**Climate Justice in Appalachia and Beyond**

**Dr. George Banziger\***

 I am a long-standing member of the First Unitarian-Universalist Society of Marietta, a Green Sanctuary congregation, which is located in Washington County, Ohio. Washington County is one of the 22 Ohio counties included in the federally designated region of Appalachia that is under the guidance and support of the Appalachian Regional Commission, a federal agency.

The exploitation of Appalachia by outsiders goes all the way back to the days of George Washington, who, prior to serving as our first president, surveyed the lands around the Ohio River in eastern Ohio and western Virginia (West Virginia did not become a state until 1865) for development and ownership by the Virginia landowners. These claims of ownership ignored the Native American Creek tribe and those Americans already homesteading in the region. Then, in the 1800s, as Steven Stoll described in his 2017 book, *Ramp Hollow*, outsiders extracted lumber and coal from the Appalachian forests. One of the justifications for this exploitation was the disparagement of the residents of these areas as degenerate, backward, and ignorant. Fast forward to the 21st century, and we witness the false promise of natural gas being extracted from the Utica and Marcellus shale deposits and, in reality, the profits once again going mainly to outsiders, such as fossil-fuel companies in Texas.

I believe that as UUs our concern and commitment about climate justice has spiritual grounds in the transcendental Unitarians, like Emerson and Thoreau, who have preceded us. And we have common ground and a sense of intersectionality with others who have experienced climate injustice. But let me first review the history and current conditions of climate injustice: economic and environmental exploitation in Appalachia.

With the active support of state legislatures in West Virginia and Ohio, and with the engagement of oil and gas companies, many of which are based outside of this region, fracking (high-pressure hydraulic fracturing) is in high gear in this region. It takes 1.5 million to 16 million gallons of fresh water for each fracking well (U.S. Geological Survey, 2022), a thirst that seems unquenchable with the level of fracking we observe. Since the Ohio Legislature, the governor, and the agencies that are supposed to serve the public have mandated that fracking be done under public lands including the Ohio state parks, we can assume that much of this water will be drawn from watersheds that serve these public lands. We in eastern Ohio are outraged at the arrogance of the state legislature, where this mandate to drill under public lands originated. Many of these public lands, including Salt Fork State Park, the state’s largest state park, are located in eastern Ohio, i.e., Appalachia. The legislation that created this mandate was buried (stuffed) in a poultry bill, so there was no opportunity for public hearings. We are also fearful about the impact of fracking, such as reduced watersheds, air and water pollution, intrusion of service roads near our parks, health risks, and ecological degradation.

But in Washington County Ohio what is of greater concern to us is the detritus from this heightened fracking activity. I am referring to what is called “brine waste,” the biproduct of fracking, much of which is radioactive and which contains harmful chemicals including PFAS (forever chemicals), carcinogens, volatile organic compounds, and more. Of course, oil and gas producers attempt to mollify us by stating that only about 1% of brine waste contains these chemicals, but when we are talking about millions of gallons of brine waste, the amounts of these harmful substances are non-trivial. (It is important to note here that oil and gas companies are not required to reveal the contents of brine waste, a privilege granted by the federal government; independent observers have tested samples of brine waste, however). Washington County, has the dubious distinction of leading the state in the total volume of brine waste injected under its grounds. According to data from the Ohio Department of Natural Resources, a total of 5,985,024 barrels (a barrel is about 52 gallons) of brine waste were pushed into the ground through what are called Class II injection wells in 2023! Most injection wells are in eastern Ohio; one might ask how many barrels were injected in Franklin County (the Columbus area, Ohio’s capital) and whether such egregious exploitation would be tolerated in the environs where our public officials and department personnel reside. (The answer is 0.)

Many of us who reside in the Mid-Ohio Valley (the Marietta, OH–Parkersburg, WV area) see the need for a transformative economy in West Virginia and eastern Ohio. For many years we have been promised that economic development, jobs, and prosperity would result from the extractive industries of coal, oil, and natural gas and from the profits that these industries generated.

 But where are the profits, jobs, and prosperity from these industries going, and how much benefit to the Appalachian region of the Ohio Valley accrues to these investments? In a study done by the Ohio River Valley Institute (July 2021) it was reported that from 2008– 2019 in the 22 counties in Ohio, Pennsylvania, and West Virginia, which produce 90% of the natural gas in Appalachia, economic prosperity, in terms of jobs, income, and population growth, trailed the U.S. measures of these factors. In that period the number of jobs increased just 1.6%, eight percentage points below the U.S. figure, and personal income was one-third below the national average. The demographics of our region continue to show decline of population as young people choose to leave. In other words, little revenue or benefit from all this activity with natural gas have accrued to the region. Natural gas extraction and plastics manufacturing are capital-intensive enterprises. What is needed for job creation and sustained prosperity in the region is activity that is labor-intensive and that employs a local work force.

I have been affiliated for the past few years with an organization called ReImagine Appalachia, whose mission is to build a 21st century economy that is good for workers, communities, and the environment. Focusing on central Appalachia (eastern Kentucky, West Virginia, eastern Ohio, and western Pennsylvania), ReImagine Appalachia seeks to build a new economy centered on local wealth. RA supports grant seeking and nurtures partnerships and entrepreneurial endeavors that facilitate a transition from extractive industries like oil and gas to renewable energy and locally based manufacturing. These endeavors include development of biomaterials, such as hemp, an alternative to plastics; battery technology to store energy from renewable sources and for motor vehicles; and capping abandoned oil and gas wells. Other ideas involve job training for those previously involved in the criminal justice ‘system or in drug/alcohol rehabilitation, and research on the use of coal tailings to produce rare-earth metals, which are so critical to mobile phones, electric vehicles and other 21st century devices.

Residents of Appalachia are on common ground with other front-line communities that have experienced the disproportionate impact from corporate greed and government negligence. A few of the most striking examples come to mind: the Flint Water Crisis of 2014, where the water supply of the city was switched to the Flint River, impacting primarily African-American neighborhoods with lead contamination and other toxins; Cancer Alley in Louisiana (between Baton Rouge and New Orleans), where primarily African-American communities have experienced elevated cancer rates; the Navajo Nation Uranium Mining from the 1940s to the 1980s, where the government and companies failed to clean up radioactive sites; the Love Canal incident of 1977, when toxic chemicals killed residents and harmed the health of many more in that community near Niagara Falls, NY; and the Ogoni Crisis in the Niger Delta of Nigeria, where multiple oil companies like Shell extracted oil and left contaminated water and numerous health problems in the local community, from 1958 to the current day. Although our suffering may not be as tragic or extensive as people in those crises, we humbly and respectfully express intersectionality with these groups under the shared shadow of exploitation, greed, and negligence.

We as UUs express support for our common principle of belief in the interdependent web of all existence. Individually, we strive to live by environmentally sustainable practices, reduce waste and conserve energy. And collectively, we are united in Green Sanctuary projects in our communities, such as supporting recycling centers, pollinator plots, and solar-energy initiatives .

Our collective efforts are rooted in the rich tradition of our Unitarian pioneers, including the transcendentalists Ralph Waldo Emerson and Henry David Thoreau, who strove to live in harmony with nature and regarded our natural world not as a resource to be exploited but as a sacred entity. Thoreau was also one who advocated for civil disobedience to resist unjust government actions. (One wonders what Thoreau would do in response to the recent Supreme Court decision rejecting the principle of Chevron deference). Then there is the example of transcendentalist Margaret Fuller, who drew her version of intersectionality in connecting the oppression of women in the 19th century with the exploitation of nature.

And so, we as UUs stand proudly on a tradition of living harmoniously with nature and building economies that employ local work forces, benefit local communities, and promote climate justice. May we collectively move forward with one foot firmly planted in the legacy of our forerunners and the other foot pointed toward a sustainable and just world that builds local community prosperity and environmental health.

 \* George Banziger, Ph.D., was a faculty member at Marietta College and an academic dean at three other colleges. He is a member of the Green Sanctuary Committee of the First Unitarian Universalist Society of Marietta, and of the Mid-Ohio Valley Climate Action team.

(gbanziger497@gmail.com; 740-434-3354)