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LEGISLATURE PASSES WEAK MARCELLUS SHALE BILL IN SPECIAL SESSION

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

After more than three years of false starts, the West Virginia Legislature last month finally passed a bill regulating the drilling of Marcellus shale gas wells in West Virginia.

The final version of the legislation – HB 401 – virtually assures that streams will be muddied and private water wells and springs that provide drinking water in rural areas will be contaminated by horizontal drilling operations.

HB 401 was passed on Dec. 14, 2011, and signed by Governor Earl Ray Tomblin on Dec. 22, 2011, following a four-day “Extraordinary” Session called by the Governor.

The Governor “called” the special session after the Legislature’s Select Committee on Marcellus Shale Drilling reported out a bill at the end of the November Legislative Interim meetings.

The bill considered by the Legislature in the special session was a version of the Select Committee bill that was “tweaked” by the Governor to remove some of the industry’s objections to the bill. The Governor then lobbied leadership in both the House and Senate to accept his version of the bill.

While the final bill approved by the Legislature was weaker in several important ways from the Select Committee bill, it also contains some minimum provisions that will help protect the environment and surface owners from horizontal drilling operations.

So, what’s in the bill finally passed by the Legislature? Here’s a partial summary:

- **Inspectors:** The only sections of the new legislation that apply to the drilling of all oil and gas wells are the sections on DEP oil and gas inspectors. The Oil and Gas Inspector’s Examining Board (which was virtually controlled by the industry) is eliminated, and replaced with a system of civil service employees, similar to how other DEP inspectors are hired.

New inspectors must still have at least two years’ work experience in the oil and gas industry, provided that one year of the experience requirement may be satisfied by a relevant college degree or actual relevant environmental experience. This keeps the fox in charge of the hen house.

Salary levels for oil and gas inspectors are set at not less than \$35,000 per year, and not less than \$40,000 per year for supervising oil and gas inspectors.

The new permit fees for drilling horizontal wells will enable the Office of Oil and Gas to hire approximately 17 additional employees, including 9 new inspectors, basically doubling the current staff size.

- **New Article §22-6A -- Natural Gas Horizontal Well Control Act:** The bill establishes a new code section that applies “to any
(More on p. 12)

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KEEP ME IN THE DARK

Sam, the fellow who cuts my hair wants one. He wants the solar soccer ball that I pointed out to him. Sam came here to the U.S. from Syria and returns annually when possible. After one trip he mentioned the limited opportunities for villagers in his home area due to lack of reliable sources of light. Remembering that, I noticed a prototype soccer ball with a flexible solar panel. Kicking the ball enough times during the day could allow the kicker to attach the ball's panel to a small light or even a laptop computer.

West Virginians don't want lights. That is, they don't want certain ones. Poll results---released by the Department of Highways in December---showed that a large majority of respondents do not want a display of animated lights on the New River Gorge Bridge. Most of these voters felt the proposed light system, and accompanying new overlook, were not worthy of the expense. One commenter, responding to a blog on the issue, said, "Why does it need lights? We all know where it is." Secondly, poll takers expressed concern for the area's natural beauty. In a separate but similar newspaper poll from Fairmont, 40% of participants wanted to protect the natural beauty of the New River and the Gorge. This notion of protection and preservation apparently extends even to the beauties of this area in the unlit night.

The idea of fighting light pollution and preserving dark skies is one that continues to gain attention. Earlier in *The Highlands Voice*, in 2008, Hugh Rogers wrote of the International Dark-Sky Association <http://www.darksky.org/> and of the assorted drawbacks of excessive lighting. Hugh noted that these include the wasting of electricity, the damage to human health, the bogus safety element, the disruption of habitats and lives of creatures, and the elimination of the pleasures of night sky viewing. These issues and more are being taken up by individuals and groups all over the country and the world. Many locations have become Dark Sky Communities, with pledges and actions to remedy light pollution. In the UK, excessive light can be designated a "Statutory Nuisance." In this country, plans are being made for the annual observance of Earth Hour www.earthhour.org at 8:30 pm on Saturday, March 31, 2012.

Such measures are in response to continuing indications of the importance of regular passages of daylight and dark to living organisms. Hugh mentioned the deprivation of melatonin which could be linked to breast cancer; some studies also show links, from lack of a full complement of darkness, to seasonal affective disorder, bipolar disorder, and depression. In animals, dark skies help in processes of social behavior, foraging, and breeding.

"Lights kill birds" are words that have been in headlines in recent months. Sometimes the bird deaths happen in ways that are not obvious. Most well known now are the incidences in which migratory birds become confused and trapped in the illuminated dome-like phenomenon associated with some lighted structures on some foggy nights. Less publicized are the effects of excessive lighting on insects, which serve as prey and offer sustenance for birds [and bats, lizards, and frogs]. Dead insects found beneath a single porch light can serve as an illustration of the number of deaths involved when the array of lights is greater.

(Cynthia D.'s not finished; more on p. 11)

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ALPHA NATURAL RESOURCES TO TREAT SELENIUM POLLUTION FROM MINES IN FOUR WV COUNTIES

By Cindy Rank

We ended the 2011 year with positive news about the outcome of one of our lawsuits against mining companies to force the cleanup of pollution being discharged from a variety of minesites. [See front page December 2011 *Voice* story about the FOLA/Consol agreement.]

It seems only fitting that we begin the new year with another upbeat story focused on another similarly positive agreement, this time with Alpha Natural Resources (the company that bought Massey Energy not so many months ago).

The Alpha Consent Decree was filed with the U.S. District Court for the Southern District of West Virginia in Huntington WV on December 12, 2011.

The earlier FOLA agreement required treating pollution from mines in the Twentymile Creek area of the Gauley River. This more recent agreement with Alpha Natural Resources requires the company to clean up discharges at some 14 outlets at three large mining complexes along mountain ridges in Logan, Boone, Kanawha and Fayette Counties of West Virginia. The discharges impact major tributaries that are part of the Coal, Kanawha and Gauley River watersheds.

In this latter settlement selenium is the culprit and Alpha will pay some \$4.5 million in penalties as well as design and install treatment systems that will likely cost another \$50 million.

The agreement sets forth specific requirements, timeframes and schedules for Alpha to come into compliance with state and federal Clean Water and Surface Mine Acts. Compliance monitoring and reporting will be overseen by Special Masters (an Engineering Master to monitor the design and construction of treatment systems, and a Biology/Aquatic Ecology Master to monitor the quality and stream life of the receiving streams), reviewed by our competent legal team and finally enforceable by the court itself.

Since the litigation was brought pursuant to citizen suit provisions of federal law, the U.S. government will have an opportunity to review the settlement before its terms take effect. Some \$450,000.00 of penalties will go to the federal government and some \$4,050,000.00 will go to the West Virginia Land Trust (WVLT) for a Supplemental Environmental Project to restore riparian areas and preserve land within the watersheds impacted.

The WVLT is already working in close partnership with the West Virginia College of Law's Center for Energy and Sustainable Development (CESD) under a previous Supplemental Environmental Project (SEP) brought about in a separate Civil Action to develop a Riparian Area Preservation Project in the Coal, Elk and Gauley River watersheds.

The two organizations are working collaboratively to identify properties with ecological significance, including riparian areas, in the watersheds affected by the discharges at issue and to preserve these lands by accepting donated conservation easements or through the purchase of easements or land in fee.

Under the terms of this current SEP project, the West Virginia Land Trust will continue this work, add the Kanawha River Watershed to the scope of activity, and at the same time, increase its organizational infrastructure to strengthen its ability to work statewide and significantly increase the number of acres that can be preserved annually.

POSTSCRIPT

And, in case readers think I've gone all soft and gooey eyed with the coming of the new year, allow me a few words of negativity.

Over the past thirty plus years I've been to most of the minesites and visited the area streams that are frequently involved in our legal challenges, and I can't end this article without offering two final gestures.

1) A grateful nod to our legal team headed by the folks at Appalachian Mountain Advocates (previously known as the Appalachian Center for the Economy and the Environment) and Public Justice and others who continue to assist us through the legal and technical morass of mine permits. And to members of WV Highlands Conservancy and our ever faithful co-plaintiffs the Ohio Valley Environmental Coalition, Coal River Mountain Watch and the Sierra Club, many of whom face challenges of a more personal and debilitating nature every day of living near today's monster strip mines

And 2) a moment of sober sadness which washes over me every time I sit with my topo maps and Gazetteer to make sense of the senselessness represented by the multitude of permits that should never have been granted in the first place.

As for the water pollution, we've been down this path with Acid Mine Drainage in the not so distant past and it's painful to argue against permits that will inevitably result in further pollution of our irreplaceable headwater streams (not to mention the destruction of thousands of acres of hardwood forests and the people and generations old communities that once populated the hills and hollows) only to see those permits granted one after the other. The long term costs will be astronomical.

To see on the WV Department of Environmental Protection's GIS mapping website the mass of permits that almost seamlessly blanket a wide swath of West Virginia from Mingo and McDowell Counties to Webster, Clay and Nicholas further north.

The picture is even more frightening than the one we carried to Judge Haden back in 1998.

Happy New Year.

MOUNTAINTOP REMOVAL—UP CLOSE AND PERSONAL

Visit Kayford Mountain south of Charleston to see mountain top removal (MTR) up close and hear Larry Gibson's story about how he saved his mountain, now almost totally surrounded by MTR. Bring lunch for a picnic on Larry's mountain. Call in advance to schedule. Julian Martin (304) 342-8989; martinjul@aol.com or Daniel Chiotos, (304)886-3389 – cell, (304)205-0920 – office.

DUELING SCARE TACTICS

By Beth Little

At a special Pocahontas County Commission meeting on November 17, someone accused the county commission or the hydrogeologist (it wasn't clear who was being accused) of using scare tactics. The hydrogeologist was Paul Rubin, who gave a presentation on the dangers of drilling and fracking in karst, which is the limestone cave geology underlying much of Pocahontas County.

Aubrey McClendon, CEO of Chesapeake, said, "Natural gas prices, if they went through the roof, because they couldn't extract shale gas in this country, then 70% of American homes on natural gas heat will be cold; 35% of American homes, businesses and factories that use electricity from natural gas will be dark; and crops that require natural gas fertilizer will not be grown." (Talk about scare tactics!) McClendon refers to opponents of fracking as environmental zealots or "fractivists."

This is a tactic to support the argument about continuing the advancement of drilling for natural gas with "fracking" (horizontal hydraulic fracturing) in the Marcellus shale and other shale plays around the country. The argument goes on with assertions that shale gas is cheap and abundant, and the Pickens plan calls for the mass conversion of power plants and truck fleets to natural gas. T Boone Pickens is on TV frequently touting this plan, and the rest of the time he is in Congressional offices lobbying Congress to support it. The idea is that since shale gas is a domestic resource, we will be able to free ourselves from dependence on foreign oil and the threat of international terrorism. (More scare tactics)

But here are some background facts that put this argument in question.

At present, natural gas is trading at about \$4 per thousand cubic feet. That is cheap. Arthur Berman, a Houston-based Geoscientist who is a consultant to the gas industry, says that a well head price of over \$7 per thousand cubic feet is needed for shale gas drillers to make a profit. The price in 2005 to 2008, when the Marcellus shale gas play took off, peaked at over \$12, but the drilling frenzy has created an oversupply, and the price has gone through the floor.

So why are operators continuing to drill? The traditional approach to low prices for the industry has been to shut in wells. But the new technology is expensive, and operators have had to borrow heavily. With all the hype, Wall Street has been happy to comply, but shale wells are depleting so quickly that wells have to be drilled continuously to maintain cash flow. Given the very heavy debt burdens of many shale gas operators, drilling is the only way to meet debt service. Financial analysts and journalists began referring to this in late 2009 early 2010 as a drilling treadmill they couldn't get off.

The quick depletion of shale wells refers to the fact that the supply of shale gas drops steeply after the first year or two of production. Even refracking the wells doesn't help much. Tax revenues also drop. An excellent example of this can be seen by examining the audited accounts of the city of Fort Worth, which is in the Barnett shale play. In 2008 the city received approximately 50 million in revenues from gas. This dropped precipitously in 2009 to about 19 million.

There is also a question about the claims of abundance, since shale gas is replacing the production of conventional natural gas, which is declining sharply, but that would take more space, and this is already long. (All this data comes from industry or government sources, which I will be glad to provide if anyone contacts me –

blittle@citynet.net).

Meanwhile, gas industry lobbyists have been going to Washington and asking to convert six LNG (liquid natural gas) import terminals (see map) to export terminals, and they have received the first permit for an export terminal at Sabine Pass, Louisiana. In the past, the US has been a net importer of natural gas. (Some of the land for the import terminals was acquired by eminent domain, which is legal for importing LNG, but not for exporting, so there is a legal question here that may be challenged).

The move to exportation is because of the price in Asian markets. Natural gas in Asia is indexed to the price of crude oil. While gas trades here for around \$4, it's trading at \$12 to \$15 in Asia. So operators can extract, pipe, refine and ship to Asia for about \$9, and sell their product for a very nice profit. The Oil & Gas Financial Journal says, "The Chinese are willing to pay a premium to secure North American resources necessary to feed the growing Asian economy." If you have kept up with shale plays at all in the news you'll note that quite a number of joint ventures have been done with the Chinese, the Indians, the Australians and others (see map again).

Let's say shale operators convince Congress to legislate the Pickens plan, and we begin mass conversion of power plants and truck fleets to natural gas. We now become much more dependent on natural gas because we think, because we have been told, it is a cheap and abundant source of energy. In the meantime, gas operators begin to export American natural gas to Asian countries to grow their economy. So the gas industry is now being paid handsomely for that gas, much more than can be paid in America. So the domestic prices are inevitably going to rise, and operators will be making money hand over fist.

But what about the American consumer, who, thanks to the genius of Congress, has converted your electricity to be dependent on natural gas. Plastics manufacturers are right now ramping up production because they claim natural gas is a cheap and abundant source, so they are going to use it as feed stock for plastics and bring jobs back to the US. (How many of you caught the story about how WV legislators are upset that Chesapeake signed a contract to pipe gas to Louisiana instead of a cracker plant in WV)? Truck fleets will be dependent on natural gas to supply inventory around the country, only now, natural gas prices have gone through the roof due to exportation and Asian demand.

So Aubrey McClendon's prediction may come true BECAUSE of the shale boom.

Nobody knows for sure what could happen with shale gas drilling – how much water will be contaminated or whether our homes will be cold and dark - because the future is always uncertain. But the shaky financial picture on top of the frantic rush to drill raises the question: Is this really the highest and best use of our beautiful West Virginia land (and water and air)?

Note: This article previously appeared in *Mountain State Sierran*.

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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.

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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. Electronic copies arrive as e-mail attachments a few days before the paper copy would have arrived

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 or real, honest to goodness, mentioned in the United States Constitution mail to WV Highlands Conservancy, PO Box 306, Charleston, WV 25321.

EVIDENCE MOUNTS TO BACK EPA MERCURY RULES, WITH ANNUAL BENEFITS OF \$50 TO \$130 BILLION

By Daniel J. Weiss and Jackie Weidman

We are a week away from the December 16th deadline for the Obama Administration to issue its final toxic air pollution reduction rules for coal fired power plants. This comes more than two decades after President George H.W. Bush signed this public health protection into law as part of the Clean Air Act of 1990.

There is escalating pressure from dirty utilities and coal companies to weaken or delay the pollution reduction standards even though they support from other companies. Six coalitions representing 125,000 businesses, ranging from Fortune 500 companies to small businesses, sent a letter to President Obama strongly supporting a timely promulgation and implementation of the Environmental Protection Agency's rules. Led by Ceres and the Small Business Majority, urge that caving to the polluters' demands would jeopardize much needed jobs and postpone innovation and

investment. These diverse businesses emphasize that "the Clean Air Act yields substantial benefits to the economy and to business, and that these benefits consistently outweigh the costs of pollution reductions."

These pollution reductions are long overdue. The dirtiest power plants in the U.S. account for a disproportionately large amount of toxic pollutants, according to an analysis by the Environmental Integrity Project (EIP) released on December 7th. The report concludes that coal fired power plants in Ohio, Pennsylvania, Indiana, Kentucky and Texas have the most toxic emissions.

Ilan Levin, associate director of Environmental Integrity Project, said

"The only thing more shocking than the large amounts of toxic chemicals released into the air each year ... is the fact that these emissions have been allowed for so many years. There is no reason for Americans to continue to live with unnecessary risks to their health and to the environment. "

These rules will remove millions of pounds of mercury, lead, arsenic and other dangerous pollutants from coal plants, preventing 17,000 premature deaths annually. Although EPA estimates that it will cost utilities \$10.9 billion to clean up, it will save at least \$59 billion in fewer premature deaths, lower health care costs, and fewer absences from work or school. Despite these benefits, the companies most affected by the rules— with the dirtiest power plants – and their allies are launching a serious rear guard action to weaken or delay these reductions.

Anti-pollution control forces have encouraged their allies to advocate on their behalf. For instance, an editorial by Murdoch's Wall Street Journal from December 6th misleadingly diminished EPA's benefit projections for the rules.

Siding with dirty utilities, the editorial inaccurately interpreted the EPA's Regulatory Impact Analysis from March by claiming that societal benefits from mercury reductions "max out at \$6.1 million." These numbers isolate a specific section of the analysis rather than looking at the entire benefit-cost projections. The figure by the Journal only refers to benefits from "exposure among recreation freshwater anglers." In other words, the figure applies to recreational anglers, and clearly represents a very small portion of the overall health benefits.

On the contrary, EPA projects:

"Annual monetized benefits of \$58 to 140 billion (3 percent discount rate) or \$52 to 130 billion (7 percent discount rate) are expected for the proposed Toxics rule in 2016."

Benefits detailed in the report are due to decreased health costs from current health ailments the public currently faces because of mercury pollution. They include neurological problems, cardiovascular impacts, chromosomal damage, and immunologic effects, among others.

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

Editor's Note:

In December, 2011, the United States Environmental Protection Agency made final rules controlling emissions of mercury and other toxic substances from coal fired power plants.

Since then, the news reports have largely repeated industry arguments that these rules will result in lost jobs, higher rates for electricity, closure of power plants, the end of the world as we know it, etc.

Largely missing from the coverage has been the other side of the argument.

Regulation is about cost shifting. As practiced up to now, before the new rules, the cost of electricity has been its dollars and cents cost to the consumers plus several thousands deaths a year of anonymous people who had the bad luck to live downwind from wherever the coal was being burned (Coal, of course, has other costs such as lost mountains, dead and injured miners, foul water, etc. but the focus of these rules is mercury and other toxics.)

The regulations shift these costs. Instead of part of the cost of electricity being borne by these anonymous people downwind, that cost will be borne by the power companies and, to some extent, the customers who use the electricity. Instead of thousands of people paying for the electricity with their health, the power companies will have to spend their money to remove mercury and other toxic substances.

The omission from most press coverage of the new regulations has been the benefit to those downwind of mercury emitting power plants. The stories have focused on the burden to the power companies as the costs have been shifted from the breathers to the companies. A more balanced approach would include not only the burden shifted onto the companies but also the burden lifted from those who have been subsidizing electricity production by giving up their health.

This story offers some of that balance. It is from a blog entry that appears at <http://thinkprogress.org/romm/2011/12/08/385329/epa-mercury-rules/>. To see the entry as well as discussion it produced, stop by that site.

MORE ABOUT MERCURY

The Massachusetts Institute of Technology just released a report on December 5th, which is the latest in a long line of energy assessments that determine the air toxics rule will have little or no impact on reliability. Study co-director Richard Schmalensee, said that, most importantly, the U.S. power grid is definitely not “on the brink of widespread failure.” Furthermore, the study shows that our electric grid “could handle expected influx of electric cars and wind and solar generation.”

Kentucky Power announced on December 6th a \$1 billion pollution control retrofit for one of its generation units of the Big Sandy Power Plant. Greg Pauley, president and chief operation officer of Kentucky Power stated the improvement, aligned with EPA rules, is “in the best interested of [its] communities overall, and will permit job retention, [and] a significant contribution to the tax base.”

Those who blame EPA regulations for coal plant closures both ignore unassociated reasons for shutting down, and exaggerate the impact closures will have on the U.S. electric grid.

The plants that are scheduled to retire account for just 5 percent of total coal-fired generation from 2010, and have lower than average capacity factor compared to all coal plants.

Announced / Scheduled Coal Plant Retirements as of September 26, 2011					
Scheduled Retirement Date	2011	2012	2013	2014	2015
Average Age at Retirement	54	55	51	54	60

Source: *the Analysis Group Fall 2011 Update*

Unused capacity in natural gas plants is likely to offset coal plant closures as wholesale electricity prices from gas plants are decreasing, the U.S. Energy Information Administration concluded last year.

Constellation Energy is an example of a utility that succeeded in economically retrofitting its facilities to reduce toxic pollution. Its Brandon Shores plant spewed the most hazardous materials of any U.S. power plant back in 2008. But Constellation invested in clean pollution control to create one of the cleanest coal-burning power plants in the country. It met the Maryland pollution-control deadline “without a hiccup in delivering electricity.”

Paul Allen, Constellation’s chief environmental officer, assures other utilities that “it’s entirely possible to comply with these rules and remain a profitable company.” Active construction took just 26 months, employing 1,400 skilled construction workers. Constellation emphasizes that reliability was not compromised while constructing retrofits and that other utilities can do the same through proper planning and scheduling maintenance during non-peak hours.

Constellation is urging the White House to reject pleas from dirty utilities who claim they can’t do the same by the 2015 deadline for air toxics reductions.

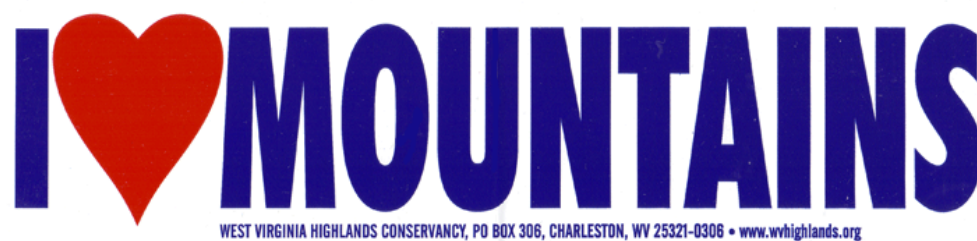
All of these analyses from different sources have one finding in common: they agree that cleaning up the nation’s dirtiest coal plants can be accomplished without threatening electricity reliability. As the December 16 deadline approaches, there is a growing body of evidence that protecting our children’s health from mercury and other toxic pollutants from dirty power plants is possible without turning the lights off.

– Daniel J. Weiss is a Senior Fellow and the Director of Climate Strategy and Jackie Weidman is a Special Assistant at the Center for American Progress.

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.

RED SPRUCE ECOSYSTEM RESTORATION HIGHLIGHTS FROM 2011 AND PLANS FOR 2012

By Dave Saville

The Central Appalachian Spruce Restoration Initiative (CASRI) is a partnership of diverse interests with a common goal of restoring historic red spruce-northern hardwood ecosystems across the high elevation landscapes of Central Appalachia. It is comprised of private, state, federal, and non-governmental organizations which recognize the importance of this ecosystem for its ecological, aesthetic, recreational, economic, and cultural values.

CASRI partners have had an active year full of successes. The past year's highlights include:

Partnership Liason

After volunteering for CASRI for 2 years, one as a VISTA, and one as an AmeriCorps Volunteer, Evan Burks has landed a full time position with the Forest Service at the Monongahela National Forest as "Partnership Liason." Evan brought considerable experience working with the CASRI partners, and is now getting paid to coordinate its efforts. Congratulations to Evan and thanks to the Forest Service!



Evan Burks paddling on the Blackwater River

Website: WWW.RESTOREREDSPRUCE.ORG

Our website has become the central location for disseminating information about the history, ecology and research being done about the red spruce ecosystem. There are news stories and information about projects and volunteer opportunities. This is a great resource to anyone interested in learning more about, or getting involved with, the CASRI efforts. We continue to actively add news, events and other content so please visit often. www.restoreredspruce.org

Barton's Bench Ecological Restoration Project.

The Barton Bench area is a 90 acre parcel of land mined for coal in the 1970s prior to becoming part of the National Forest system. It is a portion of the 40,856 acres acquired by the US Forest Service in the late 1980s that has become known as the "Mower Tract." The federal standards followed by the coal companies for the cleanup operation left the area in a less than desirable condition. The soils in the project area were degraded and heavily compacted. In addition, the area was planted with predominately non-native grass species, resulting in a dense grass mat as the only vegetation, inhibiting native species recolonization. This is a permanent condition referred to as "arrested succession" and was unlikely to correct itself without intervention.

There are approximately 2,500 acres of previously mined

land on the Mower Tract and 1,800 acres are in a similar vegetative state as the Barton Bench Ecological Restoration Project Area. This high elevation area was a red spruce-northern hardwood ecosystem prior to mining activities. A remarkable 240 rare species have been documented in the surrounding red spruce ecosystem. The entire project area falls into Management Prescription 4.1 under the 2006 Forest Plan. This Management Prescription calls for restoration and management of red spruce and spruce-hardwood communities in the Central Appalachians.

Project goals include:

- Short term - provide early successional habitat for wildlife species dependent on this type of habitat;
- Long-term – restore watershed conditions and native red spruce-northern hardwood ecosystem within the project area; and
- Use the results of this project to move forward with large-scale native species restoration across the previously mined areas of the Mower Tract.

Visit www.restoreredspruce.org for a complete report from the Forest Service detailing all the work that was completed in fiscal year 2011. In a nutshell, over 20,000 seedlings were planted, 135 wetlands were constructed, treated 15 acres of spotted knapweed, entered into an agreement with Canaan Valley Institute to decommission approximately 8,000 feet of old roads, restored approximately 600 feet of unstable stream, and restored or created an additional 3 wetlands within floodplain of the stream. WV Department of Environmental Protection funding was used to leverage over a \$100,000 of matching contributions. Good stuff and many thanks and congratulations to the Forest Service for their collaborative, cooperative work, accomplishing great things.

Results from this project will be used to guide the planning for the next project on Lambert's Run, just south of the Barton's Bench project area. This is a 2,667 acre project area with over 1,000 acres of coal surface mined area.



Barton Bench Ecological Restoration Area

Canaan Valley National Wildlife Refuge

The Nation's 500th National Wildlife Refuge has been a leader in CASRI's efforts to restore the wildlife habitat associated with the red spruce ecosystem. For over 10 years now the Refuge has been planting red spruce and balsam fir seedlings on the refuge and engaging in other restoration activities. Tens of thousands of trees have been planted and thousands of man hours have been volunteered. Using students from local colleges and universities, Boy and Girl Scout troops, local school groups, with the support of local residents and businesses, our efforts are paying off big-time!

With the successful completion of the Refuge's Comprehensive Conservation Plan (CCP), the Refuge staff can get busy actually implementing it. For the first time, restoring red spruce ecosystem is officially part of the Refuges management goals.

The Refuge continues to work with surrounding land-owners and have active, ongoing, projects with the neighboring Monongahela National Forest on both Cabin and Canaan Mountains, both Canaan Valley and Blackwater Falls State Parks, Canaan Valley Institute, and other local landowners. A new cooperative agreement with the Timberline Homeowners Association will allow us to complete a critical link along our Blackwater River corridor on both sides of the river in 2012.

The US Department of Interior has recognized the work of CASRI on the Refuge by highlighting it in a recent report to Congress. President Obama's "America's Great Outdoors" initiative establishes a 21st century conservation and recreation agenda to reconnect Americans to the outdoors. In the report, Secretary of the Interior Ken Salazar recognizes the Refuge as one of the best investments in the nation to support a healthy, active population, conserve wildlife and working lands, and create travel, tourism and outdoor-recreation jobs. It was identified for its potential to conserve important lands and build recreation opportunities and economic growth for the surrounding communities. This recognition was accomplished as part of close engagement with Gov. Earl Ray Tomblin and the state of West Virginia, as well as private landowners, local elected officials, community organizations and outdoor-recreation and conservation stakeholders.

The report states, "Canaan Valley National Wildlife Refuge West Virginia is the heart of the Central Appalachians, home to one



Dave Saville & Kyle Hayes plant red spruce in Canaan Valley.

of the healthiest, most biologically diverse temperate forests on Earth and some of the largest intact forest blocks in the eastern United States. These forests shelter cool headwater streams that deliver clean water to larger rivers, like the Potomac and Ohio rivers, and ultimately millions of people. They also are at the doorstep of the urban East Coast — within one day's drive of Washington, Baltimore, and New York City. Collaborative conservation efforts to connect federal, state, and private land are essential to protecting critical wildlife-migration corridors and ultimately to sustaining a network of healthy land and waters that will provide the full range of benefits to people. "

Blister Swamp

At the very headwaters of the East Fork of the Greenbrier River, Blister Swamp is a very remote, high elevation wetland. Privately owned, it is adjacent to Forest Service lands. Cooperating with the land-owner, the US Fish & Wildlife Service, Forest Service, The Nature Conservancy and The Mountain Institute have made extensive accomplishments in protecting and restoring this special place. Fence has been constructed to keep livestock out of sensitive areas, seed has been collected from the namesake "Blister Pines" (balsam fir) and a program of seedling production and planting has been implemented.

Seed Collection/Seedling Production

Red spruce and balsam fir, as well as most species, do not regularly produce a seed crop. Balsam firs have regularly produced cones on a 5-year cycle, other species are periodic. 2011 has been the best year we have seen for red spruce and balsam fir cones as well as with several small trees and shrubs associated with the high-elevation red spruce ecosystem. This year, with the help of hundreds of hours of volunteer labor, we were able to collect seeds from nearly 30 different species. Besides the usual fir and spruce seed, we were able to get significant quantities of Service Berry, several viburnums, mountain ash and many more. Restoration projects, especially on formerly surface mined lands, can use as many pieces to the ecosystem as we can provide.

Seedlings of both balsam fir and red spruce are available for sale. Visit www.restoredredspruce.org to learn more.



Red Spruce Cones

Tucker County High School Greenhouse

The Tucker County High School, with funds from the National Forest Foundation, has constructed a 30 foot x 72 foot greenhouse and classroom. They plan to grow species associated with the red spruce ecosystem for restoration purposes.

Wearing Black in Bear Season

A hunter's warning on the trail
I'd like to pass on

two-year-old poking along Otter Creek
oblivious till I reached for my pack, then shot
straight up the cliff—
mother with cub above Shingletree Run
too curious, he wouldn't mind so
she spanked him away—
another with three, count them, three cubs
in our bottomland all summer—
one was left lonely next year—
biggest guy I ever saw, shambling across
pipeline on Flatrock Plains
paid me no mind, but another, below
on Bearpen Flats blueberry field
looked up from munching and jumped
like a cricket, backwards—
I wasn't wearing black

Lomohongva, the Hopi woman explained
the name she had given her son, meant
"the pretty way the bear looks when he stands up"

I think of some who stood up:
Ken Hechler on the march to Blair Mountain,
Cindy Rank at every public hearing,
Corridor H Alternatives stopping bulldozers at Christmas,
Julian speaking in the teeth of a mob,
Bob Gates with his camera—and so many more
bearing witness,
bearing down and bearing up,
bearing burdens and scrutiny, losses and fruit,
bearing everything in mind—
wearing black in bear season

—Hugh Rogers



PO Box 306 Charleston, WV 25321

West Virginia Seed Source Red Spruce and Balsam Fir Seedlings

The West Virginia Highlands Conservancy continues its efforts to conserve and restore the High Elevation Red Spruce Ecosystem in West Virginia and the Central Appalachian Mountains. Once again in 2012 we will be offering high quality seedlings grown from seed collected locally by Highlands Conservancy volunteers. **All proceeds go to support red spruce ecosystem restoration efforts in West Virginia.**

Seedlings for Spring 2012

Red Spruce

10-18 inches, these are a 2 inch plug 6 inches deep.

100 - \$200
1,000 - \$950

Canaan Valley Balsam Fir

14-20 inches, these husky trees, are a 1 year plug grown in a transplant bed for 2 additional years.

100 - \$250
1,000 - \$1250

Flexible availability, April 1 - 31, 2012.
Quantities Limited - Minimum order 100.
All prices FOB Morgantown, WV

For more information visit www.restoreredspruce.org
or contact:
Dave Saville
304-692-8118
daves@labyrinth.net

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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.

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.

OUR READERS WRITE

Managing Wildlife? Consider the farmer

The article "Managing Wildlife" (*The Highlands Voice*, December, 2011) left out the group of people that feed the wildlife and the world. The Farmer.

A lot of farmers do not buy their hunting licenses. They hunt on their own land by landowner rights set by the game laws and some do not hunt. But they want people to hunt on and around their property. Every single wildlife from animal to bird that the state manages directly affects the farmers including crops and animals raised on their farm and their ability to feed their own family and the world.

I am not just talking about the damage the wildlife causes to the crops or animals but the ability to grow their crops, raise their animals in a productive way to pay the electric bill and all the other necessary payments that come along with just being alive.

Where else would you go to see deer but to the farmers alfalfa field? Or to see a coyote or a golden eagle but near a sheep farm? Or to see any other wildlife but near a free range turkey or chicken farm? All these crops are expensive to produce and manage. Some days the wild animals are beautiful to look at and other days they are thieves. Hunters and wildlife watchers only do that for fun and when they choose. I have to consider the impact of wildlife everyday. It is a necessity. Wildlife do not just stay on state land and they do not know what a boundary fence or marker is. In fact most farmers realize that they will have to plant extra and expect some loss due to wildlife thieves.

I was born and raised on the farm that I manage today and have a degree in Agriculture/Resource Management. My husband and I raise beef cattle and hay to feed them. My love is for animals; that includes wildlife. After I was in college and well on my way to my degree, I wished I had majored in Wildlife manage and forest management.

One summer I worked with the DNR giving out crop damage permits. I was shocked at the extreme amount of damage that wildlife does to farmers dollars from crows, deer to beaver. And as a sheep and cattle farmer, I have already seen the damage done by coyotes, bears and eagles. We went from having over 100 head of ewes with an average of 150% lamb crop to the coyotes putting that part of the farming operation out of business. But now the coyotes are starting to work on the calf crop and the black headed vulture is migrating here and they love new born calves.

We are in the Chesapeake Bay Water shed area. So I signed 15 acres of highly erodible pasture into a Conservation Reserve Program (CRP). The 15 acres were very steep. Fence had to be built around it. Not an easy job when every post and wire had to be hand carried up and down over steep ground. It was not accessible by a 4 wheeler or tractor. Then approximately 15,000 pine trees were planted inside the fence. It took 2 years to finish the project.

Then winter came and the acorn crop failed(for the next several years) I watched as the deer quickly ate those 15,000 trees. Now 10 years later there are approximately 200 trees that are over 4 feet tall and the rest of the trees are still only 6 to 10 inches tall. The deer have not killed all of the trees but they sure have tried. The pine trees in that 15 acres should be 8 feet tall. All I can say is we tried.

Farmers do not want the population of wildlife wiped out. Remember most farmers love animals, enjoy watching them, and plan for some part of their crop(dollars) to feed wildlife but the farmer needs to be able to have a say on how much of their crop(dollars) goes to wildlife. To a farmer, feeding wildlife is like feeding their

children. They are part of the farm and family. We just want to have a say and be able to control how much wildlife we feed. With the ever growing population and food shortages around the world, the farmer (producer of food for the world) in the near future will be the perspective that matters to a hungry world.

Thanks,
Luci Raines
Circleville, WV 26804

MORE FROM CYNTHIA D. (Continued from p. 2)

Peregrine Falcons have been introduced into the New River Gorge canyon. It would be ironic if lights here caused them trouble or harm, because a number of the young birds were transported from bridges in the region of the Chesapeake Bay. The theory was that the birds would have a greater chance for survival in the quieter, darker hills of West Virginia.

Powering up the proposed lights could be controversial too. Alternate energy could have been, but was not part of the proposal. There seemed to have been no thought given to using solar, wind, or even hamster generators [to use one of our editor's examples].

There is some irony in a statement from the Middle East too, where soccer balls could provide a little light. My friend Sam's family wishes to have lights, to read and study, and to be freer from the limits of natural dark. But one Dark Sky story reports that American soldiers in Afghanistan enjoy the novelty of a full canopy of starry skies there, something few see at home. Perhaps this points to the need for balance without excess and, at the least, preservation for some places.

So, after the poll, the WV DOH officials almost, but not quite declared the project dead. However, this publicity could enliven some other efforts. Groups and individuals, interested in saving the Bridge area and other places may be inspired to begin their education on the value of Dark Skies. Fayetteville, Oakhill, and elsewhere could investigate Dark Sky designations and Lights Out programs <http://lightsout.audubon.org/>.

At any rate, many of us will continue to resist the efforts to banish the dark, with its attendant moon and stars, especially in the mountains, and will instead, cherish it...wherever and whenever we can.

Speakers Available !!!!!

Does your school, church or civic group need a speaker or program presentation on a variety of environmental issues? Contact Julian Martin at 1525 Hampton Road, Charleston, WV 25314, or Martinjul@aol.com, or 304-342-8989.

NEW GAS REGULATIONS (Continued from p. 1)

natural gas well . . . drilled using a horizontal drilling method, and which disturbs three acres or more of surface, excluding pipelines, gathering lines and roads, or utilizes more than two hundred ten thousand gallons of water in any thirty day period.”

The bill grandfathers in existing or pending horizontal well drilling permits. It does not apply to horizontal wells that disturb less acreage or use less water. It also does not apply to vertical Marcellus shale gas wells that might disturb three acres or more of surface or utilize more than two hundred ten thousand gallons of water.

- **Legislative Findings:** The “legislative findings” section of the new Act sets the tone for the permissive nature of the new legislation. For example, it states that the DEP Secretary “should have broad authority to condition” drilling permits in order to protect the safety of persons, prevent damage to publicly owned lands or resources, and to otherwise protect the environment. But it also states that the Secretary “should also have broad authority to waive certain minimum requirements” of the bill. The bill provides that the Secretary must submit annually a written report to the Legislature detailing the number of waivers granted. Similar permissive language exists throughout the bill, saying the “the Secretary may”, instead of “the Secretary shall.”

- **Authority to Regulate and Propose Rules:** The bill gives the DEP authority to propose necessary legislative rules to implement the provisions of the bill, and states that the Secretary “has sole and exclusive authority to regulate the permitting, location, spacing, drilling, fracturing, stimulation, well completion activities, operation, any and all other drilling and production processes, plugging and reclamation of oil and gas wells and production operations within the state.” This language is obviously aimed at preventing local authorities from attempting to regulate drilling operations. The bill also requires the Secretary to make a monthly written report to the Governor on how long it takes to issue drilling permits (an obvious industry provision).

- **Drilling Permit Applications:** Among other things, the bill requires every permit application to include: an erosion and sediment control plan certified by a registered professional engineer; a site construction

plan certified by a registered professional engineer; and a well site safety plan (with a copy provided to the emergency planning district in which the well work will occur at least seven days before commencement of well work).

In addition, “if the drilling, fracturing or stimulating of the horizontal well requires the use of water obtained by withdrawals from waters of this state in amounts that exceed two hundred ten thousand gallons during any thirty day period,” the permit application must include a water management plan. The water management plan provisions are basically the same as those spelled out in DEP’s Emergency Rule. The provisions in the bill do NOT require an operator to obtain an actual water withdrawal permit.

- **Ability to Deny or Condition Permits:** The bill says, “The permit may not be issued, or may be conditioned” if the Secretary determines that: the proposed well work will constitute a hazard to the safety of persons; the plan for soil erosion and sediment control is not adequate; damage would occur to publicly owned lands or resources; or the proposed well work fails to protect fresh water sources or supplies.

- **Public Notice and Comment Period:** The bill provides for public notice and a 30-day public comment period for each horizontal well drilling permit application. The Governor had removed this provision from the bill, but it was restored by a Senate amendment. However, the provision in the Select Committee bill to allow the Secretary of DEP to hold a public hearing on permit applications was removed from the bill. The bill also requires the DEP to develop a public web site containing detailed information on horizontal well drilling permits.

- **Drilling Permit Fees:** The bill sets drilling application permit fees at \$10,000 for the initial horizontal well drilled at a location and \$5,000 for each additional horizontal well drilled on a single well pad at the same location.

- **Performance Bonds:** The bill establishes a \$50,000 individual well bond to accompany the drilling permit. Unfortunately, it still provides for a \$250,000 “blanket” bond to cover a producer’s wells, which is totally inadequate to provide for reclamation of all

those wells in the event a producer abandons its operations.

- **Drill Cuttings and Drilling Pits:** For horizontal wells, drill cuttings, drilling mud, and drilling pits must be disposed of in an approved solid waste facility and can no longer be buried on site without the landowner’s permission. This does not apply to conventional shallow wells, and does not address the legacy pollution problems caused by leaking pits that are allowed to be buried on site.

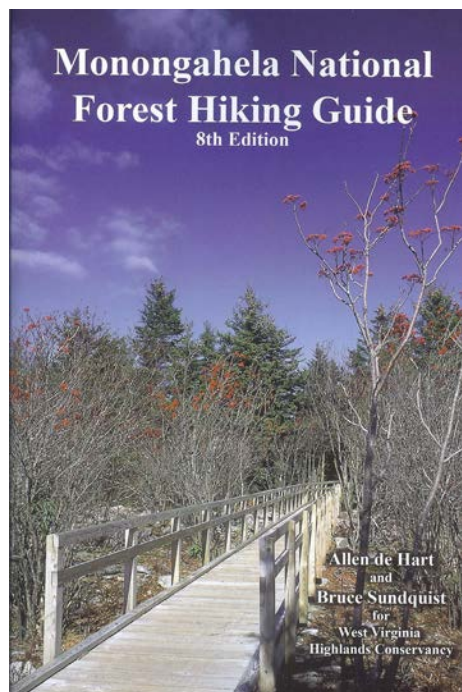
- **Well Location Restrictions:** Horizontal wells may not be drilled within two hundred fifty feet from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. These limitations may be waived by written consent of the surface owner, and the Secretary may grant the operator a variance to these provisions. No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply.

Almost all of the distance restrictions provided in this bill are weaker than those provided in the Select Committee bill. Because the distances are weakened and exclude pipelines and well roads from these setbacks, the bill virtually assures that streams will be muddied and private water wells and springs that provide drinking water in rural areas will be contaminated by horizontal drilling operations.

The bill removed an entire amendment from the Select Committee bill that provided the Secretary the additional authority to deny or condition drilling permits based on a variety of other circumstances.

- **Noise, Light, Dust and Volatile Organic Compounds Amendment:** The bill includes a House amendment requiring DEP

(More on the next page)



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)

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Price: \$20.00 from the same address.

THE REST OF THE STORY

(Continued from previous page)

to study the impacts of noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions from occupied houses, and gives DEP the to propose additional legislative rules based on the study.

- **Casing and Cement Standards:** While the bill contains some minimum casing and cementing standards, it removes more than 20 pages of standards included in the Select Committee bill, and authorizes DEP to promulgate additional standards by rule.

- **Drilling in Karst:** The bill provides that the Secretary "may require additional safeguards to protect" karst geological formations and the groundwater in those formations.

The bill requires the Secretary, in consultation with the state geologist, to propose emergency and legislative rules to establish designated geographic regions of

the state that include "naturally occurring karst terrain" and to establish standards for drilling horizontal wells in those regions. The bill requires that such rules require "at a minimum" that operators perform pre-drilling testing "to identify the location of caves and other voids, faults and relevant features in the strata and the location of surface features prevalent in naturally occurring karst terrain such as sink holes", and "may include baseline water testing within an established distance from a drilling site." The bill's language specifically states that nothing in the bill "allows the department to prevent drilling in naturally occurring karst terrain."

- **Air Quality Regulation:** The bill removed the provisions in the Select Committee bill requiring DEP to regulate air emissions at drilling sites and other natural gas operations. Instead, the bill requires DEP to study air quality issues, including possible health impacts, and to promulgate legislative rules if "necessary."

- **Impoundment and Pit Study:** The bill requires DEP to conduct a study of impoundment and pit safety, including the presence of radioactivity from naturally occurring radioactive materials, and to promulgate legislative rules if "necessary."

There are many other provisions of this complex legislation, including important provisions for surface owners, which I have not detailed here. There were also many provisions that WVEC and our expanded coalition of organizations concerned about Marcellus shale drilling felt should be included in the bill, but were not.

Lawmakers in both the House and Senate called the bill "a good first step," but acknowledged that there is more work to do.

Whether or not legislators will "have the stomach" to revisit the bill in the upcoming legislative session is, of course, the big question.

WIND POWER: IS IT WORTH IT?

By Mark Morgan

The heavily funded and admittedly effective US industrial wind lobby portrays its product as descending from old-world windmills. Close your eyes and you'll surely imagine these magnificent machines gently turning in the breeze ... each kilowatt arriving at your reading lamp courtesy of a rosy –cheeked Hummel child. Existing solely to save the planet by generating clean, affordable and environmentally friendly electricity, you can be sure that any addition to the plant owner's bank account is purely accidental.

Hogwash! In reality, the US industrial wind business traces its roots to Ken Lay and Enron with profit as its core goal. As Gabriel Alonso, chief executive of Horizon Wind Energy LLC - one of America's biggest wind developers, often reminds his employees ... their goal isn't to stage a renewable-energy revolution ... **"This is about making money!"** (1)

I was not always this cynical. I wanted to believe that industrial wind would replace fossil fueled power plants and, until two years ago, defended its arrival here. Like many West Virginians, I wanted the destruction of our mountains by those who profit from the blue diamond stopped ... **NOW!** I believed industrial wind offered the best opportunity to accomplish that goal and, even recognizing industrial wind also consumes our forest lands, it seemed an excellent alternative to the coal industry's horribly destructive mountaintop removal mining process.

Sadly, once the layers of "woulds, coulds and shoulds" were peeled back, I found industrial wind failed to keep its environmental promises. Save the canned boilerplate responses to criticisms, the wind industry offered nothing conclusive to demonstrate it would significantly reduce emissions or close fossil fueled plants. There is no conclusive evidence that one coal plant has been closed as a direct result of the installation of tens of thousands of wind turbines. Not one! I've asked advocates to name one facility. Answer ... zippo!

I fully expect advocates to point to many studies which validate their "woulds and shoulds." But the studies they point to carry their own fair share of "woulds and shoulds" as well. We're even asked to disregard the increased emissions generated by fossil fueled plants as they inefficiently try to compensate for wind's constant variability and accept that, on their word alone, when the wind is blowing, a coal plant, somewhere, is not running. That's equivalent to some self-appointed Giraffe Control Officer bragging that not one has been spotted in Charleston during his watch.

Consider this measure instead. US industrial wind capacity at the end of 2010 exceeded 40,000 MW (2). The US has some 490 coal power plants with an average size of 667 MW (3). A direct one to one trade would have closed some 60 coal plants. Again ... name one!

Bringing this closer to home ... Edison Mission Energy is heavily invested in Appalachian coal fired power plants even as it grows its Appalachian wind plants. Can we expect Edison to replace

its fossil plants as it opens wind plants with equivalent MW capacity? Will any of the major players holding significant interest in both fossil fueled plants and wind plants make this commitment? I suggest they will not, as long as there is profit to be made from each.

The sad truth is that industrial wind does not replace fossil fueled electricity generators. It does not reduce emissions. It does not provide affordable, on demand electricity. The relatively miniscule amount of electricity generated typically arrives when it's not needed and cannot effectively be stored. Industrial wind, true to Ken Lay's intent, is a profit center founded on favorable legislation, mandated renewable energy goals and funded by taxpayer subsidies.

I did not come to the "dark side" willingly. At the suggestion of a friend, I attended a presentation on industrial wind at which the speaker systematically destroyed any notion that industrial wind has earned a seat at the US energy table. Expecting yet another NIMBY rant, the presenter instead based his case that industrial wind is a failed technology on science alone. There was little mention of view-shed, bat/bird kills, noise or health issues, all of which I've

since learned are serious issues in their own right. The presenter focused primarily on the poor performance and high cost of industrial wind and the fact that they could never replace current generators, my main reason for initially supporting industrial wind.

Knowing that the two key representatives of our proposed wind plant were introduced as being in the audience, I could hardly wait for the question and answer session. This was going to be a knock down for the ages! Just wait until they set this clown straight!

Then, the presenter wrapped up and said the magic words I'd been waiting for ... Any Questions? My gladiators stood up and walked out! Not a word! No defense! How could they let this brutal attack stand?

That was my turning point. Suspicion

drove me to read any article I could find about industrial wind and the more I learned the more I disliked these monstrous contraptions which were scheduled to invade my Appalachian Mountains by the tens of thousands.

Before this event, I was willing, like many of my friends, to sacrifice a mountain view, some bats and birds and even the hard earned tax dollars these wind folks would pick from my pocket if it meant the greater good would be served. What I learned, however, lead me to the conclusion that there is no trade.

- Coal plants will continue to exist at pre-wind levels and the mines will remain open in order to supply them.
- Emissions will not be reduced as a result of industrial wind. When asked if wind power was reducing carbon emissions, Deb Malin, a Bonneville Power Authority Representative, answered, **"No. They are, in fact, creating emissions."** (4)
- Not only will the surface destruction brought about by mountain top removal mining not be reduced as a result of wind plants,



Windmills on Laurel Mountain

(More on the next page)

MORE ABOUT WIND (Continued from previous page)

industrial wind will bring destruction well above the ground in areas not previously impacted by mountain top removal. (5)

- The cumulative impact of long stretches of deadly 450 foot tall whirlybirds along our fragile mountain ridges will set a deadly gauntlet for many migratory species with no real benefit to show for the sacrifice.
- The arguably unnecessary remote wind installations require long runs of forest fragmenting high power lines required to bring the occasional electricity generated to a point of use.
- My picked pocket only serves to benefit the wind developers.

I cannot abide the suggestion that we must sacrifice our environment in order to save it. This is an absurd argument enabling this energy imposter's invasion of delicate habitat with little return. Sacrifice is, after all, a forfeiture of something highly valued for the sake of one considered to have a greater value or claim. Environmentalists must consider the possibility that industrial wind, by its failure to perform to stated goals, does not then qualify for this sacred consideration.

My comments here are my own. I am a member of the Board of Directors for the Allegheny Highlands Alliance (6), but do not speak for the organization in this commentary. I serve as editor of the Allegheny Treasures blog (7), an amateur site intended not to answer questions, but instead to stimulate discussion of industrial wind among readers, as I hope to do in this piece.

I arrived at my opinions after all consideration to the argument presented by the AWEA and other industrial wind support groups. I'll be the first to admit I could be wrong, as I was when I supported industrial wind just two years ago. If a persuasive argument can be made to sway me back, I assure you I'll happily move. But I should warn you, the argument must begin with a list of coal plant closings and not easily manipulated speculative "data." Empty promises will not justify consuming even one more square inch of Appalachian forest.

Oh, before I'm criticized on the property rights issue ... I firmly

believe that you should be allowed to do anything you wish with your property as long as it brings no harm to others. But whatever you choose, don't ask me to underwrite your adventure with my tax money in the form of subsidies, grants, or any other considerations from which you profit.

I should note that I am not insulted at the NIMBY (Not in my back yard) moniker the wind advocates apply to me. I would take it one step further and suggest they call me a NOPE (Not on planet Earth)! I believe we are all responsible for our environment and must challenge every intrusion. We cannot accept, without question, the possibility that what has been portrayed a solution may, in fact, create additional ills, no matter how much we want to believe.

We should do all possible to move this country away from fossil fuels. Choosing an alternative with no proven track record in accomplishing this effort, especially one with industrial wind's potential for serious environmental destruction, is simply not an acceptable choice.

Footnotes:

(1) <http://online.wsj.com/article/SB10001424052748704629104576190812458488694.html>

(2) http://www.nrel.gov/continuum/wind_power_innovation.cfm

(3) <http://www.energyjustice.net/files/coal/igcc/factsheet.pdf>

(4) <http://www.masterresource.org/2010/07/northwest-windpower-problems/>

(5) http://wvhighlands.org/wv_voice/?p=3841

(6) <http://alleghenytreasures.com/allegheny-highlands-alliance/>

(7) <http://alleghenytreasures.com/>

Editor's note: Mr. Morgan lives in Keyser, WV. In his cover letter offering this commentary he says, "It is my hope the piece will stimulate further discussion on the very important and timely topic of industrial wind in the Appalachians."

The Way the Voice Works

The Highlands Voice is the official publication of the West Virginia Highlands Conservancy. While it is the official publication, every story in it does not represent an official position of the Conservancy. While all of our members share the general goal "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", our members often have differing views upon the best way to do that.

As a result, stories in *The Voice* often reflect different points of view. The Conservancy itself, however, only speaks through its Board. The only stories that reflect the official policies of the Conservancy are those reporting Board actions, including litigation positions we have taken, comments on proposed regulations, etc.

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 \$12 by mail; **long sleeve** is \$15. West Virginia residents

add 6% sales tax. Send sizes wanted and check payable to West Virginia Highlands Conservancy
ATTEN: James Solley, WVHC,
P.O. Box 306,
Charleston, WV
25321-0306.



West Virginia Mountain Odyssey



Outings, Education and Beyond 🇺🇸

January 1, 2012: New Years Day Snowshoe Discovery Tour, 10 am, meet at White Grass Lodge. Your chance to appreciate the simple beauty of snowshoeing. Natural history and local lore are featured.

January 7: Winter Bird Walk, 8 am, meet at the Refuge Visitor Center, led by Volunteer Casey Rucker.

January 7: Winter Trails Day Snowshoe Tours - 10 am and 2 pm, meet at White Grass Lodge. Clinics on types of snowshoes, clothing, basic techniques, and outdoor winter snow travel followed by a natural history tour on snowshoes into our neighboring National Wildlife Refuge.

January 8: Snowshoe Discovery Tour - Winter Birding - 10 am, meet at White Grass Lodge. Join Casey Rucker for a winter birding outing.

January 13: Refuge Story Hour: SnowFlakes - 10 am, at the Refuge Visitor Center. We will read *The Snowy Day* & Frederick. Then we will observe snow with magnifying glass, melt snow, & make a rainbow with a prism. Enjoy this new monthly program series for pre-schoolers.

January 16: Martin Luther King Snowshoe Discovery Tour - 10 am, meet at White Grass Lodge. A natural history snowshoe walk with Chip Chase as he shares his knowledge about the climate, forest type, and geology of the area. Enjoy a short streamside jaunt that lasts about an hour and covers around a mile of easy rolling terrain.

January 21: Valley Vibes - 7 pm at the Refuge Visitor Center. Topic and presenter TBA.

January 22: Snowshoe Discovery Tour - This is Your Land - 10 am, meet at White Grass Lodge. Are you interested in the history and management of the different public lands in Canaan Valley? Then this is the outing for you! Join Dave Saville for this very informative program.

January 29: Snowshoe Discovery Tour - Ecosystems Beneath Our Feet - 10 am, meet at White Grass Lodge. Led by biologist Dr. Dave Culver from American University, this outing will take you on an adventure you're sure not to forget! Snowshoe to some small springs in the area in your quest to discover blind, white bugs.

February 5: Snowshoe Discovery Tour - GPS Mapping Skills- 10 am, meet at White Grass Lodge. Dr. Rick Landenberger will provide an introduction to GPS technology including principles for mapping points and routes, with particular emphasis on central Appalachian forest ecology and wildlife applications. Bring your own GPS if you'd like, but Rick will have loaner units for first timers. Dr. Landenberger is the Executive Director of a non-profit geospatial research and education network, and a West Virginia University faculty member in Geology & Geography.

February 11: Winter Bird Walk, 8 am, meet at the Refuge Visitor Center, led by Volunteer Casey Rucker.

February 12: Snowshoe Discovery Tour: Behold! The Land of Canaan - 10 am, meet at White Grass Lodge. This walk features historic highlights from the founding to the lumbering age in Canaan Valley. Also it includes a discussion of the conifers that are found in the Canaan Valley area. Led by local Master Naturalists Bruce and Andy Dalton.

February 18: Valley Vibes - 7 pm at the Refuge Visitor Center. Topic and presenter TBA.

February 20: President's Day Snowshoe Discovery Tour - 10 am, meet at White Grass Lodge. Join Chip Chase, owner of White Grass and lifelong outdoorsman sharing his knowledge of the area as well as the history of the relationship with the Fish and Wildlife Service and the formation of the Refuge here.

February 26: Snowshoe Discovery Tour, meet at White Grass Lodge, time and topic TBA.

All events are free. These events are co-sponsored by the Friends of the 500th, the Canaan Valley National Wildlife Refuge and by White Grass Ski Touring Center. Call 304-866-3858 for more information