**Reports for Green Sanctuary Meeting of February 16, 2025**

Injection Wells.

 On February 6 Bob Lane, Bob Wilson, and I met with the three Washington County Commissioners. I deferred to the two “Bobs” in this meeting (we were the only three constituents in attendance). They talked about their legal case, which is now in a Washington County court, having been referred there by the Ohio Supreme Court. During the discussion it became clear that we need to request (demand!) a public meeting about the application of Deep Rock for an injection well near their office adjacent to the Ohio River on Route 7 near the Shelly & Sands facility. Bob Lane had contacted the three township trustees from Warren Township, all of whom agreed to request a public meeting. In their request for the public meeting, the elected officials should state that a decision maker from ODNR should be present to answer questions (this is to avoid the situation we experienced nearly two years ago when ODNR staff present at a public meeting at St. Ambrose Church were told not to answer questions; our county commissioner had to go to Columbus to get questions answered). I spoke briefly then handed my written comments to the clerk of the commissioners. There was no one there from the press (Marietta Times usually attends), so I sent my written comments, 1 which I have sent to the ODNR, and a summary of the meeting to the editor of the Times. There has yet been no article in the Times about that meeting; neither has the Times yet published Vic Elam’s letter on this subject.

 February 15 was the deadline to offer comments on Deep Rock’s recent request for a permit.

 I have also contacted the Ohio EPA about their authority over injection wells 2.

Save Ohio Parks.

 SOP is asking all concerned to ask Governor DeWine to place a moratorium on hydraulic fracturing, aka fracking, near and under public lands in response to the explosion at a site just outside Salt Fork State Park. Dawn had forwarded information on what to say about this disaster to the governor; some of our members have already take action.

ReImagine Appalachia:

 At their recent update (February 11) there was considerable discussion about how to respond to the recent Executive Orders from the White House about halting all grants. Many of those at this Zoom meeting have projects that are primarily funded by federal grants. RA staff urged those people to contact their members of Congress and emphasize that their projects, many of which serve people in “coal country,” are in jeopardy. Co-Director ReImagine Appalachia, Dana Kuhnline, led this discussion and provided some guidance about how to navigate these troubled waters.

 I assume that Dawn will have a separate report on our meeting with Amanda Woodrum, Co-Director of ReImagine Appalachia at the Hour of Environmental Action on February 13.

Citizens Climate Lobby.

 CCL is promoting the Fix Our Forests Act, which attempts to address long-standing issues regarding forest management. Some environmentalists, as expressed through a Democratic dissent to the legislation, point to the allowance for harvesting old-growth forests on federal lands as a reason not to support this legislaation. This will be discussed at the CCL meeting of February 17.

 Chuck McClaugherty, Alexis Smith, and I reported on our meeting with Ryan Culross, staff member responsible for energy issues in Congressman Mike Rulli’s office on January 31—also on the agenda for February 17.

 Randi Pokladnik will give a presentation at the February 17 CCL meeting; GS Committee members are invited (this is an effort to get people who are on our mailing list but who have not attended a meeting recently to participate in our meeting:

 *Do you wonder what a plastic water bottle has in common  with climate change? Plastics, especially single use plastics, are contributing to climate change from the fracking well pad where they begin their life to the landfill. Estimates say over 3 percent of climate emissions are generated from plastics production. Yet, only 9 percent of plastics are recycled, the remaining plastics do not break down but instead emit toxic gases into the atmosphere if burned or left in landfills. We need to  evaluate our use of plastics.*

Research on Production Waste at Ohio University

 At our last meeting we briefly discussed the research being done by Dr. John Staser at Ohio University on production waste. We did not decide on any committee action, but I have sent the following message to Dr. Staser twice since our last meeting. He has not yat responded.

 *Dr. Staser,*

*I am familiar with your work on production waste (from hydraulic fracturing) from media sources, and I am aware that Dr. Randi Pokladnik and others visited your lab in Athens recently.*

*The Green Sanctuary Committee of our Unitarian-Universalist congregation is concerned about this issue.  I gave a presentation at our Green Sanctuary meeting last month on production waste--it is attached (I did make reference to your work in that presentation). Your work is appreciated if it can lead to some safe and productive use for production waste.*

*I have some questions which I would respectfully ask you to respond to:*

*1. Have you read Ryan Nobel's book,****Petroleum 238****, and are you familiar with the reports on the radioactivity of production waste and the health risks associated with that issue in his book? If so, how are you dealing with that issue in your lab?*

*2.  What kind of process or  filtrate are you using to address the radioactivity and toxicity of production waste?*

*3. How are you dealing with the waste from the production waste that is being produced in your lab?*

*4. What kind of sampling methods are you using to assure that you get a broad representation of production waste?*

*5. What possible uses do you see at this time for production waste?*

*Thank you in advance.*

1 ***Comment on Permit Request for Deep Rock Injection Well***

 *When will the people at the Division of Oil and Gas Resource Management start listening seriously to the residents of Washington County about injection wells?*

 *We strongly oppose the approval of a permit for Deep Rock Disposal to establish an injection well at American Growers #4, section 4, in Warren Township in Washington County. We want our voices to be heard, and we need our election officials to convey our concerns to the Division.*

 *In researching this request in the context of other requests for permits from Deep Rock, we have come up with several questions that need to be addressed before this request is approved:*

1. *It appears that this is the same request that was made to the Division in 2021. Why was that request not approved, or was it and the drill site was never established?*
2. *I just received a report that brine waste is being delivered by rail to Parkersburg WV;,trucks are picking up this material at the train depot and delivering it to Deep Rock’s site just outside Marietta. I have asked Director Vendel if Deep Rock is authorized to do that.*

*3. Inspection reports indicate that a railroad spur has been put in at this site which is adjacent to a barge dock. Will brine water, aka production waste, be shipped in by barge to this site? And if so, has the U.S. Coast Guard been informed that this material will be transported on the Ohio River?*

 *4. Will this brine water be piped from the site to another site just off Route 676, through a residential area of the City of Marietta (Harmar Hill)?*

 *5. Deep Rock plans to store brine waste in two 25,000 bbl (that’s over 2 million gallons) tanks very near the Ohio River. Is this a tolerable risk to a river that provides drinking water to thousands along its path*

 *6. Why was the public announcement buried in the classified ad section of the Marietta Times? When a utility that is operating in Washington County makes a public announcement, it appears in a large space (quarter or half page) in the body of the newspaper.*

 *Apart from these questions, numerous issues still persist regarding injection wells and this request in particular.*

 *There is serious concern about the safety of the extensive drilling of injection wells in Washington County.*

 *-Our county leads the state in the volume of brine water injected into its grounds. This excessive brine water is damaging some production wells of independent oil & gas operators. Bob Lane and Bob Wilson, two such operators, have filed a law suit against Deep Rock and other injection-well companies alleging extensive damage to their wells. This case has received a favorable ruling on appeal and is now in a Washington County court. It would seem reasonable to defer the approval of any further injection wells and even suspending injection-well requests throughout the area until this case is settled. Furthermore, the excessive amount of brine water in the county is threatening aquifers; the Redbird incident of a few years ago is evidence of that. We are still waiting for a report on the Veto Lake incident two years ago where raw petroleum appeared on the lake (was this due to excessive brine water blowing off an improperly capped old oil well?).*

 *Brine water contains toxic substances that are carcinogenic, PFAS chemicals, volatile organic compounds, and most of brine water is radioactive (Radon 222). Justin Nobel in his book, Petroleum 238, documents the health risks of brine water based on reports from all over the country. Operators of these injection wells point out that only about one per cent of brine water contains these toxic substances, but when we are dealing with millions of gallons, the amount of this toxicity in non-trivial.*

 *In recent days we have experienced earthquakes in the area (January 28, 2025 near Reno). There were 39 earthquakes in Washington County within a week. It is likely that the excessive amount of brine waste injected into the ground is migrating and affecting geological faults. We need more time to study this issue.*

 *Another health and safety risk in our county is the "parade" of brine trucks traveling our roads and streets. From our church office on Third & Putnam Sts in Marietta we can see a brine truck (these trucks are only marked as "brine" not brine water, production waste, or a more accurate description of their contents) every 20 minutes or so as they pass through downtown Marietta. A year and half ago a brine truck went off the road on I77 (on a summer Saturday evening) just north of Parkersburg WV; the driver was killed, and we never heard the results of any investigation of the truck or its contents and where the truck was coming from or going to.*

 *Deep Rock and other disposal companies have a questionable record of safety on injection wells. Four injection wells in Athens County were recently suspended due to problems, and one well there was plugged.*

 *The high pressure under which brine waste in injected can affect aquifers by migrating along fault lines. A few years ago brine waste from the Redbird #4 well migrated out of the injection zone ultimately to the Ohio River. We do not need a repetition of this event.*

 *We would respectfully request a public meeting to be held by the Division in Washington County about this request for a permit from Deep Rock. This should be held before any approval of the permit request is granted. We, furthermore, request that Eric Vendel, the Director of the Division, be present at this meeting and that questions from the public will be responded to—unlike what happened at the public meeting two and half years ago at St. Ambrose Church about the Arrowhead Injection Well when our County Commissioner, Charlie Schilling, had to go to Columbus to get questions answered.*

*Dr. George Banziger*

*Muskingum Township (Washington County)*

*February 14, 2025*

2 ***Injection Wells and the Ohio EPA***

 *On February 13, 2025 I had an extended conversation with Mr. Lindsay Taliaferro (pronounced “Tolliver”) of the Division of Drinking Water and Ground Water of the Ohio EPA. I had called this Division about an announcement that Bob Lane called me about concerning rules governing ground/drinking water under the Ohio Administrative Code. Bob had received this announcement from a manager of a drinking water agency in Washington County. The Ohio EPA was asking for comments on these rules. I called the Ohio EPA because Bob asked me to determine if we should respond to the request for comments on these rules. I checked with Roxanne Groff of Buckeye Environmental Network, and she responded that these rules have been around a long time and do not really need much change. The Ohio EPA has the authority for all injection wells that are not Class II (those are the responsibility of ODNR, Division of Oil & Gas Resource Management (when I mention ODNR in this report, I am referring to this Division). I also checked with Jay Huck, the manager of Putnam Water Corporation, which is the body that provides water to Muskingum Township, where I live. He did not know anything about this announcement requesting comments, but during our conversation expressed interest in voicing concerns about Class II injection wells in the county. Regarding these rules, there is really no reason to challenge them at this point—it’s just their enforcement and collaboration with ODNR we need to monitor.*

 *In my conversation with Lindsay I discovered that there are no changes recommended in these rules. I learned that Ohio EPA has primacy (granted by the US EPA) for Class I, Class IV and Class V injection wells. Class I involve wells for industrial waste (not petroleum-based) at a depth of 3,000-6,000 feet. Class IV injection wells are illegal, and Class V are shallow wells for non-hazardous waste.*

 *Ohio EPA has a two-stage process for application for permits; first is the permit to drill, then is the permit to operate.*

 *I asked if there are any pending permits in Washington County. Lindsay said that there aren’t, but there has been interest expressed for a Class I permit. I asked from which company, and he said, Deep Rock! Deep Rock has submitted a seismic study, the preliminary step to applying for a permit. Lindsay’s major concern with their permit is the Rome Trough, a geological fault that runs next to the Ohio River. I asked what site Deep Rock is considering for this Class I well—he described it as the same site that they are proposing for their Class II injection well. I then asked if the Ohio EPA collaborates with ODNR when the same sites are planned for Class I and Class II injection wells. He said that they do and mentioned Kenneth Brown at ODNR who manages Class II injection well permits. Lindsay said that it takes about nine months for the permit process to play out*

 *Lindsay said that we can contact him if we want an update on permits that are being applied for (**l.talferro@epa.ohio.gov**; 614-644-2771).*

 *I get the impression that the Ohio EPA is more transparent and forthcoming than ODNR.*

*George Banziger*

*February 14, 2025*

George Banziger, February 14, 2025