choose sides, an interesting offshoot in this campaign has been a lawsuit at Harvard University. Student groups there have been unsuccessful in the push to divest. The Harvard president said, "The endowment is a resource, not an instrument to impel social or political change."

So, seven Harvard law students are suing that university. "Climate change is now causing harm through mortality, economic damage and political instability," said Benjamin Franta, one of the students who filed. A letter by all seven students explained, "We're also suing on behalf of future generations. By investing in the extraction of fossil fuels, the Harvard Corporation is actively supporting the destruction of the earth's atmosphere and the catastrophic consequences that will be visited upon our children and grandchildren. It is our duty to give voice to these coming generations and to hold the Corporation accountable for its reckless and shortsighted behavior."

Virtually the only mention of this movement in West Virginia came with the announcement of divestment by the Rockefeller Fund, when it was noted that then-Senator Jay Rockefeller had no direct involvement in the fund. In comments on that, Ted Boettner, executive director at the West Virginia Center for Budget and Policy, pointed out that only two other states, Alaska and Wyoming, are more financially dependent upon fossil fuels than West Virginia, but that other states are recognizing the movement away from those sources and are diversifying their economies.

Here, in West Virginia, we can certainly recognize some of the targeted out-of state businesses listed among those from "The World's Top 200 Public Companies" and ranked by "Carbon Content of Fossil Fuel Reserves". Under "coal" they include: #10 Peabody Energy, #18 Arch Coal, and #19 Alpha Natural Resources. Under "Oil & Gas" are #24 Chesapeake Energy, # 39 EQT, and # 43 Antero Resources.

Meanwhile many state industry representatives and politicians continue to paint a glowing picture of the future production and sales of coal and gas from the mountains and foothills. So it may be difficult to envision "Divest from Fossil Fuel" protests coming soon to campuses and other institutions throughout our state.

Still...most of us never thought Don Blankenship would be indicted either...



Canaan Valley Institute's Building – What Happens Next?

By Jackie Burns

In early summer 2014 Canaan Valley Institute (CVI) decided it could no longer afford to keep up the building it built in 2009. The building and a smaller maintenance facility were built with funding from National Oceanic and Atmospheric Administration (NOAA) in a more optimistic time. Grants were more abundant. Now the grants are harder to come by, and Canaan Valley Institute staff is much smaller. The building has more space than they need, and they have not been able to find enough non-profit partners to share the space and the expense. So what happens now?

Well, since the funding was through National Oceanic and Atmospheric Administration (NOAA) as grants, and since CVI can no longer keep up the grant conditions, the building reverts to NOAA ownership.

Initially two entities petitioned NOAA to transfer the building to them: the National Youth Science Foundation (NYSF), an educational non-profit organization; and the Canaan Valley National Wildlife Refuge, a federal agency. NOAA was leaning towards transferring the property to the federal agency. Then public opinion and politics intervened.

In December, a public meeting was convened by Tucker County Commission to gather opinions about the transfer. Additionally, people could send in written comments for two weeks following the meeting. A variety of opinions were gathered, but the prevailing opinion was that the refuge office and visitor center should stay in Canaan Valley, and that the National Youth Science Foundation's plan for expanded science education programs seemed like a good use for the CVI building and grounds. The Tucker County Commission and Senator Manchin both came out in support of the National Youth Science Foundation (NYSF), plan.

The Senator also expressed support for upgrading the refuge facilities in Canaan Valley. In late January the Refuge withdrew its proposal for the CVI building.

But NOAA was still concerned. They had seen a non-profit, CVI, go from being strong to being burdened by this large building. They didn't want to transfer the building to another non-profit that would have similar problems down the road, and they didn't want to get it back in five, ten or fifteen years because the new owner could no longer afford it. NYSF has decades of experience running educational programs, but they've worked on leased land, and haven't had to manage the land and buildings before. So, NOAA talked to the Senator, and wrote NYSF a letter requesting a new, expanded proposal with more budget information and a better business plan.

The Senator called a meeting to discuss this need for a revised plan, and invited supportive business and development representatives. By the end of the meeting the NYSF had a business and a development volunteer committee to help them with their new proposal. NOAA's letter also invited them to meet with agency

representatives to discuss what was needed.

The plan has been developed and submitted to NOAA. In addition to the plans for educational programs, NYSF has outlined income and expenses related to the property for the next decade. The plan includes escrow and reserve funds to keep up with maintenance needs. NYSF has launched a fundraising effort that includes five-year pledges to take care of the building and build the reserve and escrow accounts. At <http://empower.nysc.org/projects/stem-education-center/> you can lend your support. Also, check out <http://www.nysf.com/wp-content/uploads/2015/01/Proposal-to-NOAA-STEM-Education-Center.pdf> to read the plan submitted to NOAA.

Now NOAA has to decide: Is the plan enough, or should they just sell the building?

And what will happen to CVI? Well, they have kept their most sustainable programs and staff, so they expect to be around well into the future. They are working with NYSF on a partnership that will allow them to stay in the building, leasing office space. Being unburdened by the building will help them continue to thrive.



Federal Energy Regulatory Commission Studying Big Pipeline (Continued from p. 1)

(FERC). The decision on whether to approve it or not is a “major federal action” within the meaning of the National Environmental Policy Act (NEPA). The National Environmental Policy Act is supposed to help us consider the environmental consequences of our decisions. The agency involved considers the environmental impacts of a proposed action and prepares an Environmental Impact Statement. This study is then used to help FERC make the most environmentally prudent choice.

Right now FERC has made a preliminary list of what it wants to study:

- land use impacts, including the exercise of eminent domain and future land use restrictions;
- impacts on property values, tourism, and recreational resources;
- safety issues, such as construction and operation of the planned facilities near existing residences, schools, businesses, and military training facilities, and in karst and steep slope terrain;
- alternatives, including routing within existing linear corridors, avoiding private property, National Forests, National Parkway lands, National Wildlife Refuge land, and other sensitive environmental features;
- impacts on local emergency management systems;
- impacts on forested areas and other vegetation;
- impacts on surface water resources including springs, seeps, and wetlands;
- impacts on groundwater resources and wells;
- impacts on protected species and habitat;
- impacts on cultural resources including battlefields, cemeteries, and historic properties; and
- concerns regarding construction and operational noise, especially related to compressor stations.

This is where you come in. Right now we are in the “scoping” phase. FERC is figuring out what it should consider in the study. It wants to know if there are things it should study that are not on the list. It also wants to know if there are any local impacts that it should pay attention to.

How to participate

You can participate either in person or in writing. FERC is holding a series of meetings, beginning in Fayetteville, North

Carolina, on March 9 and following the proposed pipeline north to end in Bridgeport, WV, on March 24. See on p. 5 for the location of the meeting near you.

To participate in writing, you can send comments to FERC. You have to reference the appropriate project docket number(s) (PF15-5-000 for the SHP and PF15-6-000 for the ACP Project) with your submission. Here are alternatives:

(1) You can file your comments electronically using the eComment feature located on the Commission’s website (www.ferc.gov) under the link to Documents and Filings. This is an easy method for interested persons to submit brief, text-only comments on a project;

(2) You can file your comments electronically using the eFiling feature located on the Commission’s website (www.ferc.gov) under the link to Documents and Filings. With eFiling, you can

provide comments in a variety of formats by attaching them as a file with your submission. New eFiling users must first create an account by clicking on “eRegister.” You must select the type of filing you are making. If you are filing a comment on a particular project, please select “Comment on a Filing;” or

(3) You can file a paper copy of your comments by mailing them to the following address:

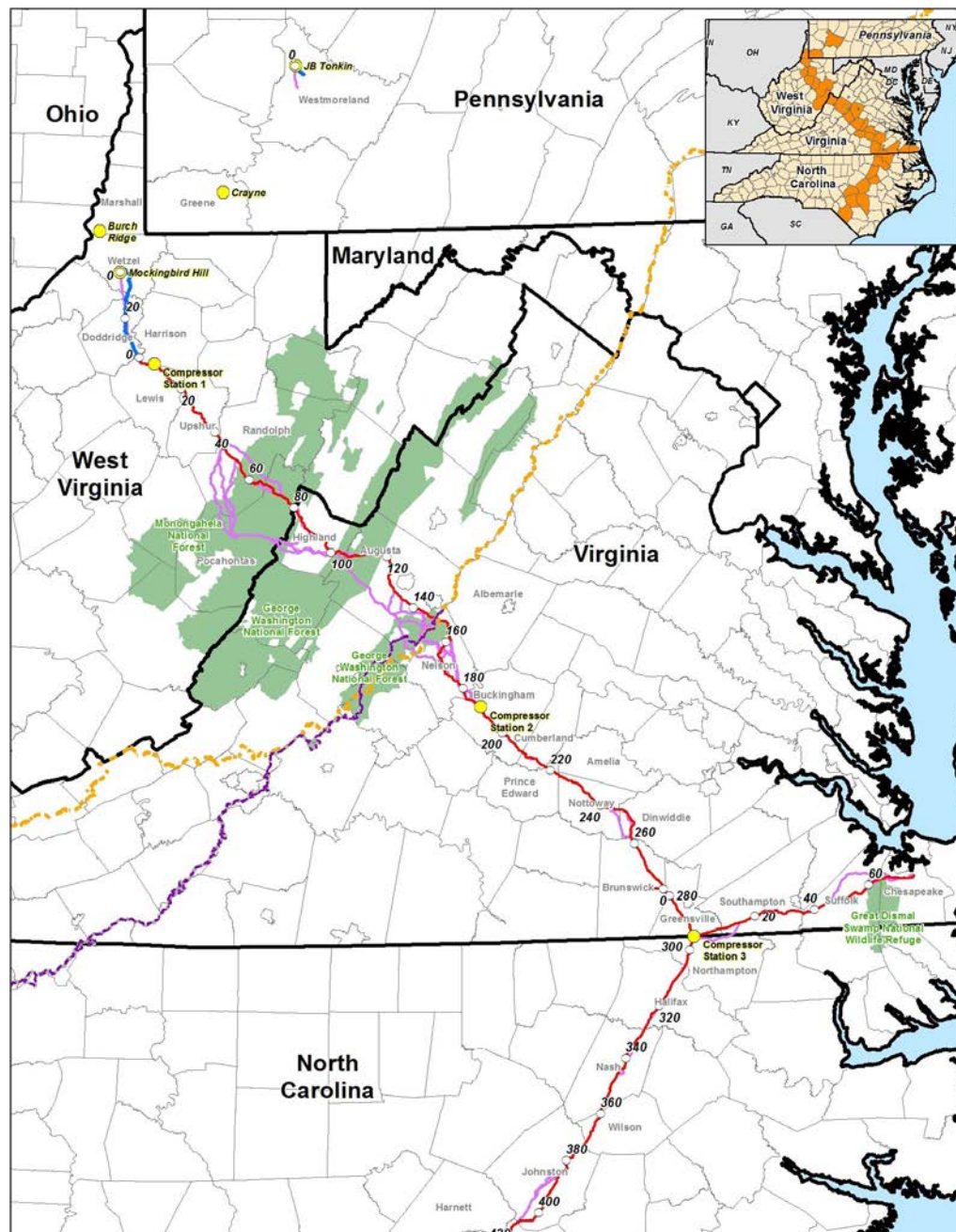
Kimberly D. Bose, Secretary
Federal Energy Regulatory
Commission
888 First Street NE, Room 1A
Washington, DC 20426

THE DEADLINE FOR COMMENTS IS APRIL 28, 2015.

Everyone who files comments gets on the Environmental Mailing List and will receive notices of future actions.

How the Forest Service is involved

Because the proposed pipeline would pass through the George Washington National Forest and the Monongahela National Forest, the United States Forest Service would have to approve that portion of the route. The Forest Service would have to decide whether it gives Dominion a permit to cross the Forests. If the pipeline conflicts with existing management plans for the



National Forest, the United States Forest Service would have to approve that portion of the route. The Forest Service would have to decide whether it gives Dominion a permit to cross the Forests. If the pipeline conflicts with existing management plans for the

(More on the next page)

Studying the Big Pipeline (Continued)

Forests, the Forest Service would have to decide whether it will change those plans to accommodate it.

The Forest Service will not, however, do its own Environmental Impact Statement. Instead, it will be a “cooperating agency” in the Statement that FERC does and will adopt the EIS that FERC does as its own.

The “No Build” alternative

Traditionally the “no build” alternative has been the poor step child of the NEPA process. The typical Environmental Impact Statement identifies several alternative actions and identifies one of the alternatives as the “preferred alternative.” The alternative of not doing anything is always, or almost always, listed. So far as I know, it has never been the preferred alternative on any project. By definition, we are doing an Environmental Impact Statement because someone wants very badly to build something. They might tolerate pursuing one of several options. They would not tolerate not building.

Since the process is just beginning, the Federal Energy Regulatory Commission should be given the benefit of the doubt. Although it would be acting contrary to recorded history, it may consider the environmental impacts and decide that the best thing to do is just not build the pipeline.

Federal Energy Regulatory Commission has given a hint of its thinking in the solicitation of comments on scoping for the EIS. There it said, “We will present our recommendations in the EIS on how to lessen or avoid impacts on the various resource areas, as applicable.” This does not sound like an agency planning to seriously consider a no build alternative.



The Highlands Voice is published monthly by the West Virginia Highlands Conservancy, P. O. Box 306, Charleston, WV 25321. Articles, letters to the editor, graphics, photos, poetry, or other information for publication should be sent to the editor via the internet or by the U.S. Mail by the last Friday of each month. You may submit material for publication either to the address listed above or to the address listed for Highlands Voice Editor elsewhere in this issue. Submissions by internet or on a floppy disk are preferred.

The Highlands Voice is always printed on recycled paper. Our printer uses 100% post consumer recycled paper when available.

The West Virginia Highlands Conservancy web page is www.wvhighlands.org.

Public Meetings

Federal Energy Regulatory Commission

Monday, March 9, 2015
7:00 PM

Pine Forest High School
525 Andrews Road
Fayetteville, NC 28311

Tuesday, March 10, 2015
7:00 PM

Forest Hills Middle School
1210 Forest Hills Road
Wilson, NC 27896

Wednesday, March 11, 2015
7:00 PM

William R. Davie Middle School
4391 Hwy. 158
Roanoke Rapids, NC 27870

Thursday, March 12, 2015
7:00 PM

Jolliff Middle School
1021 Jolliff Road
Chesapeake, VA 23331

Monday, March 16, 2015
7:00 PM

Dinwiddie Middle School
11608 Courthouse Road
Dinwiddie, VA 23841

Tuesday, March 17, 2015
7:00 PM

Prince Edward County High School Auditorium
1482 Zion Hill Road
Farmville, VA 23901

Wednesday, March 18, 2015
7:00 PM

Nelson County Middle School
6925 Thomas Nelson Highway
Lovingsston, VA 22949

Thursday, March 19, 2015
7:00 PM

Stuarts Draft High School
1028 Augusta Farms Road
Stuarts Draft, VA 24477

Monday, March 23, 2015
7:00 PM

Elkins High School
100 Kennedy Drive
Elkins, WV 26241

Tuesday, March 24, 2015
7:00 PM

Bridgeport High School
515 Johnson Avenue
Bridgeport, WV 26330

The West Virginia Highlands Conservancy is a non-profit corporation which has been recognized as a tax exempt organization by the Internal Revenue Service. Its bylaws describe its purpose:

The purposes of the Conservancy shall be to promote, encourage, and work for the conservation—including both preservation and wise use—and appreciation of the natural resources of West Virginia and the Nation, and especially of the Highlands Region of West Virginia, for the cultural, social, educational, physical, health, spiritual, and economic benefit of present and future generations of West Virginians and Americans.

Acting Locally: You and Your Lawn

By Charlie Feldhake

Most extinctions take place at a pace that is not noticed within the span of an individual's life. I have mentioned a few in past columns that were rapid but while these were significant, many smaller ones went nearly unnoticed. Each generation tends to reset the clock and evaluate things from its own perspective which diminishes our perception of cumulative effects. Our culture is very different in our technologically infantile society compared to the seven generation standard of early Native Americans.

What can we do to improve our ecosystem on a daily basis if we are a family in the suburbs? (the suburbs would not exist without the invention of the gasoline powered lawnmower) We are busy with work, raising kids, walking dogs, driving to soccer matches, coaching teams, and mowing lawns. For starters we can embrace the fact that weeds are good for lawns and cut out pesticides. Weeds exploit open ecological niche needs that improve soil and help diversify the resources to expand the food chain.

I have more birds and other little critters around my house on my 0.5 acre lot than my neighbors and I like it! I enjoy the flowers weeds produce which makes my lawn interesting and not just water hogging AstroTurf. Some weeds grow tap roots which deepen the soil and clover adds nitrogen which makes the grass thicker. Earthworms churn everything up while feeding other animals so I tolerate them making my sidewalk slick after heavy rain. Clippings are too valuable for nutrient cycling to remove.

I have a small kitchen garden on the east side of the house, inside the fence so safe from deer, that connects our family at least

a little with where food comes from. On one end of the garden I have a 1.5 meter diameter rock pile, from interesting ones I have found on hikes, that has turned into a day-time haven for a bunch of fat toads. Fat toads mean lots of bugs are being eaten from the garden every night. Toads do on the ground what birds and bats do in the air. Bugs share some of my garden but toads share the bugs.

Some of my landscaping is done with bushes and trees that produce edible fruit. Many of them bloom in the spring so are quite pretty. The fact that I haven't used pesticides in the 26 years I have lived here gives me some confidence that the fruit is safe to eat (OK, I cheat with a little short lasting herbicide on sidewalk cracks, but time is valuable too).

Scaling up, support farmer's markets and eat locally produced foods. Several years ago the Organic Farming Research Institute (OFRI) issued a policy statement that said that if you have to make a choice between buying organic or local, buy local. That is impressive that they took that stance. Of course it would be best to have food that is both local and organic. We need to wean ourselves from cheap, chemically contaminated, environmentally destructive, agribusiness products where the middle man gets the gold mine and the ecosystem gets the shaft.

We can't undo past extinctions but we can help take care of ourselves, our children, and community through a healthy local ecosystem. That is a pretty OK place to start for busy families.

Highlands Conservancy Opposes Pipeline Through Monongahela National Forest

The West Virginia Highlands Conservancy has joined with at least seventeen other groups and several individuals in opposing the big pipeline which Dominion Resources has proposed to construct through the Monongahela National Forest.

The immediate question is whether Dominion should be given a permit to survey along the part of the proposed route that goes through the Monongahela National Forest. Although the current application is only for a permit to survey and not for permission to build the pipeline, the groups oppose it because it is the first step on a march toward allowing the pipeline in the Forest.

The groups expressed special concern that Dominion is studying a single route that would cut through the heart of the Monongahela National Forest, including Cheat Mountain, Shavers Fork, red spruce restoration areas and sensitive wildlife habitat. Those areas are public treasures of national importance. It would be improper for the Forest Service to simply allow the survey and then leave decisions about

their management to the Federal Energy Regulatory Commission, which must approve the pipeline. The Federal Energy Regulatory Commission does not have any experience or duty as a steward of public lands.

The groups listed five objections:

1. Dominion's application is incomplete, providing no answer or unsupported answers to crucial Special Use Authorization questions involving reasonable alternatives and avoidance of Federal Lands. The application only asks to survey one route. Yet there are existing pipeline corridors within the Forest that the application does not consider. There are also routes that avoid the Forest altogether that the application does not consider.
2. The Monongahela National Forest is managed according to a management plan that directs how the Forest is to be managed. The application is inconsistent with that plan. It favors co-location of new rights of way in areas already designated as utility corridors.
3. The application as presented does not

serve the public interest because it proposes to gather too little detail during the surveys to allow the Forest Service to adequately analyze either the actual environmental effects of the proposed route or of reasonable alternatives;

4. The Forest Service has asserted that it does not have to do an Environmental Impact Statement as required by the National Environmental Policy Act (NEPA). The Forest Service says this survey is a small, temporary project to which NEPA does not apply. This is incorrect because the impacts of the actual pipeline construction are the reasonably foreseeable result of approving a single-corridor survey of Dominion's preferred route.
5. The Forest Service has an obligation under NEPA to consider alternatives to Dominion's proposed survey that is independent from the requirement to perform an Environmental Impact Statement.

Join Now !!!

Name _____	Membership categories (circle one)	Individual	Family	Org.
Address _____		Senior	\$15	
City _____ State _____ Zip _____		Student	\$15	
Phone _____ Email _____		Introductory	\$15	
		Other	\$15	
	Regular	\$25	\$35	\$50
	Associate	\$50	\$75	\$100
	Sustaining	\$100	\$150	\$200
	Patron	\$250	\$500	\$500
	Mountaineer	\$500	\$750	\$1000

Mail to West Virginia Highlands Conservancy, P. O. Box 306, Charleston, WV 25321

West Virginia Highlands Conservancy
Working to Keep West Virginia Wild and Wonderful

GREAT HISTORY BOOK NOW AVAILABLE

For the first time, a comprehensive history of West Virginia's most influential activist environmental organization. Author Dave Elkinton, the Conservancy's third president, and a twenty-year board member, not only traces the major issues that have occupied the Conservancy's energy, but profiles more than twenty of its volunteer leaders.



Learn about how the Conservancy stopped road building in Otter Creek, how a Corps of Engineers wetland permit denial saved Canaan Valley, and why Judge Haden restricted mountaintop removal mining. Also read Sayre Rodman's account of the first running of the Gauley, how college students helped save the Cranberry Wilderness, and why the highlands are under threat as never before.

With a foreword by former congressman Ken Hechler, the book's chapters follow the battle for wilderness preservation, efforts to stop many proposed dams and protect free-flowing rivers, the 25-year struggle to save the Canaan Valley, how the Corridor H highway was successfully re-routed around key environmental landmarks, and concluding with the current controversy over wind farm development. One-third of the text tells the story of the Conservancy's never-ending fight to control the abuses of coal mining, especially mountaintop removal mining. The final chapter examines what makes this small, volunteer-driven organization so successful.

From the cover by photographer Jonathan Jessup to the 48-page index, this book will appeal both to Conservancy members and friends and to anyone interested in the story of how West Virginia's mountains have been protected against the forces of over-development, mismanagement by government, and even greed. 518 pages, 6x9, color cover, published by Pocahontas Press. To order your copy for \$14.95, plus \$3.00 shipping, visit the Conservancy's website, wvhighlands.org, where payment is accepted by credit card and PayPal. Or write: WVHC, PO Box 306, Charleston, WV 25321. Proceeds support the Conservancy's ongoing environmental projects.

SUCH A DEAL!
Book Premium With Membership

Although *Fighting to Protect the Highlands, the First 40 Years of the West Virginia Highlands Conservancy* normally sells for \$14.95 plus \$3.00 postage. We are offering it as a premium to new members. New members receive it free with membership.

Existing members may have one for \$10.00. Anyone who adds \$10 to the membership dues listed on the How to Join membership or on the renewal form will receive the history book. Just note on the membership form that you wish to take advantage of this offer.

Put Your Foot Down

The WV Department of Environmental Protection continues to ignore the studies that show mountaintop removal is drastically harming our health and cutting our lives short.

Time to put your foot down! Join The People's Foot at DEP headquarters on March 16. Bring your family and friends. We'll have a free T-shirt for the first 125 people. For more info, see The People's Foot Facebook page

Mountain Justice Summer Convergence 2015: May 30 - Sun June 7, 2015

The 2015 Mountain Justice Summer Convergence will be held in beautiful Kanawha State Forest, just south of Charleston WV, from Saturday May 30 through Sunday, June 7.

Kanawha State Forest is a gem. Only minutes from Charleston, it features deep woods, narrow mountain hollows and beautiful clean streams, plus miles and miles of hiking and mountain biking trails.

But this beautiful piece of almost heaven is under threat. There is an active Mountaintop Removal mine directly adjacent to Kanawha State Forest. This year the Kanawha Forest Coalition, a citizens' group which is opposing a mining permit for the KD#2 Mine, has welcomed Mountain Justice to hold their Summer Convergence at Kanawha State Forest.

The camp site is three log and stone picnic shelters which were built by the Civilian Conservation Corps in the 1930s. Most participants will tent camp. 100-150 people are expected to attend.

The Mountain Justice Summer Convergence will have a variety of workshops, site tours and hikes during the day. Based on an "Unconference" model, the schedule for each day's activities will be discussed and planned at each Morning Circle. Individuals wishing to present a talk or workshop at MJS 2015 should contact the camp organizers and then bring their materials (handouts etc) to the Convergence.

The Unconference model will allow the camp to be flexible and more spontaneous, and the camp will evolve throughout the week based on the input and feedback of the camp participants.

There will also be plenty of free time for discussion and networking and fun.

Evening activities will be scheduled in advance and will include speakers, a panel discussion with members of the Kanawha Forest Coalition, live music and dancing, films, discussion and a no-talent show. All meals will be cooked on site by a kitchen collective.

The event is low-cost and accessible to most budgets. The Convergence is intended to be meeting of minds, broad-based, a regional gathering open to everyone in the coal, climate and energy movement. All attendees agree to abide by Mountain Justice policies and Mission Statement.

For more information and to register, go to www.mountainjustice.org

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Nothing There

By Marion Harless, West Virginian

“Well,” they said.

“We’ll put it there. There’s nothing there.”

Sowbugs and spiders,
Salamanders and song sparrows.
Solomon’s seal, spignet, Sambucus.
Skunks and skinks.
Sanicle, ‘sang, Sanguisorba, Sorbus.
Sleep site of ursine sow.
Squirrels of every sort. Sirtalis.
Scrub pine, scrub oak, squirrel corn.
Sweet gum, sour gum, sour grass, sweet grass.
Sweet flag, sweetbriar, sweet fern,
Sweet Cicely, sourwood. Starwort.
Sarvis, stitchwort, spiderwort, swallowtails,
Spicebush, sumac and sycamore.
Shaggy manes, shrews, solitary bees.
Sky skimming swifts and scaly skittering swifts.
Silver-haired bats in shagbark shelters.
Spleenwort in sweet soil. Selaginella,
Sharpshin and shrubby St. Johnswort.
Snowbirds and sometimes siskins,
Snowshoe hares and spruce.
Shiners, salmonids, sculpins and sunfish,
Striders, sideswimmers.
Soft-shell, stinkpot, snapper.
Somatochlora, stoneflies, synurella.
Salix, streamsides, shorelines, sandspits.
Sandpipers, shitepoke and snipe.
Sulphurs, Strymon, skippers, sphinx moths.
Sorrel, stonecrop, sparrow hawks.
Snowberry, strawberry, sassafras, sarsparilla.

Sphagnum, sundew, steeplebush, sedges.
Slate slab, sandstone sculpture, shale slope,
Shield ferns, Silphium, screech owls.
Seeps, springs, swamps, spring peepers.
Soughs, sinks, stalagmites, stalagmites.
Smartweed, smokebush, silverrod, snails.
So many more.
Sunset serenity. Sunrise serenade.
So much more.

“Well,” they said.

“There’s nothing there that matters. We’ll put it there.”

Scared away –
Scattered, separated, stressed, starved.
Shoved away –
Snapped, split, shattered.
Scraped away –
Smashed and smothered.

“Well,” I said.

“Finally, they’re right. There’s nothing there.”

Stripped bare, smoothed out.
Shade and shadow banished.
Stormbeaten.
Sunbaked.
Silent sterile soil.

Nothing.

Export-Import Bank Case Dismissed for Lack of Standing

The United States District Court has dismissed a case brought by several groups that challenged the United States Import-Export Bank’s financing of coal exports without considering the environmental consequences of that financing. The case was dismissed because, in the Court’s view, the Plaintiffs lacked “standing.” Standing is the term for the legal principle that only those who are affected by the actions they are challenging may sue. Unless a plaintiff can show that it has an interest in the litigation or that it would be better off if it prevailed in the litigation, it does not have standing and may not sue.

The Export-Import Bank of the United States is the official export credit agency of the United States federal government. The mission of the Bank is to create and sustain U.S. jobs by financing sales of U.S. exports to international buyers.

The National Environmental Policy Act (NEPA) seeks to prevent the United States from inflicting environmental damage out of ignorance. It requires that governmental entities study any major action they take and determine its environmental impact.

Then environmental impact of mining and transporting coal is substantial. . Every step of the process, from mining the coal for export to consumption of the final product, causes harm to the environment and human health. Mining the coal contaminates water, soil, and air, and generates acid mine drainage and large volumes of wastewater. Transporting the coal to export terminals occurs in open rail cars, which pollute the air near the terminals and rail lines with coal dust. Coal dust contributes to lung disease, asthma, and cardiopulmonary problems. Burning the coal generates high levels of greenhouse gas emissions, which contribute to global warming.

Despite the extent of these impacts, Ex-Im Bank did not assess the environmental impacts of its decision to provide the loan guarantee. The Plaintiffs contend that NEPA would require such an assessment.

The Court ruled that, even without financing from the Export-Import, the mining and export of the coal might well go ahead anyway. If that is the case, then even if the Plaintiffs prevailed in the case and the Export-Import Bank were barred from financing the transaction before the Court, the mining would continue. The problem the Plaintiffs sought to fix would not be solved. When this is the case, the Plaintiffs lack standing.

Human Health Impacts of MTR: What Will It Take ?

By Cindy Rank

STREAM HEALTH

While it's not been a particularly easy road these past fifteen years, progress has been made to prove that drainage from valley fills and large strip mining operations causes harm to streams and aquatic life, and a modicum of better permitting has been achieved.

Thanks to scientific evidence and expert testimony in the courts our legal efforts have shown that selenium in mine discharges have contributed to deformities in fish and damage to aquatic life, and that toxic ionic pollution has caused a reduction in numbers and species of aquatic insects essential to healthy functioning headwater streams.

Of course the story doesn't end there. All water problems are not solved nor are all companies anxious to comply with improved discharge requirements. The West Virginia Legislature continues to cave to industry's lobby to lessen standards and West Virginia Department of Environmental Protection (WV DEP) continues to grant permits for large strip mines.

But as a result of the battles, treatment and cleanup efforts have begun at some active operations and by land owners of some older sites subject to a legacy of poison from previous operations.

HUMAN HEALTH

Successfully linking big mining operations to human health impacts is not quite as easy as documenting dead or deformed fish. Nonetheless, there are strong indications that many illnesses and deaths in communities near large strip mining operations are the result of pollution of the air and water families in those communities depend on.

It's been years since the wonderful "dust busters" Pauline and Mary went to court over the black coal dust that rained down on their homes and neighborhoods from coal processing and storage on the ridge above the town of Sylvester. Since then there have been years of additional research and dozens of peer-reviewed published studies linking mountaintop removal mining to abnormally high rates of cancer, birth defects and other illnesses.

More than the dirt and grime that covers porches, cars and inside homes, it's the kids needing inhalers and nebulizers, and the higher rates of cancer, lung and heart problems that are creating an ever growing state of emergency in communities

near large strip mining operations.

Increasingly attention is on the ultrafine particles found in dust created by blasting apart mountains, particles which remain suspended for days, travel easily on the wind and can contribute to cardiovascular and lung disorders.

RESPONSE

Response to these problems has been mixed.

-- Funding for a partially completed US Geological Survey research about soil contamination by dust from blasting was abruptly halted last year. Of concern is the dust that settles on communities at the base of the mountains, dust that settles on gardens and coats produce making it questionably unsafe to eat.

-- Legal actions to require federal agencies consider potential human health impacts during the permitting process have been inconclusive at best. E.g. the courts have given deference to the Army Corps of Engineers when it maintains the agency has no legal duty to consider such information.

-- Somewhat surprisingly the Federal Office of Surface Mine Reclamation and Enforcement announced in the February 20, 2015 Federal Register that it will initiate rulemaking to address toxic dust and noxious fumes that can harm people. Needless to say, industry is opposed to the action, and of course rulemaking can be a very long process, but the proposed action may offer a glimmer of hope.

-- Re-introduced in the U.S. Congress February 12, 2015, the ACHE Act (H.R. 912 the Appalachian Community Health Emergency Act) would

require a moratorium on large surface mines commonly known as Mountaintop Removal Mines until the National Institute of Health Sciences conducts or supports comprehensive studies on the health impacts of such mining operations. (See acheact.org for more information).

Hopeful as this may sound, it's doubtful Congress is any more prone than our state legislature to further rein in coal industry actions. When the loss of so many lives in mining disasters can't convince lawmakers to quit stalling and strengthen mine safety measures chances are slim that they will see the light in these human health matters.

-- If the volume of industry's negative reaction is any indication of the intensity of its concern, the kicker here may be one company's response to the health studies published by Dr. Michael Hendryx while he worked at West Virginia University (WVU). In this instance industry may have reached new heights – or depths as the case may be. By the time this issue of the Voice reaches the streets the WV Supreme Court will have heard an appeal by Highland Mining (a defendant in one of our legal efforts) to force WVU to hand over ALL data and documents used by Dr. Hendryx in his research ---- some tens of thousands of documents. Questions of academic freedom and privileged information loom large.

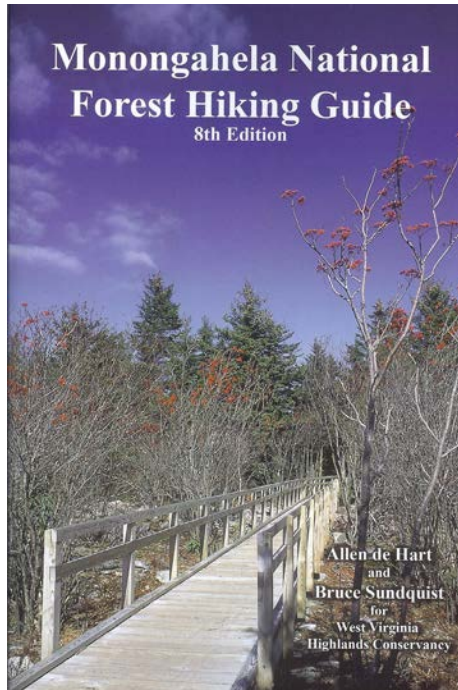
-- Unfortunately it is left once again to affected and concerned citizens to keep raising these issues, educating the public and the agencies and the courts – all the while watching more of their friends and family members suffer.

BUMPER STICKERS

To get free *I ♥ Mountains* bumper sticker(s), send a SASE to Julian Martin, 1525 Hampton Road, Charleston, WV 25314. Slip a dollar donation (or more) in with the SASE and get 2 bumper stickers. Businesses or organizations wishing to provide bumper stickers to their customers/members may have them free. (Of course if they can afford a donation that will be gratefully accepted.)



Also available are the green-on-white oval *Friends of the Mountains* stickers. Let Julian know which (or both) you want.



The Monongahela National Forest Hiking Guide

By Allen de Hart and Bruce Sundquist

Describes 180 U.S. Forest Service trails (847 miles total) in one of the best (and most popular) areas for hiking, back-packing and ski-touring in this part of the country (1436 sq. miles of national forest in West Virginia=s highlands). 6x9" soft cover, 368 pages, 86 pages of maps, 57 photos, full-color cover, Ed.8 (2006)

Send \$14.95 plus \$3.00 shipping to:
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8TH Edition Now Available on CD

WV Highlands Conservancy proudly offers an Electronic (CD) version of its famous Monongahela National Forest Hiking Guide (8th Edition), with many added features.

This new CD edition includes the text pages as they appear in the printed version by Allen deHart and Bruce Sundquist in an interactive pdf format. It also includes the following mapping features, developed by WVHC volunteer Jim Solley, and not available anywhere else:

- All pages and maps in the new Interactive CD version of the Mon hiking guide can easily be printed and carried along with you on your hike
- All new, full color topographic maps have been created and are included on this CD. They include all points referenced in the text.
- Special Features not found in the printed version of the Hiking Guide: Interactive pdf format allows you to click on a map reference in the text, and that map centered on that reference comes up.
- Trail mileages between waypoints have been added to the maps.
- ALL NEW Printable, full color, 24K scale topographic maps of many of the popular hiking areas, including Cranberry, Dolly Sods, Otter Creek and many more

Price: \$20.00 from the same address.

March 28: Learn About MTR's Health Impacts

What are the health risks of MTR mining next to Kanawha State Forest and Charleston (or anywhere)? Come find out from Dr. Michael McCawley, chair, Department of Occupational and Environmental Health Sciences at WVU, as he presents the latest research on how ultrafine particulate dust from MTR impacts our health.

Meet Dr. McCawley Saturday, March 28, at 3:30 p.m. at the Unitarian Universalist Congregation, 520 Kanawha Blvd. W., Charleston, WV. Presented by the Kanawha Forest Coalition.

DR. MICHAEL McCAWLEY
Public Health Impacts of
Mountaintop Removal Mining
Saturday, March 28th - 3:30pm
 Unitarian Universalist Church 520 Kanawha Blvd W. Charleston

Under the Highlands - Part II A Brief Geologic History

By Jim Van Gundy

The geologic history of the Appalachian region is a complex and interesting story in itself. During the Paleozoic Era, three quite different and lofty ranges of mountains were thrown up and then largely worn away within the region.

ERA	PERIOD	MILLIONS OF YEARS AGO
Cenozoic	Quaternary	1.6
	Tertiary	66
Mesozoic	Cretaceous	138
	Jurassic	205
	Triassic	240
Paleozoic	Permian	290
	Pennsylvanian	330
	Mississippian	360
	Devonian	410
	Silurian	435
	Ordovician	500
	Cambrian	570
		2500
		3800?

Geologists use the term "orogeny" to refer to a significant mountain-building event. The first Appalachian orogeny occurred in Ordovician times when a volcanic island arc, probably much like today's Aleutian Island arc, collided with ancestral North America along what is now its east coast. This has been named the Taconic orogeny and was centered to the north and east of what are now the central Appalachians.

I should point out that when I refer to a compass direction in this article, I am referring to today's regional orientation. During most of the Paleozoic Era however, ancestral North America was rotated approximately 90 degrees in a clockwise direction from its current orientation and so the ancient Appalachian mountains actually lay just to the south of ancestral West Virginia.

The Paleozoic Era lasted for roughly 330 million years and what is now West Virginia lay within tropical latitudes for most of that period. A shallow ocean also covered the state and it steadily accumulated

sediments shed by the mountain ranges that lay to the east. The Ordovician age shales and Silurian age sandstones and shales of our eastern counties are the eroded remnants of these Taconic Appalachians. The nearly pure quartz Tuscarora sandstone that forms Seneca Rocks was originally deposited as beach sand towards the close of the Silurian Period.

By the end of the Silurian Period the Taconic Appalachians had largely been worn away and not much sediment was reaching our area. In a shallow tropical ocean when the sediment supply is scanty, limestones are deposited and it was during this period that most of the limestone found in the Valley and Ridge region of the state was formed.

It should be pointed out that with the exception of the Pennsylvanian and Permian periods, significant limestones were deposited in West Virginia during each period of the Paleozoic Era. We will have more to say about the importance of these limestones in the 3rd and 4th installments of this series.

By the middle of the Devonian Period, a new range of mountains called the Acadian Appalachians was rising in the east. This range was longer and higher than the Taconic Appalachians and was the result of the collision of two small microcontinents with ancestral North America. These were relatively small blocks of continental crust, each perhaps similar in size to current-day New Zealand.

The uplift and erosion of mountains are contemporaneous processes, so this new range of mountains immediately began to shed enormous quantities of silt and sand westward into the sea occupying the Appalachian basin. Today these sediments form a sequence of middle to late Devonian shales and sandstones beneath eastern West Virginia that is nearly two miles thick. The Marcellus and other shales that lie toward the bottom of this thick pile are particularly rich in organic material and this has given rise to the abundant natural gas that is now held within these formations.

In the early Mississippian Period, some shales and sandstones were still being deposited in the state but as the sediment supply dwindled, conditions again became favorable for the deposition of limestone. The Greenbrier limestone was deposited during this time and it is

particularly thick in Greenbrier and Monroe counties where it reaches thicknesses of 1,200 to 1,500 feet. It thins considerably to the north and is only about 60 feet thick at the Pennsylvania border but it is an important source of limestone and limestone products throughout its outcrop area.

Towards the end of the Mississippian Period, the area became elevated above sea level, although initially not very far above it. Except for several very brief periods during late Mississippian and early Pennsylvanian times, West Virginia has stood above sea level since the end of the Mississippian Era, 330 million years ago.

In early Pennsylvanian time, two large rivers that lay to the north delivered extensive deposits of pure quartz sand and small quartz pebbles across the area. These deposits eventually became the lower members of the Pottsville group of rocks that include the very erosion-resistant conglomerates and sandstones that now cap all of the higher elevations on the eastern edge of the Allegheny Plateau, including Spruce Knob and Dolly Sods.

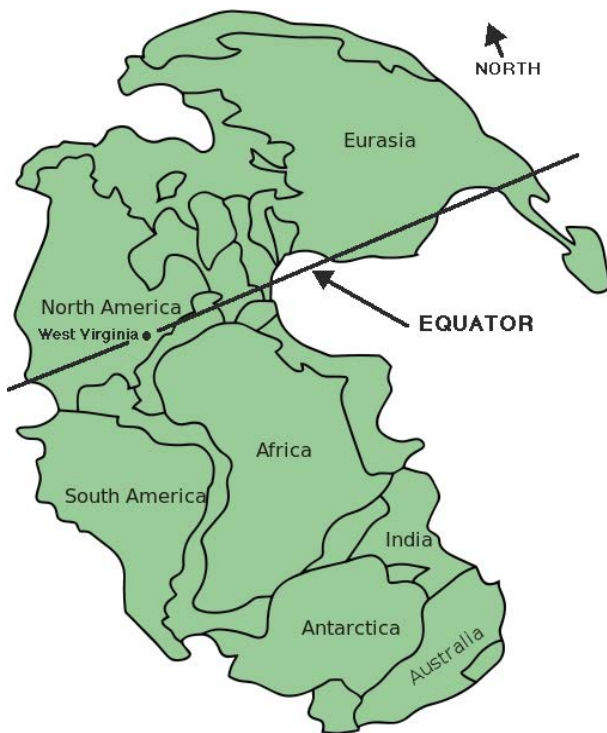
During somewhat later Pennsylvanian time, luxuriant tropical swamp forests developed on the extensive coastal plain that existed here during that time. We know that numerous rivers cut through these swamps because the rocks (including the coals) that accumulated in them contain abundant filled stream channels and river delta deposits. These swamps were close enough to sea level that they were occasionally and briefly covered by seawater to which several thin marine sediment beds bear witness. These "coal swamp" conditions persisted throughout the Pennsylvanian Period and into early Permian time. All of the mineable coals of West Virginia were deposited during this time.

By the latter part of the Pennsylvanian Period, profound geologic change was coming to the region as the ancestral Atlantic Ocean closed off completely and the African continental mass began its long, slow collision with North America.

This collision produced the Alleghenian Orogeny, the most recent and the most extensive of the Appalachian mountain building episodes. As the

Alleghenian Appalachians (not the same as the modern Allegheny Mountains) arose, West Virginia was elevated well above sea level and became an erosion surface that persists to the present day. No significant sedimentary rocks have been deposited in West Virginia since the completion of the collision with Africa. The extensive faults and folds of the Valley and Ridge and Allegheny Mountain section of the state were all created during the Alleghenian orogeny.

The collision of Africa with North America completed the assembly of a supercontinent that has been called Pangaea (literally "all earth"). West Virginia was locked in the middle of this supercontinent for nearly 70 million years until its break-up in mid-Triassic time.



Much of what can be discerned about the geologic history of an area is learned by an examination of its sedimentary rocks. Since no such rocks were deposited here during the Mesozoic Era, almost nothing is known about this period of West Virginia's geologic history. We do know that at the end of the Paleozoic Era West Virginia lay directly on the equator and was locked in the interior of a very large continent. As such, it would almost certainly have been a very hot desert with infrequent rainfall. These conditions would likely have persisted well into the Mesozoic. Although the Mesozoic Era was the so-called Age of Dinosaurs, there are no dinosaur fossils to be found in the Mountain State because no rocks of this age exist here.

As Pangaea began to break-up in the early Mesozoic Era, a new ocean, the modern Atlantic, started to form between Europe/Africa and North America. The Atlantic continues to widen today at the rate of several inches a year.

The rifting (break-up) of Pangaea to form the Atlantic basin was caused by tensional (pulling) forces that were just the opposite of the compressional (pushing) forces that had persisted throughout the Paleozoic era. While compressional forces cause thickening and shortening of the continental crust through folding and thrust faulting, tensional forces cause the crust to be stretched and thinned. As a consequence of this stretching process, a different type of faulting called "normal" faulting occurs, and this may allow magma to well up through the thinned crust along the fault zones from deep within the Earth. This emplacement of magma formed, and is still forming, the floor of the Atlantic Ocean basin.

As a new ocean basin opens, the normal faulting is not necessarily limited to the ocean basin proper. It also typically extends landward somewhat onto the continental margin. During Triassic and into early Jurassic time, there was extensive volcanic activity all along what is now the eastern seaboard of the United States. This was probably similar to the type of volcanism seen in Iceland today. Some of this activity extended as far west as eastern West Virginia and Pendleton County has a few small exposures of igneous rock dating back to Jurassic times.

As the Atlantic Ocean continued to widen, the Alleghenian Appalachians were in course worn away by erosion and the region became a gently rolling surface not far above sea level. It persisted in this condition, crossed by sluggish meandering streams and rivers, until early Tertiary time (about 35 million years ago) when the entire eastern margin of the continent was uplifted by perhaps as much as 6,000 feet and tilted westward. The reasons for this uplift are problematic. No folding or major faulting accompanied the uplift and the regional stresses were definitely not compressional during this time. A good possibility is that the uplift represents a delayed "isostatic rebound" of the deep roots of the Alleghenian Appalachians.

At about the same time, there was scattered volcanic activity in eastern West

Virginia. This marks the last time there were active volcanoes in the eastern United States. Pendleton County and adjacent counties in Virginia have a few small exposures of igneous rock dating back to these early Mesozoic times. The conical hill named Trimble Knob that stands just south of the town of Monterrey, Virginia is one of the most visible remnants of this volcanic activity.

Whatever its cause, the Tertiary uplift rejuvenated the streams of the region and as their gradients steepened they began to downcut their valleys into the newly elevated landscape. This downcutting by upland stream systems is what has produced, and continues to produce, the topography of eastern West Virginia. If you stand in the middle of Pendleton County's Germany Valley, you will be standing on Ordovician age limestones - some of West Virginia's older rocks. It's impressive to realize that stream erosion has removed about 16,000 feet (slightly over three miles) of rock from the current Germany Valley surface since the beginning of the Alleghenian orogeny. Current rates of landscape erosion in the central Appalachians are estimated to be on the order of one hundred feet per million years.

West Virginia straddles the Allegheny Front with the Valley and Ridge province to the east, and the Appalachian Plateau province to the west. In the Valley and Ridge province, the rocks outcrop in narrow parallel bands oriented northeast to southwest along the structural "grain" of the region. The bands are a consequence of the anticlinal and synclinal folds in this area. Ridges are developed on bands of resistant rocks such as the Silurian-age Tuscarora sandstone so spectacularly seen at Seneca Rocks. The valleys are developed on parallel bands of softer, more erodible rocks such as the middle Devonian shales and lower Devonian and upper Silurian limestones.

The streams of the Valley and Ridge and Allegheny Mountain sections of the state demonstrate a "trellis" pattern with most of the larger streams aligned along the regional structural grain in a northeast to southwest orientation. Where these streams do cut across the structural grain,

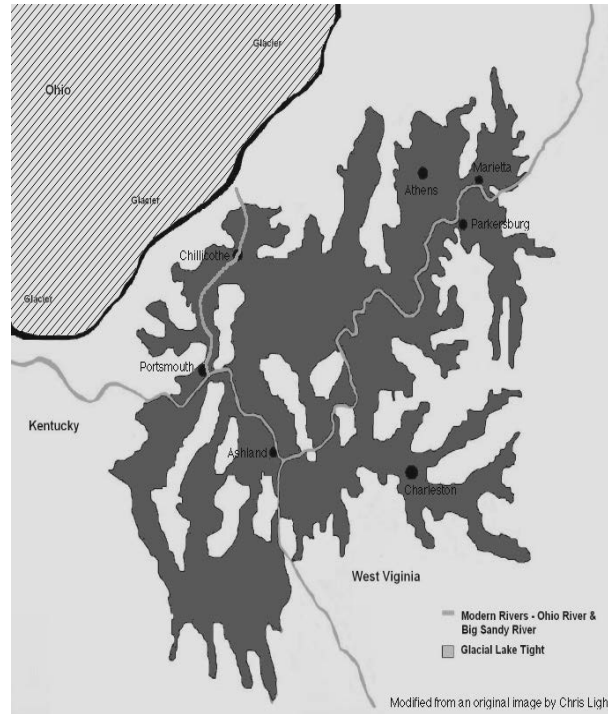
they typically do so only for short distances through “water gaps” cut through the more resistant sandstones of the ridges.

To the west of the Allegheny Mountains a distinctly different stream pattern is in evidence. Over most of the Appalachian plateau proper, the streams demonstrate a randomly branched “dendritic” (tree-like) pattern. Dendritic drainages develop on generally flat-lying rocks of more or less uniform erodibility. Since the topography of the region is largely due to the downcutting action of streams, these two different drainage patterns account for most of the differences in topography on the opposite sides of the Allegheny Front.

West Virginia was not glaciated during the Pleistocene epoch, but it was nonetheless affected by the thick continental ice sheets that lay just 50 miles to the north of Pittsburgh. Parts of the highlands in particular had a “periglacial” climate with the ground permanently frozen at depths of more than a few feet – a condition that geologists call permafrost. Features such as frost polygons, rock trails, cryoplanation terraces and taluses are features associated with permafrost, and all are in evidence along the Allegheny front at Dolly Sods.

Proglacial lakes are lakes that form at the margins of continental ice sheets. During the last of the great Ice Ages, at least two large proglacial lakes occupied parts of the Mountain State. Glacial Lake Monongahela extended for 130 miles from the present site of Elwood City, Pennsylvania (NW of Pittsburgh) to near Weston, West Virginia. This lake inundated essentially all of the land below 1,100 feet elevation within the Monongahela River drainage. The other great West Virginia proglacial lake was

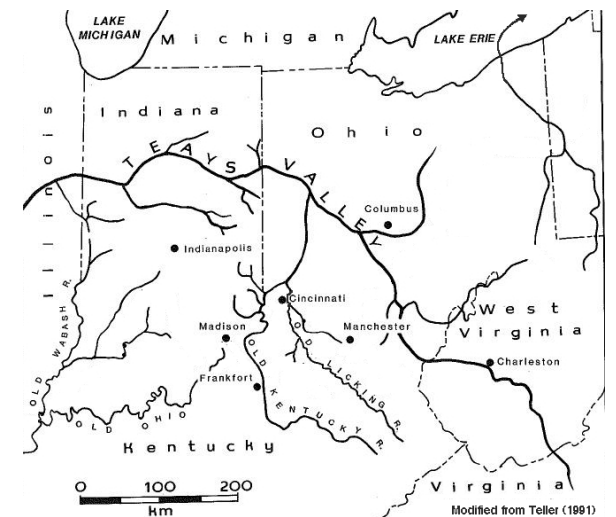
Teays Lake, also called Lake Tight after the Muskingum College geologist who first recognized its existence. It flooded the Kanawha and Scioto River valleys from the present site of Chillicothe, Ohio to what is now Hawk’s Nest State Park in West Virginia.



The great continental glaciers of the Pleistocene also changed many of the major drainage relationships in our region. Prior to the Pleistocene, the Monongahela River drained northward to the St. Lawrence River through what is now the Beaver River valley in Pennsylvania. The Beaver River now flows in the opposite direction (southward) through the ancestral Monongahela valley to join the Ohio River just below Pittsburgh. The Ohio River itself did not exist until near the close of the Ice Ages.

To the south, the Teays River flowed northward from the Blue Ridge Mountains in

North Carolina, through what are now the valleys of the New and Kanawha Rivers in West Virginia and then followed a less certain path across Ohio, Indiana, and Illinois, eventually joining the ancestral Mississippi River. The stretch of Interstate 64 between St. Albans and Huntington follows the now abandoned valley of the ancient Teays River, which is now occupied by much smaller streams.



Note: This is the second in a four part series on the geology of Appalachia.

Send Us a Post Card, Drop Us a Line, Stating Point Of View

Please email any poems, letters, commentaries, etc. to the VOICE editor at johnmcferrin@aol.com or by real, honest to goodness, mentioned in the United States Constitution mail to WV Highlands Conservancy, PO Box 306, Charleston, WV 25321.

Leave a Legacy of hope for the future

Remember the Highlands Conservancy in your will. Plan now to provide a wild and wonderful future for your children and future generations. Bequests keep our organization strong and will allow your voice to continue to be heard. Your thoughtful planning now will allow us to continue our work to protect wilderness, wildlife, clean air and water and our way of life.

Our Readers Write:

The moral courage to change energy policy

Dear Editor,

Slaves represented half of all property wealth in the South in 1860. Slaves provided the energy that fueled the southern agriculture-based economy including export of cotton for northern and European textile industries. Political interests revolved around maintaining and enlarging slave-based wealth. Abolitionists who sought the end of slavery were reviled as enemies who would ruin the economy and strand assets of \$10 trillion in today's terms.

A bitter, divisive civil war broke out. Slaves were emancipated. Valuable human property was forfeited. The South struggled to start a new economy.

Gas, oil, and coal now provide the energy that fuels our economy. "Extreme extraction" is how we get this energy. In West Virginia, extreme extraction blows up mountains for coal. Extreme extraction harvests shale gas by drilling 1 ½ miles into the earth, then horizontally drilling mile-long bores like spokes on a wagon wheel mile, then injecting pressurized chemical-laden water into the boreholes. For oil, extreme extraction digs sludge-like bitumen in Alberta tar sands, sets up platforms in mile-deep oceans and in stormy arctic seas, and plunges drill bits in remote jungles. A political form of extreme extraction makes allies with extreme despotic governments like Saudi Arabia, leads into extreme conflict

in the Middle East, and makes common cause with corrupt governments.

The proposed Atlantic Coast Pipeline is just another piece of extreme energy. The construction itself would be unprecedented—a 42 inch pipeline buried in steep, rugged, pristine terrain. The gas would come from the extreme energy shale "fracking fields."

Investment in this \$5 billion pipeline makes economic sense only if pipeline revenue pays for itself and adds profit. Protecting this investment asset would include continuing an assured supply of "fracked" gas, maintaining customer demand, and quashing competing alternatives. Big-money energy investors use well-funded political and propaganda power to aggrandize and protect their assets. Such investors resist the "new abolitionists" who advocate public policies for energy conservation and renewable technologies that might weaken or even strand conventional energy investment potential. Lessons of the antebellum southern slave-based economy are instructive as we watch West Virginia policymakers pander to powerful coal and gas industries.

Society's extreme dependence on carbon-based fuels is increasingly leading toward extreme climate and ocean disruptions. When my young grandchildren

are my age (66), coastlines will be submerged, agriculture will be in flux, and according to the Pentagon, global unrest will be extreme due to water and food scarcities and population displacements.

The Atlantic Coast Pipeline is not just an economic cost/benefit issue or a "not in my backyard" issue. It has profound moral, ethical, and spiritual contours. Slavery in the United States was more than just about the economy. The United States faced a profound decision about an economy that exploited energy from enslaved human beings. Emancipation was a rocky path; yet emancipation was the right moral thing. Moving together toward responsible energy consumption, clean energy opportunities, and energy conservation is the right moral covenantal responsibility with future generations. Making together common sacrifice for future life on Earth is the right moral pathway. Recognizing our own extreme addiction to extreme energy is a first step toward emancipation from denial, and to then step courageously and confidently into the freedom of a new beginning.

Allen Johnson

Note: This letter was first written to *The Pocahontas Times*.



Species audible during the editing of this issue of the Voice. Looking for a date, staking out territory, or some such birdy thing.

VOICE AVAILABLE ELECTRONICALLY

The Highlands Voice is now available for electronic delivery. You may, of course, continue to receive the paper copy. Unless you request otherwise, you will continue to receive it in paper form. If, however, you would prefer to receive it electronically instead of the paper copy please contact Beth Little at blittle@citynet.net. With electronic delivery, you will receive a link to a pdf of the Voice several days before the paper copy would have arrived. The electronic Voice is in color rather than in black and white as the paper version is.

HIGHLANDS CONSERVANCY BOUTIQUE



- ▶ The baby shirts are certified organic cotton and are offered in one infant and several toddler sizes and an infant onesie. Slogan is “I ♥ Mountains Save One for Me!” Onesie [18 mo.]---\$17, Infant tee [18 mo.]---\$15, Toddler tee, 2T,3T,4T, 5/6---\$18
 - ▶ Soft pima cotton adult polo shirts are a handsome earthtone light brown and feature the spruce tree logo. Sizes S-XXL [Shirts run large for stated size.] \$18.50
 - ▶ Order now from the website!
- Or, by mail [WV residents add 6 % sales tax] make check payable to West Virginia Highlands Conservancy and send to West Virginia Highlands Conservancy, Online Store, PO Box 306, Charleston, WV 25321-0306

T- SHIRTS

White, heavy cotton T-shirts with the **I ♥ Mountains** slogan on the front. The lettering is blue and the heart is red. “West Virginia Highlands Conservancy” in smaller blue letters is included below the slogan. Short sleeve in sizes: S, M, L, XL, and XXL. Long sleeve in sizes S, M, L, and XL. **Short sleeve** model is \$15 by mail; **long sleeve** is \$18. West Virginia residents add 6% sales tax. Send sizes wanted and check payable to West Virginia Highlands Conservancy ATTEN: Online Store, WVHC, P.O. Box 306, Charleston, WV 25321-0306.



HATS FOR SALE

We have West Virginia Highlands Conservancy baseball style caps for sale as well as I ♥ Mountains caps.

The WVHC cap is beige with green woven into the twill and the pre-curved visor is light green. The front of the cap has West Virginia Highlands Conservancy logo and the words West Virginia Highlands Conservancy on the front and I (heart) Mountains on the back. It is soft twill, unstructured, low profile, sewn eyelets, cloth strap with tri-glide buckle closure.

The I ♥ Mountains The colors are stone, black and red.. The front of the cap has ♥ MOUNTAINS. The heart is red. The red and black hats are soft twill, unstructured, low profile, sewn eyelets, cloth strap with tri-glide buckle closure. The stone has a stiff front crown with a velcro strap on the back. All hats have West Virginia Highlands Conservancy printed on the back. Cost is \$15 by mail. West Virginia residents add 6% tax. Make check payable to West Virginia Highlands Conservancy and send to West Virginia Highlands Conservancy, Atten: Online Store, P.O. Box 306, Charleston, WV 25321-0306