To the Editor:

On Friday, the Akron Beacon Journal printed a column by Robert Chase of Marietta College supporting hydraulic fracturing for shale gas. Regardless of Chase’s background, many of his claims are inaccurate. I offer a rebuttal of his untrue assertions, focusing primarily on water contamination and regulation of the industry’s practices. For more information, please visit the website of the Concerned Citizens of Medina County at fracking.weebly.com.

Chase offers as his first “myth” that hydraulic fracturing is not responsible for aquifer contamination. First, Chase in incorrect in assuming that hydraulic fracturing has been used since the 1940s: practices used now are only possible with the combination of several technologies including slick water fluid and horizontal drilling. In fact, the current drilling boom only began after Congress exempted hydraulic fracturing from the Safe Drinking Water Act in 2005. Then, Chase assumes that opposition to hydraulic fracturing is centered on “fracking-fluid” contamination of water supplies. While the transport of this fluid to drilling sites by truck involves a substantial risk, migration of it into water supplies is not a major concern. On the CCMC website, you can access a peer-reviewed study finding methane contamination of drinking water. The study, published by scientists at Duke, found a direct correlation: the closer to a gas well a water sample was taken, the higher the concentration of methane. Chase and other supporters often claim that this is due to “naturally-occurring methane.” This is again not the case: naturally occurring or biogenic methane (produced by bacteria) can be distinguished from thermogenic methane (occurring only in deep shale) by comparing chemical signatures. The Duke scientists performed these tests, concluding that the methane found in the water was thermogenic, indicative of its origin in deep shale deposits. Its presence in water supplies suggests that migration occurred at some point in the drilling process.

In response, Chase would probably claim that multiple layers of casing are used when drilling occurs. According to Anthony Ingraffea, an engineering professor at Cornell, the most well publicized contamination incident in Dimock, PA involved wells with six or seven layers of casing, all of which failed.

Chase’s next point involves regulation. It’s worth noting that the reason the Safe Drinking Water Act was called for in the 1970s was that geologic and hydrologic features don’t stop at state lines. Exemptions to federal regulations give the industry the “regulatory equivalent of diplomatic immunity,” according to hydrologist Sandra Steingraber. Common Cause has called Ohio’s state regulations “some of the most lenient in the nation.”

Chase’s final argument involves minimizing risk and maximizing reward. A study conducted by Ohio State researchers reported that it’s reasonable to expect 20,000 jobs for our state, 90% of which are expected to be out of state hires. In Pennsylvania, there are currently 1,900 wells that have been hydraulically fractured; 30 have had serious environmental incidents. That factors into 1 incident for every 63 wells. If you do the math, that’s 3.5 jobs per serious environmental incident. And Chase wants us to believe the benefits justify the risks.