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The Highlands Voice

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LANDOWNERS AND OLD MINE SITES - WHO PAYS ?

By Cindy Rank

At the present I'm deeply immersed in an extensive and much needed project of sorting, recycling and shedding – and sometimes shredding - some 35 years worth of old paper files, water and mining regulations, newspaper articles, meeting notes and records of all sorts. Truth be told I'm the daughter of a lovable pack-rat, but have come to realize that I have surpassed even my mother's wildest dreams and I'm sure the important parts of West Virginia environmental history that I've stockpiled all these years are by now probably digitized and far more readily accessible in some cloud or another than from my overflowing shelves and stacks of boxes here in Eden WV.

In the process I find myself slowed down every now and then by the inevitable reminiscing and I all too often stumble upon reminders from the past that illustrate how slow we are/have been to address even the most obvious of environmental problems that are visited upon our state year after year.

In thinking about this month's issue of *the Highlands Voice* I had to laugh (or was

that a whimper I heard) when I came across a few clips from 1992 that took me back to "Caperton Country" complete with posters and postcards showing one of Tom and Judy Rodd's kids braving a red and yellow mine drainage stained creek to pose with a friend both smiling under a sign "WELCOME TO CAPERTON COUNTRY!"

I do also still have one dusty bottle of Chateau Callaghan hidden in the corner of a shelf, but the creek chub that came inside the bottle has long been demolished into some sort of dull-tan fluff that sluffs around on the bottom of the bottle when you pick it up.

But the more sober, somber part of those papers were a couple articles from the Charleston Gazette that told the story of Lewis Law who bought property in Fayette County where mining had occurred and acid mine drainage continued to pollute Wolf and Arbuckle Creeks. Mr. Law contended he didn't know about the problem when he bought the property (though it was reported the previous owner was spending some \$5,000/wk to treat the acid water). The US

Attorney in southern WV brought criminal charges against Law for violating the Clean Water Act and polluting two Fayette County streams. After being convicted and appealing to the 4th Circuit and unsuccessfully to the US Supreme Court Law was still fined and sentenced to two years in prison.

About the same time Director David Callaghan – returning to head the newly organized WVDEP which was created from the ashes of the Arch Moore debacle known as the Division of Energy (DOE) – ordered three landowners of forfeited mine sites in Preston County to pony up the funds necessary to treat the acid mine drainage discharging from their properties.

I'm unclear as to the exact outcome of this particular Preston County effort [my memory fails me and I've yet to come across any clarifying follow-up articles that I'm sure are buried in my boxes upstairs], but it was at that time the West Virginia State Supreme Court issued a Mandamus order [brought by Pat McGinley and the late Phil Scott on

(More on p. 3)

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Ramblin' the Ridges

By Cynthia D. Ellis

Wish List

*** **

Dear Santa---

All of us in your favorite mountain preservation group have been exceedingly good this year, so-o-o-o-o, perhaps you could consider bringing us a present---a drone!

No, no, no!!! Not the evil kind!!! The other kind--- a little one. We could use it.

We mean the kind based on that model airplane, the "Ritewing Zephyr II". The one that costs \$500 to \$1000 and has a camera. Little sneak peaking machines such as this have been used to monitor:

- Bengal Tigers
- Indian Rhinos
- orangutans
- chimpanzees
- pygmy rabbits
- elk
- salmon,
- rare plants
- hurricanes, and
- the restoration progress of undammed rivers.

Just think of the creatures and situations we could help protect, in the mountains, with our new "watchful eyes" toy. It could be a UAV---Unmanned Aerial Vehicle, or the smaller MAV---Macro Air Vehicle. [MAV's were inspired by hummingbirds.] They both spare the lives and expense of pilots in manned surveillance and many can fly in rough weather.

And then, if it's not too much trouble, we could use some tech savvy folks to help sort out the data from our new drone. Please bring us a few analysts who don't mind working for shirts, hats, stickers, pencils, spruce seedlings, history books, and chances on a great raffle.

Or maybe, instead of human techies, we need some kind of elves like yours...or something like the house elves in the Harry Potter books.

Or CLONES! We could use them to supplement the work of our volunteers! They could read and evaluate forest plans, wind facility proposals, coal mine drainage and gas fracking issues. Or they could help collect seeds and cones of native plants and lead hikes. They could attend hearings and record them. They could help lobby! We would probably need some that are programmed with legal expertise too...to sort out the ethics of the use of clones, and the privacy issues for the little drone. Or course we would still maintain close ties with our real human helpers. We get great satisfaction from interactions with our loyal members and generous benefactors and would not want to delegate that.

Oh, but now, we apologize. We should have begun with some polite inquiries. Is all well at your home and in the workshop? How are Mrs. Claus, the reindeer, elves, and all? How about you? We hope you feel fit and ready to go. We certainly enjoyed the photos you sent of you and Mrs. C. relaxing on the beach. in hammocks, in your WVHC polo shirts. Now that you're back home at the Pole, we hope you have your wreath, from our early December workshop, hanging on your door. As the big night approaches we can just imagine your flight and the pleasure you experience when gliding

(For the rest of the story, turn to p. 10)

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POLLUTION FROM OLD MINE SITES-- WHO PAYS? (Continued from p. 1)

behalf of WV Highlands Conservancy and others] that made it clear the state is responsible for reclamation at forfeited sites, reclamation that included water treatment. And the federal Office of Surface Mining was also on the same page and even threatened take-over of the mine bonding program if the state didn't come up with the money needed to fulfill its responsibilities under the law. [Lots of long and tedious stories with all of this Many of which have been reported the Highlands Voice over the years.]

WHEW !

All that just to say that, together with our friends in Ohio Valley Environmental Coalition and Sierra Club and represented by the good folks at Appalachian Mountain Advocates, we're back at it.

As we reported in the June 2013 issue of *the Highland Voice* we filed suit in May 2013 against three landowners whose properties continue to discharge selenium laced water from valley fills created as part of earlier mining at those sites.

Again in June 2013 we filed two more complaints against landowners in similar positions ... and again just weeks ago we filed another.

Like the earlier complaints, these contend that there are unlawful, unpermitted discharges of selenium that may be a result of previous mining, but since the companies involved have been released from their bonds the responsibility for treating the pollution falls on the shoulders of the current landowners. (...Who may well have benefitted monetarily from the earlier mining ...)

As was true for the three mentioned in the June Voice, these three are also located in Mingo County WV with the offending drainage entering tributaries of the Tug Fork River (Ben's Creek, Pigeon Creek, etc).

-- Hershaw Partners, LLC owns property that includes the old Chafin Branch Mine.

-- Pocahontas Land Corporation owns land originally permitted as the Southeast Ridge Mine.

-- Fund 8 Domestic, LLC is the focus of the most recent complaint filed November 12, 2013 and includes discharge from properties once under permit as Anchor Surface Mine and Opportunity No.3 Surface Mine.

All six of these complaints are a result of unpermitted discharges of selenium from several 'reclaimed' valley fills at previous mine sites that are causing harm to the water quality downstream.

Selenium is a toxic element that causes reproductive failure and deformities in fish and other forms of aquatic life, and can at very high levels pose a risk to human health, causing hair and fingernail loss, kidney and liver damage, and damage to the nervous and circulatory systems.

WV DEP Division of Water has documented harmful levels of selenium in a variety of lakes and waters of the state. In addition, sampling during the Mountaintop Mining - Valley Fill Programmatic Environmental Impact Statement as early as 1999 found harmful levels of selenium in discharges from many surface coal-mining and valley fill operations across Appalachia.

Many of our court cases seek to hold companies accountable for selenium pollution from their active mining operations and for meeting selenium limits in their water discharge permits. Many of our administrative appeals to the Environmental Quality Board focus on the need for WVDEP to issue permits with adequate selenium limits where there is a 'reasonable potential' that selenium will be discharged as a result of the mining.

Unfortunately, as more and more sources of untreated selenium pollution are documented at old mine sites like the ones now being challenged, the widespread nature of selenium impaired streams begins to look hauntingly similar to those thousands of miles of streams already impaired by acid mine drainage. And that is a picture our state just can't afford.

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Of course selenium isn't the only problem caused by these old valley fills ... For example, high conductivity and total dissolved solids (TDS) as well as high levels of sulfates (SO<sub>4</sub>) in the Twentymile area where huge mining complexes (Alex Energy, FOLA, etc) straddle the Nicholas-Clay County line and impact water quality and aquatic life in tributaries that flow both to the Gauley on the east and the Elk to the west have been the focus of a number of our complaints against active mining operations in that area.

Similar harm is known to impact streams and aquatic life below some of the older valley fills where mine permits have been released so we're looking ahead to more challenges of landholding companies who have inherited these unpermitted polluting discharges as well.

Stay tuned.

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The West Virginia Highlands Conservancy web page is [www.wvhighlands.org](http://www.wvhighlands.org).

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.



# MONSTER STRIP MINE HEADS TO UNITED STATES SUPREME COURT

By John McFerrin

Mingo-Logan Coal Company has filed a petition for a writ of certiorari asking the United States Supreme Court to reverse the decision of the United States Court of Appeals which allowed the United States Environmental Protection Agency to withdraw approval of a permit to mine in Pigeonroost and Oldhouse Branches and their tributaries.

## What this case is about

Indirectly, this case is about whether Mingo Logan Coal Company can go ahead with its plans to mine in Pigeonroost and Oldhouse Branches and their tributaries. Mingo Logan seeks to bury over six miles of pristine streams, including all wildlife living in those streams, with millions of cubic yards of mining waste, disturbing over 2,000 acres (about 3.5 square miles), releasing toxic pollutants into downstream waters, and devastating wildlife and watersheds.

The Court will not directly decide whether this is a good idea or whether the federal Clean Water Act allows it. Like much federal litigation, this case is directly about who gets to decide that question. Mingo-Logan and its supporters say that the Corps of Engineers gets to make the final decision. The Environmental Protection Agency and its supporters say that, while the Corps has a role and may issue a permit, the Environmental Protection Agency the Clean Water Act designates EPA as lead agency overseeing Clean Water Act permits and gives it authority to veto such permits when the water quality impacts are unacceptable. If, as the EPA found here, the environmental impacts of the planned mine are unacceptable, then it has the authority under the Clean Water Act to veto the permit.

## What has happened so far

This mine has been controversial since at least 1998. It was a part of the *Bragg v. Robertson* litigation by the West Virginia Highlands Conservancy that resulted in the programmatic Environmental Impact Statement studying mountaintop removal mining.

More recently, in 2007 the Corps of Engineers issued the permit required to fill streams, known as a §404 permit, for the mine. This immediately resulted in protests from the West Virginia Highlands Conservancy, the Ohio Valley Environmental Coalition, and Coal River Mountain Watch as well as continued interest by the Environmental Protection Agency. The interest manifested itself in additional study, including proposing alternatives to the mining plan as proposed.

The EPA spent the next two years looking for less damaging alternatives to the proposed mining plan. Finally, in 2009 the EPA asked the Corps of Engineers to use its discretionary authority to deny the permit. When the Corps of Engineers went ahead and granted it, EPA issued notice of a proposed veto. . In announcing its decision to not allow the mining, the EPA said:

EPA's final determination on the Spruce Mine comes after discussions with the company spanning more than a year failed to produce an agreement that would lead to a significant decrease in impacts to the environment and Appalachian communities. The action prevents the mine from disposing of the waste into streams unless the company identifies an alternative mining design that would avoid irreversible damage to water quality and meets the requirements of the

law. Despite EPA's willingness to consider alternatives, Mingo Logan did not offer any new proposed mining configurations in response to EPA's Recommended Determination.

The EPA also held public hearings to consider comments upon its proposed action. See the June, 2010, issue of *The Highlands Voice*.

After considering its own studies and the public comments, the EPA issued the veto that is the subject of the ongoing litigation. See the February, 2011, issue of *The Highlands Voice*.

The company appealed the EPA's decision and, on March 23, 2012, a federal court in the District of Columbia overturned the U.S. Environmental Protection Agency's veto. See the April, 2012, issue of *The Highlands Voice*. The EPA then appealed that decision to the Court of Appeals. The Court of Appeals overturned the District Court, reinstating the veto. The company has now petitioned the United States Supreme court for review.

The West Virginia Highlands Conservancy participated as an *amicus curia* before the United States Court of Appeals. If the case is accepted for decision by the Supreme Court the Conservancy may decide to request permission to participate as *amicus curia* before that Court.

## What is at stake

Locally, the proposed mine project would have:

- Disposed of 110 million cubic yards of coal mine waste into streams.
- Buried more than six miles of high-quality streams in Logan County, West Virginia with millions of tons of mining waste from the dynamiting of more than 2,200 acres of mountains and forestlands.
- Buried more than 35,000 feet of high-quality streams under mining waste, which will eliminate all fish, small invertebrates, salamanders, and other wildlife that live in them.
- Polluted downstream waters as a result of burying these streams, which will lead to unhealthy levels of salinity and toxic levels of selenium that turn fresh water into salty water. The resulting waste that then fills valleys and streams can significantly compromise water quality, often causing permanent damage to ecosystems and streams.
- Caused downstream watershed degradation that will kill wildlife, impact birdlife, reduce habitat value, and increase susceptibility to toxic algal blooms.
- Inadequately mitigated for the mine's environmental impacts by not replacing streams being buried, and attempting to use stormwater ditches as compensation for natural stream losses.

In issuing the veto, EPA said, "The proposed Spruce No. 1 Mine would use destructive and unsustainable mining practices that jeopardize the health of Appalachian communities and clean water on which they depend," said EPA Assistant Administrator for Water Peter S. Silva. "Coal and coal mining are part of our nation's energy future and EPA has worked with companies to design mining operations that adequately protect our nation's waters. We have a responsibility under the law to protect water quality and safeguard the people who rely on clean water."

**(Keep going; there's more on the next page**

## ON TO THE SUPREMES (Continued from previous page)

There is also the precedential value. Unless it's the O.J. trial or something, cases don't attract standing room only crowds unless somebody thinks they are a big deal and will make an important policy.

### The Arguments

The Environmental Protection Agency, the West Virginia Highlands Conservancy and those who have weighed in on EPA's side argue that the Clean Water Act authorizes "withdrawal" of a permit at any time and that there is no confusion about its meaning. They say that the Clean Water Act contains no limit on EPA's authority based on whether or not the Corps has issued a permit. Rather, the statute does the opposite: Section 404(b) mandates that the Corps's permitting authority is at all times subject to EPA's veto authority.

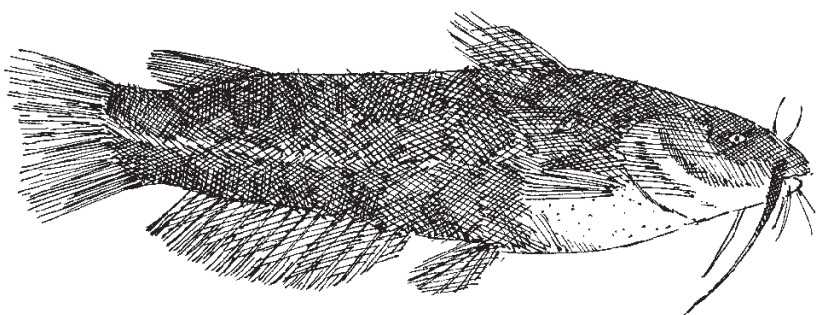
The company contends that the Corps of Engineers has primary authority to issue Section 404 (dredge and fill) permits. EPA may participate in the consideration of the application but once the permit has issued the EPA's authority ends. The Clean Water Act says that the EPA may withdraw its approval "whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas." The Court of Appeals relied heavily on the use of the word "whenever." The company contends that "whenever" means any time before the permit is issued.

The company also argues that if companies can't rely upon permits which have been issued they won't be able to plan, will spend money needlessly, can't get financing, and the sky will fall.

### What will happen at the United States Supreme Court?

Based upon statistics, nothing. Mingo-Logan has filed what is known as a petition for writ of certiorari, the route taken by almost all litigants. The Court receives approximately 10,000 petitions for a writ of certiorari each year. The Court grants and hears oral argument in about 75-80 cases. With less than one per cent of the cases being accepted each year, the odds are that Mingo-Logan's petition will be denied.

It is more likely that the Supreme Court will accept the case if there is a conflict among various Circuit Courts of Appeal. That is not the case here. It is also more likely that the Court will accept a case if there was at least one dissenting opinion in the lower court. Here there were no dissents. At the same time, there has been considerable public interest in this case. Perhaps that will have some bearing.



## BRINGING IN THE BIG GUNS

To present its case to the United States Supreme Court, Mingo-Logan has brought in Paul D. Clement. Mr. Clement is a former United States Solicitor General, has at least sixty nine Supreme Court appearances under his belt, and has been mentioned as a possible future nominee to the Supreme Court. This is reminiscent of the movie *Shane* (1953) when the cattle barons brought in Jack Wilson, the professional gunfighter from Kansas City, to take their side in the war with the homesteaders.



Jack Wilson



Paul D. Clement



# SHALE DRILLING AND PUBLIC HEALTH

By Wayne Spiggle

On November 23 the League of Women Voters of Pennsylvania sponsored a conference, titled "A Day of Discovery", on the public health issues associated with shale gas drilling. West Virginia Highlands Conservancy board member Wayne Spiggle attended the conference and brought back this report.

## University professors weigh in

"President Obama and others have expressed concern over health and environmental issues associated with shale drilling but public health professionals are absent from the table." "The public is getting misleading information because they are being told what to believe by the industry and its allies." That is the message of Bernard Goldstein, MD, Emeritus Dean/Professor of the University of Pittsburgh Graduate School of Public Health.

Dr. Goldstein was one of a faculty of professors and experts from Cornell, the University of Pennsylvania, Indiana U., Duquesne University, the US Forest Service and the National Institute for Occupational Safety and Health (NIOSH). They reviewed the long list of hazards to health from the shale drilling industry. Collectively, their presentations gave credence to the fact that health issues do exist as Marcellus drilling explodes in this region.

## The Straight Scoop On Shale

A growing public interest in this subject was evidenced from the more than two hundred people attending the conference. The information exchange was too comprehensive to be covered completely in this article. Readers are encouraged to follow <http://shale.palww.org>

or Google "Straight Scoop on Shale" for more information. The Pennsylvania League, with the help of the Colcom Foundation, has a Citizen Education Fund and its Straight Scoop on Shale initiative is a very reliable source of information.

## The Leaking Well Problem

Hydro-geologic forces and the density of well drilling are determinants of what wells leak and how much they leak. The more holes that are punched into the earth, the more likely it is that there will be leakage. Pennsylvania has 41,000 gas wells drilled in the last 13 years and 8700 have no publically available inspection reports. 100,000 shale gas wells are expected in the future.

Leaking wells are a major problem that is compounded by lack of sufficient inspection and the state's reluctance to act when a leaking well is confirmed.

## Flow Back Fluid Disposal

Flowback material is very toxic and needs to be put somewhere. That need has spawned many harmful practices from the industry as it reassures the public there is no problem. Landfill disposal, injecting

into abandoned wells, illegal dumping into state waters and similar practices simply defer the environmental consequences to the next generation.

The EPA is studying the "Potential Impacts of Hydraulic Fracturing on Drinking Water Resources" as authorized by Congress. No one seems to know when this study will be completed. For now, flow back fluid disposal is a problem without a solution. The public health implications are tremendous.

## The Need For Peer Reviewed Research

Scientific discipline requires that conclusions from observations be reviewed and duplicated by independent equally qualified researchers. This peer review process takes time and much of the content of the conference was tempered by the fact that the issues discussed were under peer review or required peer review.

Because of the limited peer reviewed research, there is little scientifically confirmed information about health consequences associated with shale gas. So far, the burden of proof on these issues has been on society, not the industry. Even with the limitations on the research, however, there are many striking observations about the public health effects of shale gas drilling which can be considered through the scientific confirmation process.

There is a threefold increase in health care use in a Pennsylvania county with a high level of shale drilling compared with an adjacent county in New York where there is a drilling moratorium. Chronic diesel fume exposure is a known health hazard and is likely to affect

hundreds of shale gas workers. High silica sand dust exposure has caused an increase in silicosis in the Midwest and is the same sand used in Pennsylvania for fracking. Failure to thrive, abortions and sudden death in farm animals located near shale wells do occur. Soil infertility and foodstuff production are problematic in areas of shale gas extraction. Contact with the toxics in frack fluid does cause illness.

## The Burden Of Proof Is On Society

The Food and Drug Administration requires responsible parties to vouch for a medication's harmlessness and to be held responsible if damage occurs. This "precautionary principle" places the burden of proof on the pharmaceutical industry and has saved countless lives. This is not the case with gas extraction and similar industries. The American Nurses Association, among others, is advocating that the precautionary principal should be expressed



Photo by Jessica Chow

(A little more on the next page)

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| Patron       | \$ 250     | \$ 500 | \$ 500  |
| Mountaineer  | \$500      | \$ 750 | \$ 1000 |

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

### 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.

### 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](http://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.

## SHALE GAS AND PUBLIC HEALTH (Continued from previous page)

in public policy concerning gas well drilling and that the medical profession must take action on health concerns despite the lack of scientific certainty.

### Commentary

Shale drilling in West Virginia has everything in common with Pennsylvania, even down to a law in both states putting a gag order on physicians caring for patients likely exposed to fracking fluid. The League of Women Voters of Pennsylvania is doing the public a great service through their "Straight Scoop on Shale" project. The WVHC and the greater environmental community in WV would do well to learn from and collaborate with this effort.

The academics were much more critical of the shale industry than I expected. More than one lecturer used the word, obfuscation to describe the information coming from Marcellus spokespeople. I had to look up this interesting word and it means the overt intention to confuse.

The information in this article was taken from my lecture notes and from the Resource Guide created for this conference. It is available through the League of Women Voters of Pennsylvania. <<http://shale.palww.org>>

Wayne Spiggle, MD [wspiggle@mac.com](mailto:wspiggle@mac.com)



## WHERE SHOULD WE PUT (OR NOT PUT) BIG WINDMILLS?

The Wind Committee of the West Virginia Highlands Conservancy has approved and is funding an effort to advocate for a substantial overhaul of the Public Service Commission's ("PSC") "Siting Rules for Exempt Wholesale Generators" (Title 150, Series 30 of the WV Code of State Rules). The Siting Rules govern applications to the PSC by entities not directly affiliated with or acting as a public utility serving retail customers of electricity for "siting certificates," which authorize the construction of an industrial wind facility in the State of West Virginia.

On March 8, 2003, the West Virginia Legislature enacted West Virginia Code § 24-2-11c, which governs the consideration of siting certificate applications by the PSC. Under this statute the PSC is required to, in considering an application for a siting certificate, "appraise and balance the interests of the public, the general interests of the state and local economy, and the interests of the applicant." Upon the statute taking effect, the PSC, on June 2, 2003, issued General Order 255.1, which initiated a process to craft the present Siting Rules. A wide variety of participants, including the Conservancy, submitted comments regarding what the final version of the rules should contain, and certain parties participated in an evidentiary hearing before the PSC. On January 5, 2005, the PSC issued an order in G.O. 255.1 which set forth the preliminary Siting Rules, subject to an additional notice and comment period. The final Siting Rules, in the form they exist today, were adopted by the PSC by order dated July 12, 2005.

Though the Siting Rules pertain to generating facilities utilizing coal, natural gas or a variety of other fuels, the most prevalent and controversial application of the rules has been in the context of applications to build industrial-scale wind turbines to generate electricity. Thus, the focus of this project is to seek revisions to the Siting Rules to provide better protection of the environment and communities in the vicinity of further proposed industrial wind facilities.

An overhaul of the Siting Rules could essentially be accomplished by one of two mechanisms:

- Petition for Rulemaking to be Filed with the PSC: this would constitute a direct request to the Commissioners that they initiate a rulemaking procedure, the end result of which would be

an entirely new set of siting rules. The drawback of this approach is that the PSC has the discretion to simply decline to do so. The upshot would be, at minimum, getting some media attention and therefore, public awareness, directed at the negative impacts of industrial wind energy development in West Virginia.

---OR---

- Lobbying the State Legislature: this effort would propose the enactment of a statute that would direct the PSC to carry out the rulemaking process described above. The upshot of the passage of such a law is that the PSC cannot decline to do something that the Legislature directs it to by law, within certain constitutional constraints.

Unfortunately, while they don't directly emit the particulate matter, sulfur dioxide, nitrogen oxides and carbon dioxide which steadily emerge from the stacks of legacy coal-fired power plants in West Virginia, utility-scale wind turbines have done serious damage to the ecology and aesthetics of the highlands spanning much of the north eastern counties of West Virginia. The Conservancy believes that wind turbine installations have been, and will continue to be, the target of a definite majority of applications filed with the Commission under W. Va. Code § 24-2-11c. Though the Siting Rules were the product of a meaningful rulemaking process initiated ten years ago by the PSC, the Conservancy observes that, in practice, they have failed to provide necessary protections for the natural environment, the scenic splendor of public lands, and the rural character of surrounding communities. In light of the Commission's consideration of several applications under the Siting Rules and following the commencement of commercial operation of three large industrial wind energy facilities in the state emerging from this process, the Conservancy respectfully asserts that the time to revisit and revise the Siting Rules has arrived.

Over the past decade, the Commission has applied the Siting Rules in a variety of cases, several of which have involved

applications to construct and operate industrial wind energy facilities. Though the Siting Rules cover a fairly broad range of topics regarding the potential impacts of generating facilities, to date the rules most subject to controversy and the presentation of conflicting evidence have largely related to the detriment to the environment generally and to wildlife in particular, disruption of the viewshed, diminished integrity of historic resources, and the introduction of noise into extremely quiet rural environments. The applicable rules in these subject matter areas will be the focus of this endeavor; however, the Conservancy welcomes the prospect of revising other components of the Siting Rules to better promote the public interest.

The Conservancy sets forth four overarching observations demonstrating the need for revision of the Siting Rules. First, the Siting Rules do not require applicants to present the best scientific and technical data and analysis available regarding a project's impacts.

Second, the Siting Rules concern data and call for conclusions requiring certain scientific and technical expertise of individuals outside the Commission's purview, yet no mechanism is in place to timely solicit and obtain the assistance of those parties, including other agencies within the state government wherein the experts reside.

Third, the Siting Rules do not provide any firm criteria for the Commission's imposition of pre-construction and post-construction conditions in an order granting a siting certificate.

Fourth, the Siting Rules 300-day decision window provided forces the Commission to analyze on incomplete information the impacts imposed by a proposed facility, and further forces the Commission to prognosticate the eventual findings and conclusions of other government agencies with expertise the Commission lacks.

Again, no one among the Commission Staff possesses education, training, or experience in hydrology, biology, noise or computer modeling of viewshed impacts. Yet, under the present statutory scheme, Staff witnesses must pretend to be experts in these areas. The timelines of various regulatory consultations and approvals in relation to such a large-scale industrial installation as a wind turbine facility do not

**(More on the next page)**



## SPOTS FOR BIG WINDMILLS? (Continued from previous page)

neatly overlap. For example, the issuance of an NPDES permit from the West Virginia Department of Environmental Protection may not occur until well after 300 days from the submission of a wind developer's siting certificate application to the PSC. Approval of a wind developer's wetland delineation by the Army Corps of Engineers may not be finalized until well after issuance of the NPDES permit, and so on.

The proposed revision of West Virginia Code § 24-2-11c rests upon assumptions, each of which the Conservancy believes to reflect the public interest and the cause of justice:

- (1) The PSC possesses relevant expertise in the regulation of electric utilities and the facilities traditionally operated by those utilities. Its regulation of exempt wholesale generators under federal law (in this circumstance, all industrial wind facility developers coming on the scene) should focus upon those same aspects, and it should not be placed in the precarious position of foretelling or divining the findings and conclusions of agencies charged with the protection of water resources, wildlife, and the like.
- (2) Notwithstanding the existence of certain public notice requirements set forth in connection with various other regulatory processes, industrial wind facility developers should not be permitted to proceed behind the scenes in obtaining regulatory approvals, and in no event should be permitted to obtain such approvals and permits after the conclusion of the evidentiary hearing in a siting certificate case before the PSC.
- (3) Intervenors in cases before the PSC, particularly industrial wind energy siting certificate cases, should not carry the burden of proof in any aspect of the case. It should always be the burden of the energy developer, and not that of private citizens, to prove the absence of impacts or the adequate mitigation of such impacts.
- (4) Proceedings before the Commission under West Virginia Code § 24-2-11c should be accompanied by a policy encouraging greater disclosure of information about an applicant and its proposed project, rather than less disclosure.
- (5) Impacts from an electric generating facility should be imposed within reasonable geographic proximity to where the majority of the benefits are incurred. West Virginia citizens should not absorb further externalities of expanded electric generation when the state already generates more than twice the electricity as its residents consume, and there is no indication that this gap in generation and native consumption will narrow at any time in the foreseeable future.
- (6) Perhaps, most importantly, because the activity of industrial wind facility developers seeking to reap the benefits of renewable portfolio standards, are responding to market opportunities rather than to demand for electric generation, such entities should be held to a higher standard than our traditional public utilities. The two terms can be distinguished in that "demand" refers to the projection of customer load in a given year in the state or in the PJM region, compared

to the available generating capacity, while a "market" exists whenever an energy developer can procure a buyer, typically a utility or electric cooperative purchasing power over a 20-year period under a "power purchase agreement." Recent information released by PJM Interconnection, our regional transmission organization, indicates a decline in projections of increasing demand in the region over the coming years. PJM has sufficient generating capacity for its constituent utilities to serve electric customers for many years to come; the construction of "alternative" or "renewable" energy sources will not serve to displace any conventional fossil fuel-fired generation.

The Conservancy can conceive of alternate ways of modifying the siting certificate statute, particularly to impose additional affirmative duties upon the PSC to consult directly with other governmental agencies. Though augmenting the duties of the Commission would be preferable, the Conservancy feels that the revisions the Conservancy will propose constitute a reasonable expansion of the scope of the PSC's review of siting certificate applications. The result in practice may be actually to *reduce* the burdens on the Commission in such cases.

In the interest of providing for less deference to entities not legitimately invested in our state and its future, and in the interest of granting greater weight to the rights of the citizens of West Virginia, we hope that we will find willing and able support at the PSC or to introduce our proposed revisions in this session of the West Virginia Legislature.

Submitted by the West Virginia Highlands Conservancy Wind Committee.

### **MOUNTAINTOP REMOVAL UP CLOSE AND PERSONAL**

Visit Kayford Mountain and/or Mud River Mountain south of Charleston to see mountain top removal (MTR) up close. Bring lunch for a picnic on Kayford mountain. Hear the story on how the late Larry Gibson saved fifty acres from mountain top removal on Kayford Mountain. Call in advance to schedule. Julian Martin (304) 342-8989; martinjul@aol.com.

## CYNTHIA D. GOES WISHIN'AND HOPIN'

(Continued from p. 2)

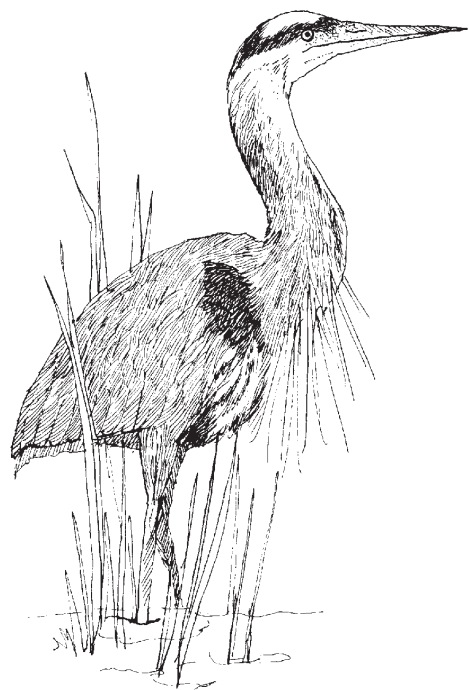
over the West Virginia Highlands. High over Cooper's Rock, Bear Rocks, through the lovely dark glittery sky down along Route 219 down toward Cranberry Glades...then maybe west a little to swing up over Grandview State Park and then south to Pinnacle Rock... with that leading reindeer's nose glowing warmly to reveal the "I ♥ Mountains" bumper sticker prominently displayed on your sleigh.

Ah well, we wish you a very safe trip. A treat will await you in the usual spot. Would you like a change from milk and cookies? Pepperoni roll? Or perhaps, beans, cornbread, and ramps? We should stick with cookies, eh. OK and they may very well include some West Virginia black walnuts this year, as a bonus.

Thanks so very much for considering this list...and for never putting lumps of coal in our stockings!

Sincerely,

Your friends of the West Virginia Highlands Conservancy



## DID VIRGINIA BLINK?

By Hugh Rogers

In late November, legislators got an update on Corridor H at their interim committee meetings. The big news wasn't about construction, or cost estimates, or anything at all happening here in West Virginia. Nor did the news come from the Department of Transportation. Instead, they listened to Steve Foster, who told them Virginia had decided to build its Corridor H connection to I-81.

Foster heads a highway booster group now called the Robert C. Byrd Corridor H Authority. You may recall his July announcement that construction of the Parsons-to-Davis section, crossing Blackwater Canyon, would begin in less than two years. That created more buzz than the Virginia report. It turned out to be a false alarm, but no matter. The Authority lives on attention. Foster is running for a seat in the House.

Their November 20 press release declared: "Supporters of Corridor H got an unexpected boost today with the release of a State of Virginia highway construction schedule that lists a 2026 completion date for Corridor H in Virginia."

Some of us who try to keep up with this issue wondered how to reconcile the announcement with a recent denial by a spokesman for Virginia's Department of Transportation. Kenneth Slack told a reporter for the Northern Virginia Daily that VDOT had no plans to revive the fifteen-mile section of Corridor H on its side of the border. Slack said, "According to information I've been given and talking to engineers, there's been no movement toward it in recent years." Slack cited "strong local opposition" to the project at public hearings in 1995. Virginia's Commonwealth Transportation Board had voted unanimously to reject the project.

Up to the present, Corridor H has not appeared on the project list on VDOT's web site. Steve Foster's assertion about Virginia's plans would seem to be as false as his claim about the Parsons-to-Davis section.

Why would he even care? Here's his explanation: "One of our biggest stumbling blocks in the past has been the perception that Corridor H was not in Virginia's radar." It's all about apparent momentum.

Later in the press release, the 2026 date was more specifically credited to the Appalachian Regional Commission's Completion Plan Report for Appalachian Development Highways. But the ARC must have consulted Virginia. How can we reconcile Virginia's official disinterest in the project with the ARC's expectation that it will be built?

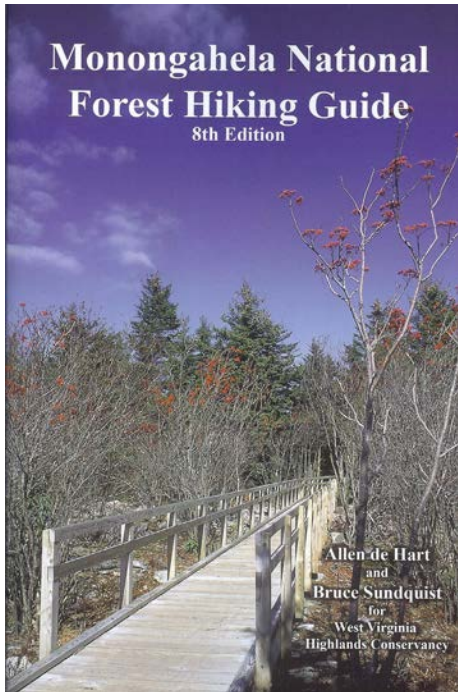
The answer can be found in an obscure proviso in the most recent federal transportation bill. The feds agreed to pick up 100% of the cost of Appalachian corridor projects, but the states were required to declare, by late this year, when they expected to complete construction on their designated corridors. Had Virginia said, "Never," the funds would have been withdrawn. The only way to keep the purse open was to set a date. As long as the purse is open, something, somewhere, can be worked out.

If you want to know what West Virginia reported to the ARC, Steve Foster won't tell you, any more than he told your legislators, but you can look it up: "West Virginia's estimated completion date for the corridor is April 2042."



## 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:  
West Virginia Highlands Conservancy  
P.O. Box 306  
Charleston, WV 25321  
OR  
Order from our website at  
[www.wvhighlands.org](http://www.wvhighlands.org)

### New 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.

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



# MAYORS TELL WEST VIRGINIANS WHAT A NATIONAL MONUMENT WOULD MEAN TO THEIR COMMUNITIES

In a recent op-ed in the Charleston *Sunday Gazette-Mail*, Lewisburg Mayor John Manchester and Sutton Mayor J.L. Campbell expressed the importance of protecting the Monongahela National Forest's scenic, recreational and ecological values in the proposed Birthplace of Rivers National Monument. Town councils in both communities passed strong resolutions of support for national monument designation, making a statement that protecting this special area benefits all West Virginians. We're proud of Mayors Manchester and Campbell for standing up for sustainable economies and for the future of the Mon's special wild places!

## ***J.L. Campbell and John Manchester: Birthplace of Rivers opportunity too special to miss November 3, 2013, Charleston Sunday Gazette-Mail***

*Wild and Wonderful. That slogan has described the Mountain State for 150 years, and for good reason. In such a small state, public lands such as the Monongahela Forest mean so much to each and every West Virginian, and the value of conserving these special places for our residents and communities cannot be overstated. We are truly blessed with incredible resources in our mountains, and we have managed to capitalize on the beauty of our forests and scenic byways, the popularity of our rivers and trails, and create important tourism-based economic opportunities.*

*Lewisburg and Sutton are two very different towns in two very different parts of the state, but without a doubt, each community is positively impacted by the Monongahela National Forest. That is why we support the community-crafted proposal to create a Birthplace of Rivers National Monument.*

*Visitors to campgrounds, backcountry areas or trout streams stop in our towns to spend their hard-earned dollars at local shops, restaurants and inns. Our residents cherish the easy access and proximity to some of the best recreation opportunities in the mid-Atlantic. The Birthplace of Rivers National Monument would ensure the permanent viability of the outdoor recreation activities that boost our economies and would protect the access to outdoor traditions that have allowed West Virginians to connect to this special land over many generations.*

*The national monument would establish stronger protection for an incredible area of national forest land that contains the Cranberry Wilderness, the Highland Scenic Highway, Falls of Hills Creek, Cranberry Glades and Tea Creek Backcountry. But this initiative is about much more than land conservation. It's about honoring our heritage and cultural connection to the mountains. It's about coming together to make sure special public lands will always be used to benefit local communities. It's about promoting our region to make it an attractive place to live, work and visit.*

*Birthplace of Rivers would be managed by the Forest Service, and the concept is supported by diverse constituencies in our communities and across West Virginia. Monument status is a flexible designation, and stakeholders in the broad coalition have worked together to make sure the proposal meets the needs of all West Virginians. Local communities will always have a say in the area's management. Groups have collaborated to protect access for hunting, fishing and wildlife management. Since West Virginia doesn't currently have a national monument, there were some concerns, but participation in the collaborative process is the only way to ensure our collective needs are being met. Engagement by stakeholders and community leaders is truly what makes this proposal something West Virginians from all backgrounds can come together and rally around.*

*In Sutton, the citizens do not even need to leave our town to benefit from the Birthplace of Rivers National Monument. The Elk River – one of the six rivers with headwaters resources in the potential national monument – is uniquely important to Sutton because it serves as our municipal water supply, and recreational opportunities along the Elk River Water Trail drive the town's economy. National monument visitors would bring significant economic benefits to Lewisburg and other gateway communities. It would protect water resources such as Hills Creek, within the Greenbrier River watershed, where local residents fish, swim and get their drinking water.*

*Research consistently shows national monuments grow local economies, and increased visibility for Birthplace of Rivers National Monument would also help local communities in transition. A recent independent study found that Birthplace of Rivers National Monument could increase local economic activity by \$5.2 million each year and could add 42 jobs on top of the 100 full-time jobs visitation to the area currently supports. An additional \$800,000 in state and local taxes could be generated each year, thanks to increased visitor spending. At a time when the mentality of "no way, no matter what" has stalled progress and collaboration in the halls of Congress, West Virginia's elected officials must consider this unique opportunity. With our state ranking near the bottom in almost every economic indicator, we should think about how we can seize the rare opportunity for the Mountain State to become a national leader in creativity and innovation, rather than striving to maintain the status quo.*

*Over the past two years community leaders in New Mexico, California and Colorado have seen national monuments protect significant landscapes, through a collaborative, engaging process to address concerns local residents might have. West Virginia's Congressional delegation should honor the way this opportunity can thrust our state and our communities to the next level of creative, innovative economic success, while honoring our heritage and maintaining our unique way of life.*



# CONGRESS CONTINUES ITS ATTACK ON PUBLIC LANDS

By Mike Costello

Several bills aimed at handing control of public lands over to big industry raise the importance of permanent conservation designations such as the Birthplace of Rivers National Monument. Earlier this year, the U.S. House of Representatives passed two measures to open public lands to unsustainable levels of industrial development. Readers of the Highlands Voice will remember two such measures passed by the House this fall:

## **H.R. 761 - "National Strategic and Critical Minerals Production Act of 2013"**

*Under the legislation, virtually any non-vegetative material removed from the public lands is considered a "critical and strategic mineral" for which the normal environmental statutes and policies do not apply. Sec. 103 of the bill declares that the priority of the lead agency (in this case, the Forest Service) is to maximize mineral resource development while mitigating environmental impacts, so that more of the mineral resource can be brought to the market place.*

## **H.R. 1526 - "Restoring Healthy Forests for Healthy Communities Act of 2013"**

*The legislation mandates drastic increases in timber cuts on all National Forests nationwide, while limiting critical environmental review under the National Environmental Policy Act and the Endangered Species Act. The bill has been dubbed a "logging without laws" measure, as it mandates unsustainable levels of industrial logging, while exempting such projects from critical environmental laws such as the Endangered Species Act and the National Environmental Policy Act.*

Unfortunately, the House continued its assault on America's great outdoors in November, passing two additional bills which could carry severe consequences for federal public lands nationwide. These recent measures, the "Protecting State's Rights to Promote American Energy Security Act" and the "Federal Lands Jobs and Energy Security Act" further prioritize industrial development and erode opportunities for citizen involvement in the decision making process.

## **H.R. 2728 - Protecting States' Rights to Promote American Energy Security Act**

*The legislation amends the Mineral Leasing Act to prohibit the Department of the Interior from enforcing any federal regulation, guidance, or permit requirement regarding hydraulic fracturing (including any component of that process), relating to oil, gas, or geothermal production activities on or under any land in any state that has regulations, guidance, or permit requirements for that activity.*

## **H.R. 1965 - Federal Lands Jobs and Energy Security Act**

*The bill contains a number of provisions that, taken together, would rescind various reforms to provide a better balance between oil and gas development and conservation of our public lands, while also reducing opportunities for the public to meaningfully participate in oil and gas leasing and permitting decisions.*

Essentially, the recent legislation passed by the House directs federal land managers to prioritize oil and gas development over recreation, water quality, wildlife habitat and other multiple use values of federal public lands. Comparatively weak state laws (or guidelines, in the absence of laws) would trump regulations for fracking on federal public lands, and our rights as citizens to comment and protest in decisions would be greatly restricted, with an appeal fee of \$5,000 levied under H.R. 1965.

The current assault on federal public lands is clearly not going away, with extreme members of Congress threatening to take additional steps toward further erosion of the lands that belong to all American citizens. However, some places are too special to be threatened by short-sighted, profit-driven decisions, and can be more permanently protected. The Monongahela National Forest contains some of those special places. One incredible area considered for permanent protection is the proposed Birthplace of Rivers National Monument, located in the vicinity of the Cranberry Wilderness.

National monument status would establish a more permanent protective status that would protect the area from future government decisions to prioritize resource exploitation over enjoyment and exploration by West Virginians and our visitors. The Cranberry is one of the Mountain State's true gems, and its protection is one of our proudest conservation achievements. Features such as Falls of Hills Creek, Cranberry Glades and the Tea Creek Backcountry, as well as headwaters or tributaries of the Cranberry, Cherry, Gauley, Elk, Williams and Greenbrier Rivers, make this landscape a unique natural treasure that must be saved for future generations. In the face of emerging threats, the time to protect the Birthplace of Rivers is now!

Visit [www.birthplaceofrivers.org](http://www.birthplaceofrivers.org) to get involved!

## **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](mailto:blittle@citynet.net). Electronic copies arrive as e-mail attachments a few days before the paper copy would have arrived.

# LEGISLATIVE UPDATE: COMMITTEE APPROVES WEAKER ALUMINUM STANDARDS

By Donald S. Garvin, Jr. West Virginia Environmental Council Legislative Coordinator

In what felt like a marathon regular session late night committee meeting, the Legislative Rulemaking Review Committee debated the proposed aluminum provisions of the Water Quality Standards rule (47CSR2) at the November interim meetings.

Despite our best efforts, the committee ultimately decided to approve the rule, which drastically weakens the aquatic life water quality standard for toxic aluminum in almost all waters of the state.

The rule change, proposed by the West Virginia Department of Environmental Protection's Division of Water and Waste Management, requires the calculation of aluminum criteria based on the "hardness" of the stream. The new equation in the rule would significantly weaken protections, as compared to the existing rule. The revisions are drastic and equate to greater than a 13-fold and 46-fold increase over the current criteria for acute and chronic aluminum toxicity to aquatic life respectively.

The rule would weaken the current criterion for trout waters at all hardness values. In any but the most pristine streams, the rule would weaken the existing aluminum criteria.

And in high-hardness conditions witnessed typically in streams that are impacted by coal mining and quarrying, the rule represents a significant weakening of the existing criteria. And, as hardness increases, it will become increasingly less stringent, allowing more of the toxic metal to be dumped into our rivers and streams.

So why is this important?

It's important to us because dissolved aluminum kills fish and other aquatic life. It has been shown to bind with other compounds in the water to coat the gills of fish, causing suffocation, death, stunting of growth and decrease in reproduction. Total aluminum (dissolved and undissolved) can leave a white coating on the streambed, smothering all stream life.

It's important to us because the proposed rule fails to protect

the "designated use" of WV streams as required under the federal Clean Water Act. West Virginia's rivers and streams are an invaluable resource and asset to the State.

It's important to DEP, apparently, because under the current criteria there are a large number of streams that are "impaired" due to aluminum pollution. If a stream is listed as "impaired", DEP is required to come up with a clean-up plan to remove the pollutant. This takes care of that problem: simply weaken the water quality standard and the impairment goes away.

In fact, since 1986 DEP and the Legislature have relaxed the aluminum standards three times, in 1998, 2000, and 2004.

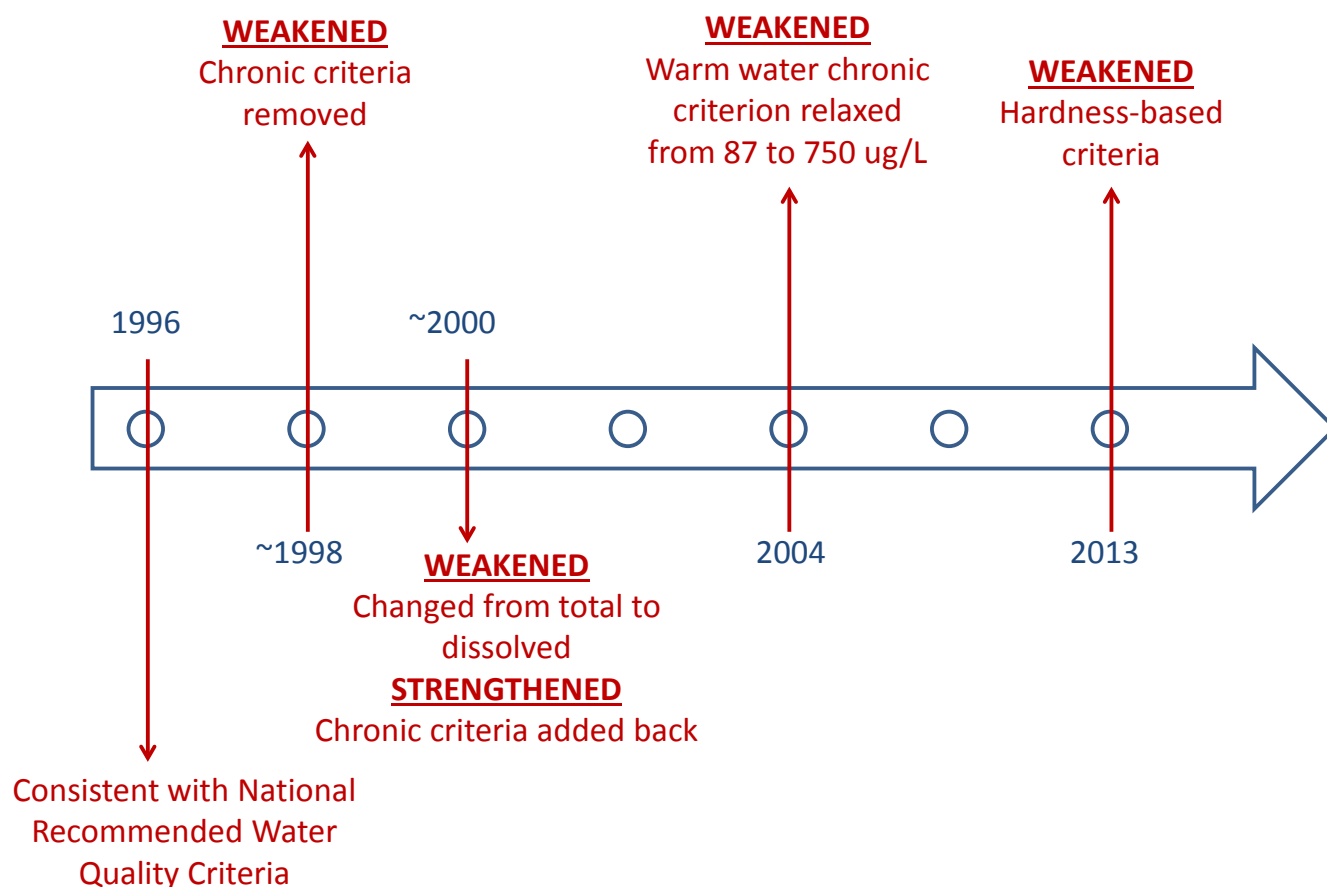
And of course, it's important to the coal industry because it does not want to pay to treat its pollution. Weaken the water quality standard and the obligation to treat goes away. This was an industry proposal to DEP in the first place.

But let's be clear: the proposed rule protects the interests of a small number of polluters rather than protecting the public's interest. So at the Legislative Rulemaking Review Committee meeting I presented comments opposing the rule on behalf of the West Virginia Environmental Council, as did Evan Hansen of Downstream Strategies. Evan was particularly effective, and his comments and analysis generated much of the debate.

As the debate ended, Delegate Barbara Fleischauer (D-Monongalia) offered an amendment removing the aluminum changes from the proposed rule, but her amendment was defeated by voice vote. Senator Ron Miller (D-Greenbrier) was the only other committee member who voted for the amendment.

So the rule will now go to the full Legislature for consideration in the upcoming 2014 session.

Let the games begin!





**Debate: Should More Wind Farms Be Built in Appalachia?****NO: THE ENVIRONMENTAL TRADEOFF DOES NOT MAKE SENSE**

By Rick Webb

I oppose utility-scale wind energy development in the Appalachian region, and not because I don't recognize the need for alternative energy. I am aware of the harm caused by reliance on coal, and I am concerned about global warming. Appalachian wind development, however, is more of a distraction than a solution to these problems. And it threatens some of the best of the region's wild landscape.

Ridgeline wind projects typically require extensive forest clearing and excavation for roads, turbines, powerlines, and substations. With about a mile needed for every seven turbines, even low-capacity projects result in substantial habitat loss and harm to wildlife. The environmental footprint is simply too large in relation to the benefits.

Suppose, for example, we want wind-powered electricity in the summer months when minimum wind availability coincides with maximum electricity demand. Let's say we want to supply enough electricity to replace just one relatively small, 500-megawatt power plant. This very modest objective would require about 300 miles of ridgeline turbine construction, and we would still need another readily available source of power for when there is no wind.

So, how should we respond to policy proposals of the wind industry and its advocates that could lead to hundreds of miles of turbines on our mountains? I have some suggestions.

Let's insist on performance accountability. The wind industry should be required to report net generation, quantifying any displacement of other generation sources and any reduction in emissions. We should not accept the industry's self promotion without access to the data.

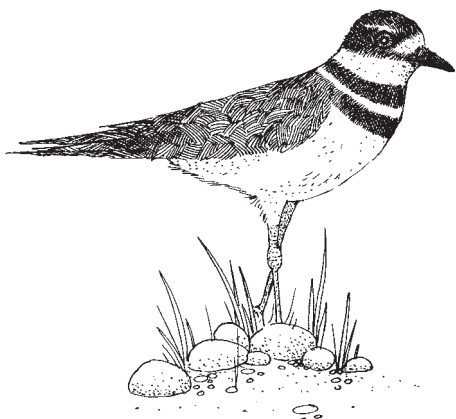
Let's not give the wind industry a pass on environmental review. We should not back away from protection of golden eagles and other wildlife that use the mountain ridges, and projects should not go forward where high bat mortality is expected.

Let's look at other options. Offshore wind development, for example, makes more sense than wind development in the Appalachian mountains—in terms of both electricity generation and environmental cost.

Let's redirect the incentives that finance the wind industry. We could achieve much more with support for residential and urban solar development—something that will actually allow people and communities to assume responsibility for meeting their own electricity needs without harming the environment.

And finally, if we are really serious about solving our energy-related problems, we should expect our elected leaders to adopt energy policies that are based on informed analysis instead of wishful thinking.

*Rick Webb is a Senior Scientist in the Department of Environmental Sciences at the University of Virginia, and he manages the Virginia Wind website*

**MUFFLED SUSSURANCE**

Nothing's in the chimney

but an updraft now    nothing

this being spring    both nothing

and this fluttering of wings

One chimney not-so-swift

— Ed Zahniser

**GET YOUR RAFFLE TICKETS NOW!!!**

We are having a raffle of this sculpture by Mark Blumenstein entitled "Mountain Melody: Phoenix Duet." Tickets are \$3 each; 2 for \$5. The drawing will be held on Sunday, October 19, 2014. The piece is 31" tall, 21" wide, and is on a base that is 12 1/2" in diameter. Tickets are available from any Board member. They make great Christmas gifts. Also suitable for any other holiday or pseudo-holiday (Richard Nixon's birthday (January 9) or Ernie Banks' birthday (January 31), etc.) you may wish to celebrate.





# FRACKING WORD GAMES

Introduction: Even as new studies out of Cornell are suggesting that concerns about air pollution are just as important as the concerns we've written about re: water, health, traffic and other impacts on communities and property, and perhaps even more important as far as global climate is concerned, it's sometimes good to also revisit some of the basic misconceptions that have been encouraged and repeated endlessly by the shale gas drilling industry, misconceptions that mislead many people as they face industry PR for the first time.

The following article by **David Manthos** for SkyTruth November 8, 2013 is a clear and comprehensive statement of many of those misconceptions encouraged by the shale gas drilling industry. (<http://blog.skytruth.org/2013/11/fracking-word-games.html>)

## Word Games are Misleading the American Public About Fracking

*Half the truth is often a great lie. –*

*Benjamin Franklin, Poor Richard's Almanac – 1758*

Hydraulic fracturing, better known as fracking, and other drilling practices have unlocked previously inaccessible reserves of oil and gas across the United States and the world. However, some of the debate over fracking is distorting public understanding of these practices and interfering with good decision-making about this recent boom in unconventional oil and gas production.

We often hear statements like this from industry and pro-drilling politicians:

***America has drilled and fracked more than 1 million wells over the past 60 years, and in all that time there has never been a proven case of groundwater contamination caused by fracking.***

This statement, in some form or another, is repeated from the kitchen tables of ordinary citizens to the halls of Congress, as landmen use it to try to secure mineral rights from private landowners and legislators advocate for more drilling on millions of acres of public land. Even environmentalists, scientists, and regulators, when pressed, reluctantly confirm this statement is technically correct.

Upon closer examination, however, this claim is a half-truth that muddles the debate on whether natural gas can be a bridge fuel to a cleaner energy future, or a dead-end.

Let's take a closer look at some of these claims:

***America has drilled and fracked around 1.3 million wells over the past 60 years...***

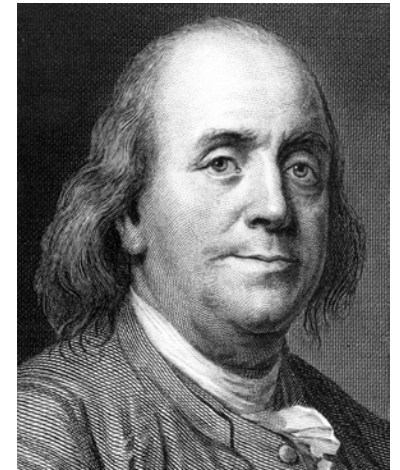
First, has fracking really been around for over 60 years? That depends on what you mean by fracking.

In 1947, Stanolind Oil (now Halliburton) completed their first conventional hydraulic fracturing operation using 1,000 gallons of water, chemicals, and sand to frack a shallow Kansas well. Instead of dropping explosives down the well like the early Pennsylvania oilmen, drillers used a spare WWII aircraft engine as a pump to pressurize the fracking fluid and apply hydraulic force to the methane-bearing limestone. According to a patent filed in 1953, the first fracks used pressures as low as 700 pounds per square inch (psi). This accounts for much of fracking's history, with small

operations that were barely noticeable once they were completed.

In 1997, Mitchell Energy completed their first high-volume, slickwater hydraulic fracture operations using an average of 800,000 gallons of fracking fluid and 200,000 tons of sand on horizontally drilled wells in the Barnett Shale of Texas. This 16-year-old practice much more accurately represents the procedure that has recently unlocked natural gas from formations like the Marcellus Shale and oil from the Bakken Shale. We refer to this type of fracking as "modern fracking."

Unlike their humble origins, modern fracking operations use millions of gallons of fluids pumped into bedrock at pressures as high as 15,000 psi to break open shale and tight sandstone formations. This is over 20x the pressure and 800x the volume of the first fracking operations.



Modern fracking has as much in common with early fracking as an SR-71 Blackbird spy plane has in common with the Wright Flyer. Yet advocates of modern fracking cite those decades of old-fashioned fracking as proof that modern fracking is also safe.

***...and in all that time, there has never been a proven case of groundwater contamination...***

Unconventional drilling and modern fracking was one of SkyTruth's first projects because satellite images and aerial photography revealed a spider's web of roads, wellpads, pipelines, and other infrastructure transforming massive tracts of western public lands. But as the practice spread from relatively uninhabited wilderness to the more populated eastern US, media coverage of modern fracking and fracking-related accidents began to increase. Journalists and academics began to investigate claims that modern



**(More on the next page)**



## THE HALF TRUTHS OF FRACKING (Continued from previous page)

fracking had caused health problems and water contamination. Then a documentary filmmaker from Pennsylvania ignited one of the biggest environmental movements in several generations: by lighting water on fire – again.

The truth about proven cases of contamination remains elusive for a number of reasons. For one, the Environmental Protection Agency has repeatedly backed away from completing research on claims of polluted groundwater in Pennsylvania and Texas, and stopped short of finalizing a report that blamed modern fracking for groundwater contamination in Pavillion, Wyoming. Also limiting our knowledge about contamination cases is the growing number of contamination claims settled out of court with strict non-disclosure agreements. One settlement with a Pennsylvania family went so far as to prevent a family, including their children aged 7 and 10, from ever publicly speaking about the issue of fracking.

What we do know is that a growing list of individuals are coming forward with reports of illness and contaminated drinking water in the immediate vicinity of wells that have been fracked. Is drilling and modern fracking the cause? In many cases we just don't know because pre-drilling water quality and public health studies don't exist, and the information is simply not available to the public.

**...caused by fracking.**

On these three words hinges a delicate and disingenuous argument about the safety of modern fracking. Watch congressional hearings on this subject and you will hear this qualifying statement tacked on to nearly every remark about the safety of drilling and modern fracking – but what does it mean?

Proponents of drilling use the term “fracking” in a very narrow (and technically accurate) way – referring exclusively to the well stimulation process known as hydraulic fracturing. Period. Based on this definition, only contamination caused by subterranean fractures that occurred during the process of hydraulic fracturing counts as

contamination “caused by fracking.”

By this criteria...

If the cement job on a well fails when it is subjected to the high pressures of modern fracking, like in Dimock, Pa., Colorado, and Ohio, the cause is bad cementing, not fracking.

If a pond containing fracking fluid fails and dumps contaminated water into a stream, or a truck carrying fracking chemicals loses control on a narrow West Virginia road and overturns into a creek, fracking itself is not the “cause” of the contamination.

Meanwhile, the public generally uses the term “fracking” as shorthand to cover all of the activities related to drilling and completing a well. Since > 90% of the drilling being done today would not be happening if it weren't for hydraulic fracturing, this is understandable.

Unfortunately there are many documented incidents where contamination of the air, land, and water can and has occurred because of oil and gas drilling. And the homeowner who can light their tapwater on fire, or discovers they've been drinking cancer-causing benzene, probably doesn't give a damn if the contamination was caused by a poor cement job that blew out, or by the hydraulic fracturing operation itself. That's a word game only politicians and engineers care about.

**The Bottom Line:** The track record of modern fracking is shrouded in incomplete information, a misleading history, and distorted by semantic arguments that narrowly define what counts as contamination from fracking. While cases of contamination *caused by fracking* remain obscured by lack of information and tricky linguistics, we know that a growing number of citizens are reporting harm and environmental contamination in unconventional oil and gas fields, and especially from *wells that have been fracked*.

<http://blog.skytruth.org/2013/11/fracking-word-games.html>

### **\*\*2nd Annual Lunchbreak Lecture\*\***

## **ATTENTION CHARLESTON AREA MEMBERS**

The winter Board meeting of the West Virginia Highlands Conservancy will be Sunday, January 26, 2014, at the Habitat for Humanity Re-Store conference room on Court Street in Charleston. It begins at 9:30 a.m. All members are invited to attend. While only Board members may vote or make motions, any member is free to listen, participate in the discussion, palaver, pontificate (within limits), etc.

Even if you don't come for the meeting, you should come for the **REALLY GOOD STUFF**: a presentation on the history of Blair Mountain. It is at 12:30, during the meeting's lunch break.

This is the second of these Lunchbreak Lectures; the first one received rave reviews.

# OF CRACKER PLANTS AND PLASTIC

Introductory remark by Cindy Rank:

For those who remember the Dustin Hoffman movie *The Graduate*, recent conversations and discussions about “cracker plants” are sure to bring to mind the cautionary advice to the young Hoffman character that PLASTICS is the future...

The perceived magic of the recent boom in shale gas drilling is focused as much on the by-products of “wet gas” (i.e. ethane, butane, propane, etc.) as the actual methane gas itself.

When separated from the methane these more lucrative constituents are “cracked” and/or transformed into a variety of plastics and other materials that support our present day society... E.g. “cracking” ethane to make ethylene, the building block for plastics such as polyethylene.

End products of the “wet gas” encountered in and near the northern panhandle of West Virginia are seen to be the economic hope of the region and multiple projects are either planned or being considered. From Monaca, PA to Marshall County, WV to cities on the Gulf shores of Louisiana, Alabama and Texas, communities are vying for the attention of companies from the US and abroad as well -- SASOL, DOW, MarkWest, Gastar, Royal Dutch Shell and other companies who might invest in such plants and in what is believed to be a revival of the US chemicals production capacity.

The latest talk here in WV is about a complex along the Ohio River in Wood County. Announced by Governor Tomblin early in November the company is looking to retool the SABIC Innovative Plastics Plant in the midst of the sprawling DuPont facility a few miles south west of Parkersburg and just downstream of the Blennerhassett Island and National Wildlife Refuge visited during a WVHC Public Lands outing a couple months ago.

What follows is an article by S. Tom Bond, Retired Chemistry Professor and Resident Farmer who lives in Lewis County, WV. His article was posted on FracCheck (<http://www.frackcheckwv.net/>) November 26, 2013.

## More on the new Parkersburg WV cracker plant

Sabic is a Saudi Arabian company that specializes in high quality plastics. It has been faced with financial difficulty and is expected to transfer its business to Illinois and Mississippi. It had previously announced plans to close in 2015. While the salaries were good, the work conditions were sub-par. Plans are that the “cracker” plant will replace its current plant seven miles from downtown Parkersburg in what is called Washington Bottom.

Odebrecht is a Brazilian conglomerate consisting of diversified

Braskem had 29 industrial units: 26 in Brazil (in Alagoas, Bahia, Rio de Janeiro, São Paulo and Rio Grande do Sul) and three in the United States. With these acquisitions, the firm became the biggest producer of resins in the Americas and the eighth largest globally. Already it produces 15 million tons of thermoplastic resins and other petrochemical products. Braskem is also building a joint venture polyethylene/ethylene plant in Mexico.

Philadelphia-based Braskem America is already the leading producer of polypropylene in the United States, with five production plants, two more than in 2009 They are located in Texas, Pennsylvania and West Virginia, and have a technology and innovation center in Pittsburgh. It has annual average revenues in the U.S. of about \$2 billion, and is listed as BAK on the New York Stock Exchange.

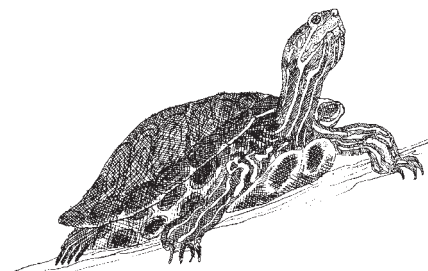
The new Parkersburg-area project will operate as **Ascent - Appalachian Shale Cracker Enterprise**. The public should be aware of the attraction the U. S. provides because of the expansion of natural gas liquids production;

businesses in the fields of engineering, construction, chemicals and petrochemicals. The installation will involve an ethane cracker, three polyethylene plants, and associated infrastructure for water treatment and energy co-generation.

Its giant Brazilian petrochemical subsidiary, Braskem,SA will handle petrochemical-related activities and commercialization of polyethylene. It should come of no surprise that the subsidiary is partly owned by a national oil firm called Petrabase. By 2009

this project is conditional to contracting a long term ethane supply, and a favorable legal climate. This is likely in a state with Governor Tomblin’s warm embrace. The people of Parkersburg area should also be aware that, as President Kirk Sherr of Clearview Strategy Group says, “The U.S. has cheap capital and cheap energy, *and there is not much of a labor component*” in petrochemical production.

Interpretation: **The money won’t accrue to the working class and the merchants who cater to them, but will go elsewhere.**





**Groups say “Not so fast”****DRILLING WASTE WATER: SHOULD WE BARGE IT AWAY?**

By John McFerrin

One of the chronic problems with oil and gas drilling is what to do with the waste water that results. The problem exists for all drilling; because of the depths of the wells, the materials the drilling encounters, and the greater volume (drilling a Marcellus well takes about 5 million gallons of water), it is worse for wells that reach the Marcellus Shale.

Drilling starts with an enormous quantity of fresh water. To this fresh water the companies add various chemicals that are intended to make the drilling and the hydraulic fracturing work better. Just exactly what the chemicals are is unclear. Companies routinely say that their formula is a trade secret. The mix of chemicals also changes as companies develop new formulas.

While the water is down the drill bore it can pick up whatever it encounters along the way. Just what metals it picks up depends upon the rocks the drilling passes through. When it reaches the Marcellus Shale the material it picks up will probably be radioactive since that formation contains radioactive material.

The water also mixes with whatever water is found at the depths where oil and gas is found. If all is working as it should, the driller will have installed casing to prevent the drilling water and all it contains from mixing with the fresh water that is found at shallow depths and often serves as a drinking water supply. The water at greater depths is usually salt brine with assorted other minerals, etc.

Exactly what the water contains differs from well to well. It has been found to include chlorides, bromides, and sulfides of calcium, magnesium, and sodium, barium, manganese, iron, and strontium, oil, grease, and dissolved organics -- BTEX -- and naturally occurring radioactive materials.<sup>3</sup> Some of the many contaminants found in samples include benzene, mercury, arsenic, barium, 2-Butanone/ Methyl ethyl ketone, naphthalene, acrylonitrile, and methanol. Some of these are known carcinogens, and many have other harmful health effects.

Some of the water stays in the ground even after the drilling and the hydraulic fracturing is over. If all goes as planned, it stays in deep formations where it cannot contaminate groundwater that may be used as a drinking water source.

Not all of the water stays in the ground. In a reversal of the old adage, what goes down must come up. A substantial portion of the water returns to the surface. The question is what to do with it

when it gets there.

Some of the water (no reliable figures are available; less than a third is a reasonable guess) is recycled and used in another well. It is not, however, all recycled. A very substantial volume is left to be disposed of. In the past, some of it has been “land applied” (spray it out into the woods and hope for the best). This has resulted in some unfortunate results (See the story in the September, 2011, issue of *The Highlands Voice*) and is rarely, if ever, done any more. Another possibility is an underground injection well (pump it down a deep well and let it stay there). The difficulty is that there are not enough of these wells. The wells that do exist are not without their difficulties. (See the story in the April, 2013, issue of *The Highlands Voice*).

Now there is another proposal for disposal of the water: put it on barges and ship it to facilities where it could be disposed of relatively safely. Now that this possibility has arisen, several groups have raised questions about whether transporting frack water on our nation’s rivers is prudent. Because the cargo would be so much water of such dangerous quality, a spill could be a disaster. The Coast Guard’s policy doesn’t contain many explicit guidelines on spill prevention and response should a spill occur.

Transporting materials on our nation’s waterways requires approval of the United States Coast Guard. The Coast Guard has recently issued a proposed policy letter to permit shale gas extraction wastewater to be carried on the Nation’s rivers. Several groups, including the West Virginia Highlands Conservancy, have submitted a letter questioning the wisdom of such a policy, particularly when there are questions which remain unanswered.

The groups contend that many unanswered questions could be resolved if the policy were required to go through the National Environmental Policy Act (NEPA) process. In general terms, the National Environmental Policy Act requires that federal agencies consider the effects of their actions upon the environment. Here, the Coast Guard has not gone through that process. The process would at a minimum require an environmental assessment and probably an environmental impact statement.

***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.

***Send us a post card, drop us a line, stating point of view***

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

# HIGHLANDS CONSERVANCY BOUTIQUE

## NEW STUFF



► Our newest online store items are here just in time for holiday shopping. 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 James Solley, PO Box 306, Charleston, WV 25321-0306

## SAME STUFF

### 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 ATTN: James Solley, 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 I ♥ 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 James Solley, P.O. Box 306, Charleston, WV 25321-0306