

Comment on the FERC Draft Environmental Impact Statement for the Cumberland Project, Docket number CP22-493

Prepared by Angela Mummaw

The following is a personal comment, prepared by Angela Mummaw, biology professor with Austin Peay State University and middle Tennessee organizer for Appalachian Voices. She has taken time off from teaching to work around the Cumberland City steam plant closure to help her friends and neighbors who are affected by Tennessee Valley Authority's decision to replace the Cumberland coal-burning plant with a gas-burning unit that would require construction of a 32-mile methane gas pipeline through Stewart, Houston, and Dickson counties in Tennessee.

General

I grew up on a farm in rural Montgomery County. Our land overlooks the river and from our yard we can see the Cumberland City smokestacks. As a child, I remember the grim polluted smoke they gave off continuously throughout the day – so much smoke that it made a dark trail all the way across the horizon. It tainted the beautiful sunsets. I remember it being a huge deal when the plant was required to install smaller stacks with scrubbers to reduce the pollution. Nowadays, the stacks give off big pillowy white puffs of smoke, which still pollute our atmosphere, whenever the plant is running. The stacks no longer run constantly like they did when I was a child, and soon they will not run at all.



Photo credit: Angela Mummaw

The Cumberland fossil plant runs when there are pulls on the energy grid, like a cold winter morning, or hot summer day. Right now as I write this, March 27th at 11:00 AM they are not burning coal. The weather has been mild for the last couple of days, and it is currently a comfortable 60° Fahrenheit with a high of 67 degrees today. The fact that the plant is not needed for a continuous supply of energy is one of the reasons this project is not necessary. It seems illogical to destroy 32 miles of beautiful countryside, take property rights from landowners, endanger our wildlife, pollute our air and water, and lock TVA customers into paying for an expensive fossil fuel for decades, to replace a plant that is only used during peak energy consumption.

Specific

Land/Vegetation Impact

The Project would impact about 291.4 acres of forested land, 96.5 acres of open land, 101.4 acres of agricultural land, and 0.69 acre of wetlands (forested and non-forested) (see table 4.5-1).

In total, approximately 490 acres of vegetation would be disturbed for construction of the Project. Of this, 188.5 acres of vegetated habitat would be within the operational (permanent) footprint of the Project, and 301.5 acres of vegetated habitat used for construction would be restored and allowed to revert to pre-construction conditions.

These statements are misleading. The areas that are clearcut cannot be restored. Some of the trees in the forested areas are in excess of 70 years. Considering how long it would take to replace them, and the fact that a permanent easement will not allow landowners to replant trees, those areas will never be returned to pre-construction uses or conditions. This should be changed to say that the pipeline construction would destroy forest land for decades and the permanent easements would never be reforested.

Species Impact

The draft EIS states that federally and state listed species would not likely be adversely affected, probably because TGP didn't find any of those species in their surveys. Species that are federally or state listed already have extremely low population numbers, so they are becoming increasingly rare and more unlikely to find during scoping sessions.

The DEIS says that TGP did not find suitable habitat for the bald eagle in the project area during field surveys. I have serious issues with that statement. Most of the proposed pipeline route is prime bald eagle habitat. There is a nest on the corner of Highway 48 and Old Highway 48, near the Bartons Creek proposed pipeline crossing in Cumberland Furnace, Tennessee. During a recent survey of Bartons Creek while near the proposed crossing, I and other biologists heard a bald eagle calling. Several locals have confirmed sightings in that area as well as other areas along the pipeline route. The pictures below were taken by Dorothy Corlew on her Century Farm off of Promise Land Road in Charlotte, Tennessee. The pipeline would cut through her farmland and destroy land that has been in her family for over a hundred years.



Photo credit: Dorothy Corlew



Photo credit: Dorothy Corlew

Tennessee's 2021 bat netting surveys resulted in the capture of three tricolored bats, and it is therefore assumed that Project activities may impact this species. As the tricolored bat was recently proposed for listing as endangered under the ESA and may become federally protected prior to the completion of the Project, section 7 ESA consultation would then be required.

The tricolored bat is the most common bat in Tennessee and should be protected. Considering all bat species in the eastern U.S., many colonies have diminished as much as 99% and some populations have shown an even greater decline. Species that were once common, like the little brown bat, are all but gone. If the pipeline construction gets approved the tricolored bat populations in our area may also have a significant decrease.

Geology

A portion of the Project within Stewart County is within the Wells Creek Crater which was formed by a historic meteorite impact and spans approximately a 2-mile diameter. A Wells Creek Basin historical marker was placed by the Tennessee Historical Commission along Cumberland City Highway near the northern terminus of the Cumberland Pipeline route (Historical Marker Database 2022). There are no known protected areas or special requirements for development within the crater area.

Impact craters are important because they allow scientists to study our planet's geological history. The Wells Creek Crater, as well as the Flynn Creek Crater that is part of the Kingston proposed pipeline route, are significant geological areas that need more research and should be provided protection. Even without special requirements for these areas, much consideration should be given before they are destroyed by pipeline construction.

Approximately 90% of the proposed pipeline route fits the dictionary definition of "karst" terrain. Karst is defined as "an area of irregular limestone in which erosion has produced fissures, sinkholes, and underground streams and caverns. It seems TGP defined and investigated "karst" features as the presence of underground caverns that could be large enough to present structural problems should they collapse under the pipeline.

Neither TGP nor FERC has addressed the issues of groundwater that would flow from disturbed soil of the pipeline construction into the limestone fissures that feed many springs and wells along the proposed route. There are several wells and springs that are close to the pipeline construction area, however, groundwater can travel a long distance and if contaminated would be a real threat to many springs and wells.

Streams/Water Bodies

The Cumberland pipeline would cross 35 perennial waterbodies. Whenever construction occurs within a perennial stream there is potential for impacts to fish habitat and water quality. There are several species of mussels, and also some fish species, like the alligator gar, that are federally listed and likely present in some of the streams that would be crossed. In Bartons Creek, we recently discovered a potential new species of crayfish and are awaiting the DNA results to make it official.

As mentioned above, middle Tennessee exists of karst terrain with its limestone bedrock. Digging and blasting near streams could cause sinkholes to open up, rerouting the water. Some streams could even go underground making them inaccessible to the landowners and livestock that depend on them.

In Houston County, Licksillet Branch would be crossed three times within a one-mile span of the proposed pipeline route. That creek would suffer cumulative negative effects due to the high number of crossings in such short succession. This also increases the possibility that karst features could collapse and cause the stream to go underground.

This brings to mind another flaw of the environmental study. There were no alternative route analyses. The best alternatives here do not involve any new pipeline construction at all. But even if building a new pipeline were appropriate, TGP did not present any alternative routes for the pipeline even though it is a major consideration under NEPA and FERC guidelines. There are other routes that could be taken from the existing TGP gas pipelines in southern Dickson County to the Cumberland fossil plant in Stewart County. They should consider routes that minimize stream crossings and routes that minimize the number of landowners impacted. TGP and FERC have not demonstrated why any alternative routes would have greater (or less) environmental impacts than the proposed Cumberland project route. This comment on alternative routes should be considered unnecessary since the pipeline is not needed, however, if TGP is applying for a pipeline permit there should be more than one route proposed.

Drinking Water Sources/Springs

Tennessee reviewed the USGS National Waters Information System (USGS 2019b) and coordinated with affected landowners to determine whether groundwater wells or springs are present within established buffer zones for Project activities. Through its research, Tennessee identified 62 wells and springs potentially affected by Project construction. Water supply wells and springs within 1,000 feet of the Project area are identified in table 4.3-2.

With well-owner permission, Tennessee would conduct pre- and post-construction monitoring of water quality and yield using a qualified, independent contractor to conduct well sampling. Landowners with water supplies located outside of the monitoring area also may request pre- and/or post-construction water sampling. In these cases, sampling would follow the same schedule and methodology as water wells and potable springs located within the monitoring area. Tennessee would also offer to conduct pre- and/or post-construction water sampling for all municipal and public groundwater wells within 400 feet of the Project area.

I have been working with landowners along the pipeline route since May 2, 2022, and know several people who have wells and/or springs within 1,000 feet of the project area. No one has been contacted by TGP about their water source. There has been no pre-testing or monitoring of water quality by TGP according to anyone I have spoken with. Many folks along the proposed route have well water and no other source. Should their water become contaminated during pipeline construction they have no other options available to them. It is important to inform landowners of who will be responsible should a spill or contamination occur. Water contamination is a serious threat and one TGP pipeline construction has caused in the recent past.

<https://www.sierraclub.org/texas/blog/2020/04/kinder-morgan-spills-drinking-water-during-construction-permian-highway-fracked>. If something happens, will TGP or FERC pay for bottled water, or will landowners be left to deal with the situation on their own? Several families also have livestock that depend on that clean well water. Who will take care of their needs should something go wrong?

Socioeconomic and EJ

Project construction would occur over a 12-month period and the average construction workforce would range between 300-400 workers, of which 90 percent would be non-local (between 270 and 360 people).

Only one permanent position employee is anticipated to be hired.

There may be a boost in the economy for the areas near the proposed pipeline route while construction takes place. Most of the jobs created (90%) would go to non-locals, although businesses in the project area could see a slight increase in revenue. Any economic boost would only last as long as the pipeline installation takes, then the communities impacted by the pipeline would experience an economic decrease as workers move out of the area.

If TVA replaced the Cumberland plant with renewables and focused on energy efficiency programs, it would create 10 times more permanent jobs than the gas-buildout. <https://appvoices.org/reports/re-jobs-report/>. That would provide a permanent boost to the Cumberland City economy. There are currently about 200 fulltime jobs provided by the TVA power plant, but a gas buildout would only create 25-30 permanent jobs.

Safety

Between January 2010 and October 2021 there were 368 documented pipeline explosions that resulted in 89 deaths and 440 injuries. <https://www.explosionaccidentattorney.com/pipeline-explosion->

[statistics/#:~:text=Between%20January%202010%20and%20October,89%20deaths%20and%20440%20injuries.](#)

Regardless of the safety procedures put in place, gas pipelines are dangerous and pose a threat to anyone around. What is a safe distance? <https://www.eenews.net/articles/gas-pipelines-explode-how-far-away-is-enough-to-survive/>

TGP does not designate an impact or evacuation zone. There is not an evacuation or emergency route put into place for those who are unfortunate enough to live or work near the proposed pipeline route. Several people's homes are within 50 feet of the pipeline path. Installation of a pipeline would take away their sense of safety in their own homes. Who will help the community members if something should go wrong?

PHMSA requires that each operator establish and maintain liaison with appropriate fire, police, and public officials to learn the resources and responsibilities of each organization that may respond to a natural gas pipeline emergency, and to coordinate mutual assistance. As part of PHMSA's requirements, Tennessee must also establish a continuing education program to enable customers, the public, government officials, and those engaged in excavation activities to recognize a gas pipeline emergency and report it to appropriate public officials. Tennessee has established and would maintain liaisons with the appropriate fire, police, and public officials to coordinate mutual assistance during emergencies. Tennessee also would provide the appropriate training to local emergency service personnel before the Project is placed in service.

According to the chief of the Charlotte fire department, there has not been any coordination or offer of assistance from TGP. They have not established any training or educational programs to inform the customers, public officials, or police. At one of the FERC listening sessions, I was informed by a TGP employee that there would be *one* cut-off valve placed somewhere along the middle of the 32-mile stretch of pipeline. I responded by saying that does not seem like a very safe protocol. I was told it was within regulations since the area is not densely populated. Does this mean it is okay if 50 people are placed in danger, but not 100? The science behind this seems flawed to me. Every human life deserves protection. If the pipeline were to be installed in a more heavily populated city there would have to be more shut-off valves, but since it is in a rural area this extremely important safety feature is not required to be used as often throughout the pipeline.

These are some of the main issues I found with the DEIS. There are other things that I am concerned about, like the amount of pollution this project would create. According to the United Nations, we have 7 years left to prevent permanent damage from climate change. <https://press.un.org/en/2019/ga12131.doc.htm>. From the construction of the pipeline to the burning of another fossil fuel, a gas-buildout is not a good idea, especially when there are other alternatives that were not seriously considered. Methane gas is being advertised as "natural" but coal is also natural and both produce CO₂. Methane is 80 times more potent a greenhouse gas than CO₂, we just don't hear as much about it because it is not as abundant in our atmosphere. We should be just as concerned, if not more concerned, about methane gas pollution. This project goes against President Biden's executive order. In making this decision, please consider that the world is perilously close to irreversible climate change. Please make the decision to deny the pipeline application.

