

Senator Joe Manchin
300 Virginia Street, East
Suite 2630
Charleston, WV 25301

July 9, 2015

April Keating, Chair
Mountain Lakes Preservation Alliance
115 Shawnee Dr.
Buckhannon, WV 26201

Dear Senator Manchin,

We write to express our concerns over the proposed pipelines, unconventional gas drilling, and fossil fuel development in our state. You may remember that Iris Bell wrote our state and Centennial song, "This is My West Virginia," in 1961. In it, she speaks of the pride, strength, freedom, and principle that she felt marked our state and its people. Sadly, in WV today, our politicians seem to have abandoned principles for the lure of money. Today, we are in a crisis situation worldwide which begins in Appalachia, the gas region. We write to bring you the evidence of real problems in our state and ask your leadership at this crucial time in our history to save West Virginia, and the rest of the country, from the ravishment of fossil fuel development.

Article 3, section 1 of the Bill of Rights of the West Virginia Constitution makes it clear that businesses' pursuit of profits must be subject to the conditions of health and public safety. Many downplay the risks and dangers of gas development in our state. Industry spokespersons insist that their processes are safe, but we know that is not always true. For instance, we know that a Fayette County injection well has been leaking, poisoning the water in Lochgelly, WV where the children have had a rash of health complaints ranging from leukemia to brain tumors since around 2005, just about the time drilling started in earnest. Why are our children to be sacrificed for profit?

Despite the increase in gas drilling, or perhaps because of it, West Virginia continues to rank among the lowest in economy, employment, and well-being. We need safe, sustainable jobs that do not sacrifice the health of our people and foul the water for those downstream. Fossil fuel extraction and transmission have been shown time and time again to be dangerous to our water resources and public health. The laws lag far behind in protecting the people, and our model is stuck in the past. Renewable energy, such as wind, solar, geothermal, and hydropower, are becoming more efficient, cheaper, and more accessible, and our people want them. Shifting to them would be easy, would provide clean, safe jobs, and would protect West Virginia's future.

We have known of the dangers of "fracking" for over ten years, and continue to see it in the stories of people like Wayne Grose, who lost a good water well and an artesian spring to seismic testing for gas around his farm. Sadly, these stories are becoming more abundant in West Virginia. It is simply irresponsible to continue to promote gas pipelines and drilling when we know the myriad threats they pose. Studies both old and new show that unconventional gas drilling has compromised water resources. Surface water is taken for drilling in the millions of gallons per well, groundwater is contaminated with waste by injection or spills, water wells are contaminated directly or indirectly, runoff contaminates streams and rivers, and storage tanks leak and contaminate water and soil. Too often, the laws we do have are not often enforced, mainly because agencies like the DEP are severely understaffed.

Unconventional drilling also has been shown to cause earthquakes from injection wells. A few

examples are Youngstown, OH, North Texas, Oklahoma, and California – places that have seen a very large uptick in seismic activity in recent years. Radioactivity being brought up from the shale is deposited in vast amounts into the hundreds of thousands of tons into landfills that are not equipped to handle this industrial waste. A glaring example is Wetzel County's municipal landfill, which in 2013 took over 250,000 tons of radioactive drilling mud. There was also a runoff event which leached radioactive water into Blacklick Creek that same year, and into Pennsylvania drinking water through a water intake downstream. Radium-226 and -228 and radon gas, present in the shale, endanger not only the workers at the drill sites, but everyone who comes into contact with the gas that is produced. Sending our drilling waste to other states, or injecting it too close to water sources, as we have been, is a pure example of socializing the costs while privatizing the benefits, and it is not a model for a healthy economy or a prosperous society.

In addition, air pollution from diesel burning trucks and silica dust at the drill site endanger workers and residents alike. Studies have shown silica dust and diesel exhaust to be carcinogenic, as well as at least 29 components of frack water. Long-term studies on the health effects of fracking on human health have yet to be done, yet we continue to drill, frack, and inject waste underground. We believe to continue to promote drilling under these conditions is morally wrong.

With such heavy industrial activity, there is always an increase in traffic, meaning bad road conditions and an increase in traffic accidents. Many out-of-state drivers do not know how to navigate mountain roads and are a safety hazard to others on the road. Heavy trucks full of water and waste travel the roads daily, destroying road beds and blocking access by school buses and emergency personnel. Taxpayers are expected to cover the cost of roads destroyed by industry. We know that the new pipeline projects are intended to carry this fracked gas away from our communities and leave us with destroyed roads and expect us to pay the cost of repair. To develop new infrastructure while our old infrastructure is crumbling and in such need of repair that we are looking at a public safety issue is irresponsible. We must stop this abuse of our state for profit.

We know that gas development increases climate change, as methane leaks are abundant across the United States from active and inactive wells, pipes and infrastructure. Air pollution from diesel burning trucks along public roads and silica dust at drill sites endanger workers and residents alike. The compressor stations required for the new pipelines will release compounds such as carbon monoxide, nitrogen oxide, sulfur dioxide, and other toxic and carcinogenic compounds. Because of West Virginia law not considering aggregate effects, we know that the cumulative damage to the environment will be great. It is time for us to stop treating our atmosphere as a dump, and our state as a national sacrifice zone.

Our state is sacrificing its air and water at a time when climate change is causing severe droughts and water privatization is restricting access to affordable, clean water. In a state that produces water, to suddenly have people who cannot drink the water from their own wells that for years came out clean and clear is unacceptable. To send dirty water downstream or send it off to be injected underground in a neighboring state is unconscionable. Clean water is the single most valuable natural resource that we have, and we only have so much of it. We must protect it for future generations.

Several large, high-pressure gas pipelines are proposed for West Virginia. Some have already begun construction. It has been proven that pipeline construction degrades water resources. Why are we not requiring the industry to take baseline samples and monitor every stream affected at every stage of construction? Storm water runoff from construction of the pipelines will endanger stream life in a state that has the second highest diversity in the world and is the source of eight major rivers. We have a responsibility to the 13 states that get their water from us to keep it clean. We ask you to demand that the industry show stewardship of our resources, and pay the true cost of its operations.

We have been told that the new gas infrastructure is going to provide us with jobs and tax revenues, but we believe the industry numbers are biased toward industry. Additionally, we suspect that most of these jobs are not going to West Virginians. One only need drive the highways a short distance or visit a drilling or pipeline site to see a new rash of license plates from Texas, Iowa, Michigan, Oklahoma, Utah, Virginia, and Pennsylvania among others. EQT, the company behind the Mountain Valley Pipeline, has stated that it would bring its own welders and other skilled laborers with it to the work sites. Despite claims that “up to 50% of workers on the Stonewall Gathering Line will be from WV,” most of those workers so far appear to be from out of state. Importing workers means camps full of non-residents (a.k.a., “mancamps”), bringing a multitude of problems to local communities, including sexual violence and human trafficking, and place an extra load on local law enforcement.

We are told that this country needs gas as a bridge fuel, but transition time is now. Policymakers are clearly ignoring the news that solar, wind, and other types of renewable energy are becoming easier and cheaper to get. Solar prices have been dropping for years, and in fact have decreased by over 72 percent in last eight years alone. This has been driven by many factors such as increasing efficiency of solar cells, improved manufacturing technology, cheaper material and increased standardization. The cost of solar energy is made more affordable by federal tax credits, incentives and grants. On the other hand, grid electricity price is increasing and have increased over 100% in last 10 years. It is clear that we do not NEED fossil fuels for energy, but we DO NEED water. It is also clear that a few people will become very rich by investing in it. Are we to put profits over people?

Companies like Dominion naturally work to assure the public that these new projects will benefit them. They bait the public with the promise of jobs, and our local officials with the promise of tax revenues. We believe Dominion and others have inflated their estimates of jobs and tax revenues in order to make their projects look more appealing. Dominion's website cites a report by CHMURA Economics and Analytics, which shows tax revenues in the hundreds of thousands, where Dominion's own numbers show them in the millions for the same region and time frame. For example, the number of jobs and tax revenues for the state from 2019 onward according to the Dominion report is \$1.16 million with around 3,000 jobs during the construction phase (they do not specify whether these are permanent jobs or temporary). This is a lot different than the CHMURA report that shows \$774,600 per year in taxes for the state, and only 74 permanent jobs. What accounts for this discrepancy? We need to be asking these questions, and more, if we are to pursue this project and the many others like it responsibly, which we must do if we are to preserve our heritage.

But even if their numbers were correct, would the tax revenues that the companies claim be enough to offset the the ensuing reduction in property values of up to 25% where a pipeline goes through, and even higher within 3,000 feet of a drill site? How much would it be worth to you to give up private property ownership, yet be required to pay taxes on property we you no longer use as you wish? Yet, these details are not shared by company representatives who come for our signatures for surveys and rights of way. They lure the people with money, asking them to give up their ownership, impede their freedom to develop their land as they wish, and break apart their children's inheritance for what amounts to pennies. For some of these people, their land is ALL they have.

West Virginia is in a situation where mega companies want to take control of the land and water, and deliver our gas to “other markets,” using eminent domain as a tool to seize private property for corporate gain. Will we continue to be victimized as we have for 152 years? Such projects denigrate and devalue not only common resources (such as water and land), but they impinge upon private property rights with the use of split estate and eminent domain as a way to increase their profits. We call your attention to the law and the tradition that allowing companies to trespass on a person's private land for surveying or corporate gain is not only wrong, but illegal:

§61-3B-3. Trespass on property other than structure or conveyance.

(a) It is an unlawful trespass for any person to knowingly, and without being authorized, licensed or invited, to enter or remain on any property, other than a structure or conveyance, as to which notice against entering or remaining is either given by actual communication to such person or by posting, fencing or cultivation.

We are told by the companies that they will do everything right, but can we believe that based on their records? And when the laws and business practices are not enough to protect us, what are we left with? When a third party contractor decides to break the law by dumping a truckload of contaminated water on a back road at night, when no one is there to see it, all regulation means nothing. A company can hire the best welders, but there is no way to guarantee even the best weld job will stand up to the steep terrain we have here, over 60 degrees in some places. We draw your attention to the section of pipeline in Doddridge County along Rt. 50W near the Mark West plant that has been suffering from slippage problems since it was built.

Seismic activity is also a threat, even in WV. The Mountain Valley Pipeline would run through Braxton County, a seismic epicenter for WV (check out the WVGES for online for maps and tables of seismic activity in the state). This size and magnitude pipeline (42" at 1440 psi) has **never been placed on this type of terrain before**. Many of our areas are rural, and a thinner class of pipe is allowed to be used in less populated areas. An explosion could burn a 2-mile radius, and our high school (Buckhannon-Upshur) is less than half a mile from the Atlantic Coast Pipeline. Are our children to be sacrificed for this export project, one that may have exhausted its usefulness in 10 or 15 years?

Responsible business models take into account public health and ecosystem services and try to preserve or even improve them. Fossil fuel development in this state has always put our land, water, property values, and public health at risk, and our people's health in last place. Pipelines are billed as safe, but these events tell a different story:

- the crude oil train derailment and subsequent leak into the river at Boomer, WV in February;
- the ethane pipeline explosion in Brooke County earlier this year;
- a broken pipeline in North Dakota that spewed three million gallons of brine in December of 2014;
- in January, 34,000 gallons of crude spilled into Yellowstone River;
- and in April, two spills of natural gas liquids into Marshall County, WV waters within hours of each other.

A Wikipedia report on pipeline incidents in the United States since 2000 returns fifteen full pages. In 2010, a 30-inch gas pipeline explosion in San Bruno, CA killed 8 people and destroyed an entire neighborhood. In May, a pipeline in California leaked 105,000 gallons of crude oil when an automatic shutoff failed, and destroyed miles of pristine shoreline. All this, while solar is getting so cheap and so popular, even the U.S. Navy and Marines are installing solar panels on their bases. In a few years, renewable energy will be quite common and affordable, but by then we may have very little clean water left. What we are doing is not sustainable. It is time for a new paradigm.

By law, all the waters of West Virginia are supposed to be clean and usable for all citizens. Is this true now? And will it be after we are inundated with pipelines and the huge increase in gas drilling that will certainly occur (300 new well pads are planned for Upshur and Lewis Counties in the ensuing months)? Our state officials and agencies are mandated by state and federal laws to protect the waters of the state and the public health. Fossil fuel development is directly injurious to our water resources and public health, and therefore, anyone who supports it is, knowingly or not, taking a stand against the

public welfare.

The WV Code supports water protection in the following statutes:

West Virginia Code § 22-11-2 holds that “[i]t is the public policy of the State of West Virginia that the water resources of this State with respect to the quantity thereof be available for reasonable use by all of the citizens of this State.”

There is also:

Water Pollution Control Act:

It is declared to be the public policy of the state of West Virginia to maintain reasonable standards of purity and quality of the water of the state consistent with (1) public health and public enjoyment thereof; (2) the propagation and protection of animal, bird, fish, aquatic and plant life; and (3) the expansion of employment opportunities, maintenance and expansion of agriculture and the provision of a permanent foundation for healthy industrial development. § 22-11-2(a). Declaration of policy

Groundwater Protection Act:

the Legislature establishes that it is the public policy of the state of West Virginia to maintain and protect the state's groundwater so as to support the present and future beneficial uses and further to maintain and protect groundwater at existing quality where the existing quality is better than that required to maintain and protect the present and future beneficial uses. § 22-12-2. Legislative findings, public policy and purposes

Natural Streams Preservation Act:

In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not impound, flood or divert all streams within the state of West Virginia, leaving no streams designated for preservation and protection in their natural condition, it is hereby declared to be the public policy of this state to secure for the citizens of West Virginia of present and future generations the benefits of an enduring resource of free-flowing streams possessing outstanding scenic, recreational, geological, fish and wildlife, botanical, historical, archeological or other scientific or cultural values. § 22-13-2. Declaration of public policy

Moreover, county governments have the duty, ability, and responsibility to protect the public from hazards to health or safety, even though they often act as if their only duty is to promote business development:

§7-1-3kk. Authority [for county commissions] to provide for the elimination of hazards to public health and safety; penalty.

In addition to all other powers and duties now conferred by law upon county commissions, commissions are hereby authorized to enact ordinances, issue orders and take other appropriate and necessary actions for the elimination of hazards to public health and safety and to abate or cause to be abated anything which the commission determines to be a public nuisance. The ordinances may provide for a misdemeanor penalty for its violation. The ordinances may further be applicable to the county in its entirety or to any portion of the county as considered appropriate by the county commission.

Water is a finite resource, and necessary to life. We must do all we can to protect it. There are ways to produce energy that does not destroy water, but these methods are not currently favored. Fossil fuels receive many times the subsidies of renewable energy. If we were to even the playing field, clean and sustainable renewables would quickly outpace dirty fossil fuels. We could start right away, building

solar farms on abandoned mine sites and implementing energy efficiency programs, which would not only bring plenty of safe jobs and entrepreneurship to our state, but would also reduce global climate change and give us hope for the future. The Union of Concerned Scientists states that: “Compared with fossil fuel technologies, which are typically mechanized and capital intensive, the renewable energy industry is more labor-intensive. This means that, on average, more jobs are created for each unit of electricity generated from renewable sources than from fossil fuels.” In our opinion, THIS is where the jobs are.

Other states have already begun the shift. There has been a national initiative to double renewable energy resources in three years. Sixteen states and the District of Columbia have renewable portfolio standards with solar energy requirements or bonuses (DSIRE 2012). Twenty-four states and the District of Columbia have direct cash incentives for solar projects and 22 offer tax credits (DSIRE 2012). There is also a Federal investment tax credit (ITC) of 30% for solar residential and commercial systems through 2016. Residential and commercial installed costs of solar systems fell roughly 15% in 2012 (SEIA 2013). As costs continue to fall, solar will become more prominent in the country's energy mix. This is a job-creating industry. West Virginia should be on the crest of this wave.

As thoughtful, voting members of the state, many of whom have voted for you and members of your family in the past, we are asking you to take a stand against the continued abuse of our state by fossil fuel development. We believe it is your duty to be aware of the issues and to act in the public's best interest. We as citizen advocates are doing our part to make you aware of what is going on in our area. We invite you to visit the areas that are heavily impacted by the oil and gas industry. We can arrange a tour for you to see it for yourself. The stories of our citizens who are struggling under this industry may affect you more strongly than you think.

Now is the time to change the tide. Please honor our West Virginia heritage. We urge you to work now to preserve its resources and its natural beauty, step up your leadership, and help us move into a clean, secure future by leading the charge for renewables. As Christiana Figueres, Executive Secretary of the United Nations Framework Convention on Climate Change, said in May 2014, we must leave the fossil fuels in the ground while we still have a chance. Later may be too late.

Sincerely,

April Keating, Kevin Campbell, Tim Higgins, Tom Berlin, Tom Bond, Diana Gooding, Ruth Lamb, Myra Bonhage-Hale, Emma Malcomb, Laurie Ardison, Autumn Long, Chris Hale, Joao Barosso, Alice Meehan, Heidi Cochran, Bill Suan, Mara Robbins, and others, representing:

Friends of Water
Mountain Lakes Preservation Alliance
Preserve Monroe
Preserve Floyd
and concerned citizens of our state