

The Mountain Valley Pipeline and Southwest Virginia
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Introduction

The Mountain Valley Pipeline (MVP) is a 303-mile natural gas project that snakes through Northern West Virginia to Southwest Virginia. The project starts in Wetzel County, West Virginia and connects to the Transco Pipeline in Pittsylvania County, Virginia. Figure 1 is a map of the pipeline throughout West Virginia and Virginia.

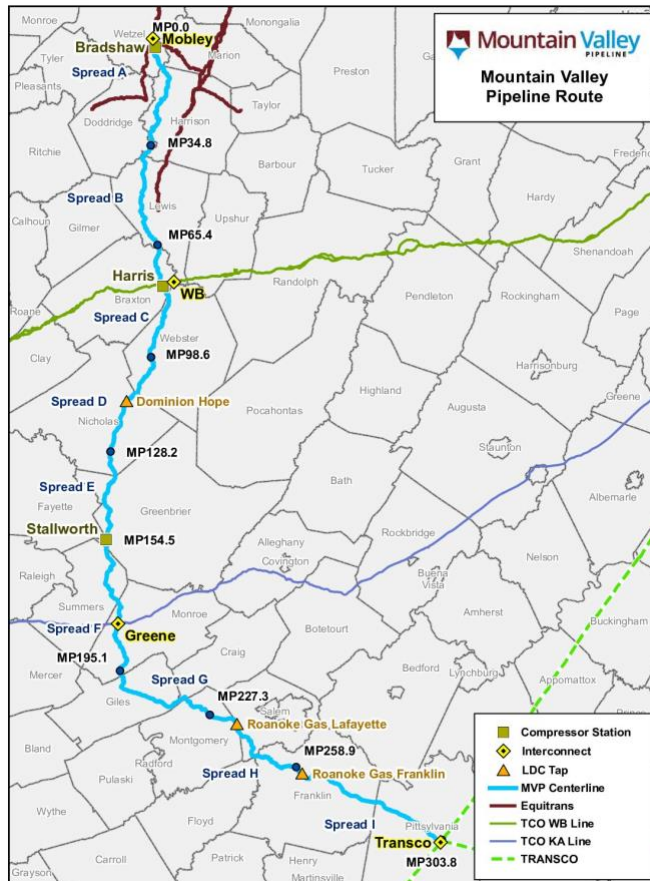


Figure 1: Map of the Mountain Valley Pipeline Source: Mountain Valley Pipeline Company

While discussions for the pipeline began in 2014, the project received its Certificate of Clearance and Necessity from the Federal Energy Regulatory Commission (FERC) in 2017, with construction starting in 2018 (Mountain Valley Pipeline, 2024). The Mountain Valley Pipeline itself is owned by several energy and gas companies, including Equitrans Midstream, who operates the pipeline. From the beginning, the Mountain Valley Pipeline has been controversial

in Southwest Virginia. Locals, residents, students, and community leaders within this region of Appalachia have cited safety concerns, environmental impacts, and environmental justice (Parfomak, 2024). There have been numerous efforts to delay and stop the pipeline from being completed or later operational. As of 2022, the project was already over 3 years behind its original schedule with almost a decade of permitting compliance issues (Southern Environmental Law Institute, 2022). Advocacy groups such as Protect Our Water Heritage Rights Coalition, Preserve Giles County, Appalachian Voices, and Mountain Valley Watch have staunchly opposed the pipeline and rallied community members to protest.

The policy being proposed is a complete halt of construction and operation of the MVP from locals in Southwest Virginia. This proposal has been the goal of groups and individuals against the pipeline since it initially began in 2014. This stop would also be applied to the Mountain Valley Southgate extension project in Southside Virginia and Rural North Carolina. Additionally, it is proposed the MVP company would provide compensation to landowners severely affected by the pipeline, as well as participate in a FERC and Environmental Protection Agency (EPA) approved environmental restoration plan. This paper will focus specifically on the Mountain Valley Pipeline's effects in the counties of Giles, Montgomery, Roanoke, Floyd, Franklin, and Pittsylvania counties in Southwest Virginia.

The rest of the paper proceeds as follows: Section 2 provides key background information, Section 3 states the hypotheses to be tested, Section 4 explains the data and variables used for analysis, Section 5 explains the methods, Section 6 explains the results, and Section 7 explains observations from the study.

Operations Timeline

To become operational, the Mountain Valley Pipeline needed approval from FERC, National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), U.S. Army Corps of Engineers (Corps), U.S. Forest Service (FS), and the Bureau of Land Management (BLM). While FERC and the NPS initially granted permits for construction in 2017, the FWS, Corps, FS and BLM cited environmental health and safety concerns (Parfomak, 2024). The FWS required the Mountain Valley Pipeline project follow guidelines set by the Endangered Species Act (ESA) and issue a biological opinion before work could begin (Harvard Law Environmental & Energy Law Program, 2023). The Corps was concerned with the MVP's effects on water systems in West Virginia and Virginia, citing that it will only issue a permit with minimal adverse environmental effects, "under Section 404 of the Clean Water Act," (CWA, 1972).

In 2018 and 2020, the U.S. 4th Circuit Court of Appeals stopped the Corps, FS, and BLM from issuing the necessary permits to construct the pipeline through Jefferson National Forest (Parfomak, 2024) (U.S. Forest Service, 2024). However, in June 2023, the Corps granted the MVP the required permits to construct the pipeline through wetlands and other protected waterways. Permitting issues between the 4th Circuit Court of Appeals, the involved Federal Agencies, and the MVP ensued until July 27, 2023, when the "Supreme Court of the United States vacated the 4th Circuit's stay ruling," (U.S. Forest Service, 2024). In 2023, the Biden Administration's Fiscal Responsibility Act "expedited the permitting process for certain energy projects," approving the MVP (H.R. 3746, 2023).

Controversies

The MVP raises environmental justice, degradation, and community safety concerns throughout Southwest Virginia (Appalachian Voices, 2024).

Environmental justice for Appalachia has been on the forefront for communities protesting the pipeline. Environmental justice is the “just treatment and meaningful involvement of all people....in agency decision-making or other Federal activities that affect human health and the environment,” (EPA, 2024). The MVP is disproportionately affecting minority communities throughout Appalachia. The MVP is set to connect to the MVP Southgate project in Pittsylvania County, which will ultimately have a negative effect on the health and safety of local communities in the area. Similarly, in Giles County, Virginia, construction of the pipeline has affected farmers and landowners, clouding drinking water, and destroying livelihoods (Small, 2024). There has been little to no reparations for these communities that have been devastated by the MVP.

Environmental damages and safety are also concerns with the project. If fully operational, the MVP would release “more than 40 million tons of greenhouse gas emissions each year” and has been “cited more than 300 times for water quality and protection violations” (Southern Environmental Law Center, 2022) Despite final approval from FWS, FS, BLM, and a push from the Biden Administration and Supreme Court, the project was “hit with a \$2.1 million civil penalty” for sediment entering the water in Giles County, Virginia (Small, 2024).

Additionally, the pipeline brings concerns of habitat and land destruction. The MVP is running through the Jefferson National Forest, cutting across the Appalachian Trail and affecting the Blue Ridge Parkway (Appalachian Voices, 2024). Southwest Virginia’s topography and terrain features long and narrow ridges of limestone and sandstone, making the land more vulnerable to landslides. (Virginia Department of Conservation and Recreation, Division of Natural Heritage, 2021). With a pipeline located along these ridges, there is a higher chance of a pipeline disruption or explosion. The MVP and Equitrans Midstream reported that the pipeline

had shifted in several places due to natural land movement (Appalachian Voices, 2024). During testing in early 2024, pieces of the pipeline near Bent Mountain in Roanoke County exploded (Paulin, 2024). Residents living near the MVP are concerned a larger explosion may occur due to the natural land shifts and fear for their safety.

The cancelation of the pipeline has become the rallying cry from advocacy groups and environmental groups. While stopping and canceling pipeline projects is rare, it is achievable. In 2020, the Atlantic Coast Pipeline was halted due to environmental concerns and community protests. As a result of the cancelation, the Atlantic Coast Pipeline has begun environmental restoration efforts required by the Federal Energy Regulatory Commission (Atlantic Coast Pipeline, 2022).

Policy Environment

The socio-economic environment policy-making system is relevant to the implementation of the MVP and the proposal to cancel the project. This system influences the MVP and Southwest Virginia.

Southwest Virginia is a rural, low-income region with an approximate population of 731,887 in 2024 (Appalachian Regional Commission, 2024). Examining Giles County specifically, the population is 16,457 people as of 2023 (U.S. Census Bureau). The median income for a whole household in the county is approximately \$61,987 with a 12% poverty rate (U.S. Bureau of Labor Statistics, 2023). This is compared to the median household income of \$87,239 for the Commonwealth of Virginia (U.S. Bureau of Labor Statistics, 2023). As of 2023, 72,220 people were employed in the New River Valley with an annual mean wage of \$56,060 across all occupations (U.S. Bureau of Labor Statistics). MVP and Equitrans Midstream boasted about the economic development Southwest Virginia would experience. The Mountain Valley

Pipeline project was expected to spend “\$400 million on Virginia-based labor, goods, and services” starting construction in 2015 (Mountain Valley Pipeline, n.d.). In an area with low wages and high poverty rates, the MVP’s spending proposal was very inciting for the local governments. The project claimed that the Celanese Plant in Narrows, located in Giles County, would largely benefit from the pipeline. The Celanese Plant manufactures cellulose acetate, is one of the largest employers in Narrows, and employs 1,000 full-time personnel (Better Buildings, U.S. Department of Energy, n.d.). It is one of the main career opportunities in the Narrows community and investment into the plant is heavily encouraged. The MVP was viewed favorably by Celanese employees as it directly supported their industry.

As of 2023, construction cost of the MVP was approximately \$6.2 billion (Appalachian Voices). In 2024, the cost rose to approximately \$7.85 billion, almost doubling the initial cost projection of \$3.5 billion (Paullin, 2024). These rising costs reflect the permit acquisition and compliance issues the pipeline has faced.

Official and Unofficial Actors

When analyzing the characters of the MVP in Giles County and Appalachia, two categories can be used: official and unofficial Actors. Official actors are government agencies, government employees and officials, and the court system. Unofficial actors are defined as private companies, citizens and landowners, advocacy groups, and protestors.

Official Actors

The official actors that have been considered in the MVP case are all fixtures of the Virginia State or federal government. These include Virginia Governor Glenn Youngkin, the Biden Administration and U.S. Congress, federal agencies such as the EPA and FERC, and the Court system.

Executive Actors

Virginia Governor Glenn Youngkin and the Biden Administration have played key roles in moving the MVP forward in Southwest Virginia. Governor Youngkin's 2022 Virginia Energy Plan highlights the legal challenges faced by the pipeline but continues to encourage the significance of the project for the state. He writes, "the project will provide up to 2 million dekatherms per day of natural gas transmission capacity to markets in the Mid-and South Atlantic and will include connections to economic development in Southwest Virginia," (Youngkin, 2022). The Governor's plan also reminded the public that "the Commonwealth had issued statements to FERC in support of the competition of the MVP," (Youngkin, 2022).

The Biden Administration and Congress had a similar response. Under legislation and support from the Secretary of Energy, Jennifer M. Granholm, the Biden Administration urged FERC to continue approving the MVP. Granholm asked the Chairman and Commissioners to consider "As extreme weather events continue to strain the U.S. energy system, adequate pipeline and transmission capacity is critical to maintaining energy reliability, availability, and security," in relation to the MVP (Granholm, 2023). Governor Youngkin and the Biden Administration used their resources and systemic influence to continue the MVP's agenda, despite legal setbacks caused by other actors. These executive stakeholders have large influence over the policy process by speaking directing to federal agencies.

Administrative State

Federal agencies such as the EPA, FWS, FS, and BLM, Corps, and the FERC are important official actors. The process for the MVP to obtain these permits was long and resulted in the company asking for multiple project extensions from FERC. The FERC authorized the pipeline on June 11, 2024, and extended the construction deadline to October 2026 (Parfomak,

2024). The NPS and FS had to give the MVP right-of-way as it was to enter the Blue Ridge Parkway and Jefferson National Forest in Virginia (Parfomak, 2024). These agencies had significant influence on the policy implementation as they determined the pace of the project by granting or denying the necessary permits and acknowledged arguments presented by stakeholders.

Judiciary Actors

The legal system, or judiciary actors influenced the policies surrounding the MVP. In particular, the U.S. 4th Circuit Court of Appeals, located in Richmond, Virginia had ordered the MVP to stop construction multiple times as it heard challenges against the company by activists and landowners (Dashiell, 2023). The cases centered on environmental concerns and the legality of permits issues by federal agencies. The court has historically leaned liberal in decisions (Ballotpedia, n.d.). The court's jurisdiction covers Virginia, West Virginia, North Carolina, South Carolina, Maryland, and Washington D.C. The U.S. 4th Circuit Court of Appeals has reversed approximately 70% of lower court decisions brought to them in appeals cases, leading locals to hope the MVP would be stopped (Ballotpedia, n.d.).

There are few accountability structures in place lay for these official actors. While the Governor is elected by his constituents in Virginia, many members of the federal agencies or the Courts are appointed by Government leaders or hired by the organization based on their expertise. Unless an individual is fired or there is public pressure to resign, a federal judge or the Secretary of Energy will remain in their position. As a result, these actors heavily influence the policy process.

Unofficial Actors

The unofficial actors at play during the MVP policy process include activist groups such as Preserve Giles County and Preserve Floyd County, landowners affected by the pipeline's path, and the MVP corporation itself.

Activist Groups

The MVP was staunchly opposed by activist groups throughout the region. In Southwest Virginia, Preserve Giles County, Preserve Floyd, Preserve Newport, and Appalachian Voices played major roles in slowing the pipeline's progress. These organizations rallied community members across Southwest Virginia to protest the MVP's construction. While these grassroots groups may not have had as much political power as the federal agencies or the courts, they influenced the policy process through extensive protests and community rallies. These activist and advocacy groups supplied "boots-on-the-ground" initiatives for towns and counties affected by pipeline construction.

Landowners

Landowners are one of the largest stakeholders and impacted unofficial actor in this analysis. While the federal government, Virginia, and West Virginia allowed the MVP access and clearance to construct on its land, the project really came down to the landowners. Landowners in the United States rely on the 5th Amendment of the United States Constitution as the basis for the right to property. The 5th Amendment states, "nor shall private property be taken for public use, without just compensation," empowering landowners to a constitutional right to property (United States Constitution). However, landowners can receive just compensation by the government and companies through eminent domain. Eminent domain is often used for federal projects that promote economic development in a large area. The MVP corporation used "eminent domain" or a "right given to interstate pipeline companies by federal statute through the

Natural Gas Act, that gives pipelines the right to take private land for FERC-authorized use,” (Mountain Valley Pipeline). In the case of the MVP, eminent domain was applied across 2 states and hundreds of miles. MVP justified their use of eminent domain by receiving government approval and providing compensation to landowners (Mountain Valley Pipeline, n.d.).

Interview with Landowner Allison Hollopter

One such landowner that was significantly affected by the Mountain Valley Pipeline was Allison Hollopter. Hollopter oversees Doe Creek Farm, owned by her mother Georgia, where they operate an orchard, kennels, wedding venue, and at one point a 1920s speakeasy inspired restaurant.

When asked if Hollopter felt like she was a part of the policy process, she responded,

“No, not at all! We were involved with negotiations as far as figuring a price for the use of the land, but they essentially had their own proposal. If we had not had a separate lawyer, it would not have gone as well as it did.... we did not fall in line as easily as they (Mountain Valley Pipeline) wanted...we did not feel involved.” (Hollopter, Personal Communications, 2024).

Hollopter continued,

“It has been 10 years since the proposal, when I first heard about it, I was on the fence because I did not know what it would mean, Georgia [my mother] was against it from the beginning. Construction started in 2017 and has continued to this day.... heavy machinery construction stopped a couple months ago but there is still a presence. We think they are done and then they come back and dig it [the pipeline] up again. We would have to tell Roland (Mountain Valley Pipeline’s contact to Allison) whenever they (employees) would trespass on the property...they would block my driveway and park at

the restaurant to get to their right-of-way faster,” (Hollopter, Personal Communications, 2024).

After she told me that the employees would block her driveway, I asked her about her interactions with the company’s employees.

“The individuals were never disrespectful to me when I had to talk to them, but they acted like they were uninformed and what they were doing did not matter, they left cattle fences open on the farm and the cows were getting out, some of the equipment had the pirate flag flying like they were pillaging, and it was offensive.” (Hollopter, Personal Communications, 2024).

To Allison, the inclusion of the pirate flag on equipment was deeply unsettling and represented the conquering of her land by the employees of the Mountain Valley Pipeline company. Allison confided that the project made her feel disappointed.

“It’s disappointing that people’s rights and their property are taken away from them not necessarily for the better of society but for the financial gain of a private company.... this was the greed that did not benefit this area or Appalachia. Giles County was targeted because it was rural and small-town greed played into it, they figured people would take the money and they could push through no problem.” (Hollopter, Personal Communications, 2024).

As a landowner, she had an overall negative experience with the Mountain Valley Pipeline company. Landowners were seen to have a disadvantage against the Mountain Valley Pipeline company. They were less organized in the region and did not have the financial or legal resources to effectively fight the pipeline. Allison discussed in her interview that many landowners accepted the settlement given to them without negotiation because they did not know or want to

fight the company. To her, the only landowners that had a “positive experience” with the company, were those who accepted the “monetary buy-out” (Hollopter, Personal Communications, 2024). For any landowner that tried to fight like Allison, the MVP was prepared to take them through as many legal battles as necessary to win.

Private Companies

Finally, the MVP corporation is the main unofficial actor throughout the policy process. The pipeline and controversy, economic development, and community discussions would not exist without the MVP corporation and its owners. In 2018, the company stated that it expected to add approximately “4,400 jobs....at the peak of construction” in Giles County (Mountain Valley Pipeline). The company highlighted its importance for economic development within Southwest Virginia. The MVP as a private company utilizes its influence with Official Actors such as Governor Youngkin to ensure its agenda was moved forward. An example of this influence on other actors is the company’s financial and political resources. In 2021, the MVP spent \$240,000 lobbying Congress and the Environmental Protection Agency to approve necessary permits for the project (Open Secrets, n.d.). In 2023, the MVP spent another \$180,000 on lobbying Congress to address the pipeline in the 2023 Fiscal Responsibility Act (Open Secrets, n.d.).

Interactions Amongst Official and Unofficial Actors

Tensions exist between the official and unofficial actors throughout the MVP’s development. Environmental activists often clashed with the MVP construction workers at protests, sit-ins, and at times faced legal troubles because of harassment. In response, the Mountain Valley Pipeline company hired a Security Contractor to ensure the safety of their sites and employees. More powerful actors such as the MVP and the federal agencies involved have

used the legal avenue to push their agenda forward in the policy process. The less powerful actors utilized framing to paint the pipeline in a negative light. Protests and frequent lawsuits affected the MVP's credibility amongst community members in Southwest Virginia. Thinking about Allison Holloper and other Giles County landowners, these actors used the taking of their land and interactions with the pipeline employees to frame the project negatively. Public administrators have shaped the policy agenda at play here very carefully. The federal agencies have used the permitting process to allow the pipeline to move forward.

Policy Proposal

Regulatory Ban

The proposal to stop the MVP would involve the implementation of an official government mandate or regulation. This regulation would be applied by a federal court or the United States Congress.

MVP protestors and advocacy groups believe that the use of regulations and federal orders would be most effective in completely stopping the project. A complete ban of the pipeline's operation would force it to stop work in its entirety. These groups and individuals promoted the use of litigation through the United States 4th Circuit Court of Appeals to achieve an official mandate. A federal ban on the pipeline would limit the MVP company in future litigation or appeals. Overall, a ban of the pipeline would be most effective in achieving the goals of the protestors and advocacy groups.

Perceptions of Power and Political Feasibility

The effectiveness of the proposal to stop the MVP is influenced by the political stability, perceptions of power amongst actors, and the overall political feasibility. Policy stability has influenced the MVP project from 2014 to 2024. The project moved slowly and followed a strict

permitting process, requiring approval from multiple government agencies. The MVP was cited hundreds of times for compliance issues and faced legal trouble. All these steps reflect the deliberate policy process in the United States.

The political power of key actors is important to consider for the proposal as well. When considering the choice of a regulatory ban on the MVP, there is the question of the political power of locals, landowners, and advocacy groups in Southwest Virginia compared to the MVP company. On a local scale, landowners like Alison Hollopter or groups such as Preserve Giles County could have considerable political capital. Political capital occurs when community members coordinate and develop their area together to make effective change (University of Georgia Cooperative Extension, 2021). The community can identify and recognize them as their friends, family, and neighbors. Through this recognition and coordination between community members, locals in Southwest Virginia can have significant political power. Political capital encourages affected communities to fight for the environmental and landowner rights of the area.

Despite this perceived political power by community groups Southwest Virginia, it could be difficult to implement and achieve a complete ban of the MVP. The MVP company is a large corporation that has seemingly abundant resources to pour into development, operation, litigation, and lobbying for the pipeline. While the company's political power may not be recognized by the communities in Southwest Virginia, it has consequential power in Richmond, Virginia and Washington D.C. The MVP can use its resources to effectively influence the United States Congress and federal agencies.

Next Steps

The MVP was passed as part of the 2023 Fiscal Responsibility Act under the Biden Administration (H.R. 3746, 2023). According to the act, "Congress.... ratifies and approves all

authorizations, permits, verifications, extensions, biological opinions, incidental take statements, and any other approvals or orders issues pursuant to federal law” to complete the MVP. The United States 4th Circuit Court of Appeals halted construction again under concerns of the act being constitutional in July 2023. This was ultimately overruled by the Supreme Court through an “emergency application from a Mountain Valley Pipeline developer” and was officially approved on July 27, 2023 (Parformak, 2024). A complete ban of the Mountain Valley Pipeline was not achieved by Southwest Virginia locals and activists. Instead, the MVP was officially approved for operation on June 10, 2024.

Federal agencies were crucial to for the project. They passed the necessary right of ways and permits required for the MVP to be constructed on federal lands. While they may not have been as vocal, locals in support of the MVP also affected the pipeline’s success. As previously mentioned, the company proposed to spend approximately \$400 million in Southwest Virginia to support the local economy (Mountain Valley Pipeline, n.d.) Individuals in Giles County who went to work for the pipeline would have clear ties to the company and supportive of their operation.

As the pipeline continues to become fully operational across Virginia and West Virginia, advocates and anti-protestor organizations are turning their attention to the Southgate Extension Project located outside of Chatham, Virginia (Mountain Valle Pipeline, n.d.). It is proposed to extend the MVP from a connection point into rural North Carolina. The project is set to be completed in 2028. It is likely that both Official and Unofficial Actors involved with the MVP will also be involved with the Southgate extension. Future proposals to stop pipelines should focus on increased community organization and protests, as well as consider the socio-economic environments of policy environments.

References

- “Appalachian Communities Continue to Oppose the Mountain Valley Pipeline.” *News: Southern Environmental Law Center*, Southern Environmental Law Center,
<https://www.southernenvironment.org/news/appalachia-cant-be-a-sacrifice-zone-for-an-irresponsible-dinosaur-like-the-mountain-valley-pipeline/>.
- Bureau, US Census. “Population.” *Census.Gov*, <https://www.census.gov/topics/population.html>.
- . “Virginia Adds More Than 600,000 People Since 2010.” *Census.Gov*,
<https://www.census.gov/library/stories/state-by-state/virginia-population-change-between-census-decade.html>.
- “Canceled: Atlantic coast pipeline”. (n.d.). *Appalachian Voices*.
<https://appvoices.org/pipelines/atlantic-coast-pipeline/>
- “Client Profile: Mountain Valley Pipeline” *Open Secrets*. 2021,2023.
<https://www.opensecrets.org/federal-lobbying/clients/bills?cycle=2021&id=D000084077>
- “Celanese Corporation” *Better Buildings, U.S. Department of Energy*. n.d.
<https://betterbuildingssolutioncenter.energy.gov/showcase-projects/celanese-corporation-large-chemical-plant-improves-energy-and-environmental#:~:text=Background,1%2C000%20Celanese%20and%20contract%20personnel>
- Dashiell, J. (2023, July 11). *Appeals court orders Mountain Valley Pipeline to halt construction again*.
<https://www.wdbj7.com/2023/07/11/appeals-court-orders-mountain-valley-pipeline-halt-construction-again/>
- Endangered Species | What We Do | U.S. Fish & Wildlife Service*. 28 Dec. 1973,
<https://www.fws.gov/program/endangered-species>.

Fiscal Responsibility Act. H.R. 3746, 2024 2023, <https://www.congress.gov/bill/118th-congress/house-bill/3746/summary/00>.

Frequently asked questions | Mountain Valley Pipeline Project. (n.d.).

<https://mountainvalleypipeline.info/frequently-asked-questions>

Granholm, J. (2023, April 21). *Letter to Federal Energy Regulatory Commission regarding the*

Mountain Valley Pipeline. https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230424-4000

Giles County | Mountain Valley Pipeline Project. <https://mountainvalleypipeline.info/giles-county/>.

Hollopter, A. (2024, October 7). *Interview about the Mountain Valley Pipeline* [Personal communication].

Home - Atlantic Coast Pipeline. 2022, <https://atlanticcoastpipeline.com/default.aspx>.

Interstate Natural Gas Pipeline Permitting Process – Environmental and Energy Law Program.

<https://eelp.law.harvard.edu/interstate-natural-gas-pipeline-permitting-process/>.

Mall, Amy. *5 Key Reasons to Stop the Mountain Valley Pipeline*. 10 Sept. 2020,

<https://www.nrdc.org/bio/amy-mall/5-key-reasons-stop-mountain-valley-pipeline>.

“Mountain Valley Pipeline.” *Appalachian Voices*, <https://appvoices.org/pipelines/mountain-valley-pipeline/>.

Mountain Valley Pipeline, LLC v. 6. 56 acres of land, no. 18-1159(4th Cir. 2019). (n.d.). Justia Law.

Retrieved October 18, 2024, from <https://law.justia.com/cases/federal/appellate-courts/ca4/18-1159/18-1159-2019-02-05.html>

“---.” *Topics of Interest*, Virginia Department of Environmental Quality, 2024,

<https://www.deq.virginia.gov/topics-of-interest/mountain-valley-pipeline>.

“Mountain Valley Pipeline and the Jefferson National Forest.” *George Washington & Jefferson National Forest*, U.S. Forest Service, 2024,

<https://www.fs.usda.gov/detail/gwj/landmanagement/projects/?cid=stelprd3827827>.

Mountain Valley Pipeline Project | <https://mountainvalleypipeline.info/>.

---. <https://mountainvalleypipeline.info/>.

Mountain Valley Pipeline: Questions and Answers. (n.d.). https://montva.com/docs/default-source/pipeline/literature/questions_and_answers.pdf?sfvrsn=d345bbab_5#:~:text=Eminent%20domain%20is%20a%20right,land%20for%20FERC%2Dauthorized%20use

OVERVIEW OF THE PHYSIOGRAPHY AND VEGETATION OF VIRGINIA. Virginia Dept. of Conservation and Recreation, Division of Natural Heritage, Mar. 2021.

Parfomak, Paul, and Adam Vann. *Mountain Valley Pipeline: Past the Finish Line*. Congressional Research Service, 13 June 2024, <https://crsreports.congress.gov/product/pdf/IN/IN12032#:~:text=U.S.%20Army%20Corps%20of%20Engineers,Harbors%20Act%20for%20water%20crossings>.

Paullin, Charlie. “Mountain Valley Pipeline Goes into Service, Starts Delivering Gas in Virginia • Virginia Mercury.” *Virginia Mercury*, 14 June 2024,

<https://virginiamercury.com/2024/06/14/mountain-valley-pipeline-goes-into-service-starts-delivering-gas-in-virginia/>.

“Political Capital: Power and Influence in Development and Introducing the CD+SI Toolkit” University of Georgia Extension. 2021.

<https://extension.uga.edu/publications/detail.html?number=B1547-3&title=political-capital-power-and-influence-in-community-development-and-introducing-the-cd-si-toolkit>

---. “Mountain Valley Pipeline Segment Ruptures during Test • Virginia Mercury.” *Virginia Mercury*, 8 May 2024, <https://virginiamercury.com/2024/05/08/mountain-valley-pipeline-segment-ruptures-during-test/>.

Safety | Mountain Valley Pipeline Project. <https://mountainvalleypipeline.info/safety/>.

Small, Leah. “As Mountain Valley Pipeline Moves toward Completion, a Farmer’s Fight Remains.” *WHRO Public Media*, 28 May 2024, <https://www.whro.org/virginia-center-for-investigative-journalism/2024-05-28/vcij-virginiavoices-jamie-hale>.

Southwest Virginia Nonmetropolitan area—May 2023 oews Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates. (n.d.). Bureau of Labor Statistics. https://www.bls.gov/oes/2023/may/oes_5100001.htm

Srygley, Sarah. *THE APPALACHIAN REGION: A DATA OVERVIEW FROM THE 2018-2022 AMERICAN COMMUNITY SURVEY*. Appalachian Regional Commission, June 2024, https://www.arc.gov/wp-content/uploads/2024/06/PRB_ARC_Chartbook_ACS_2018-2022_FINAL_2024-06.pdf#page=14.

Staff, WDBJ7. “Appeals Court Hears Arguments on Mountain Valley Pipeline.” *Https://Www.Wdbj7.Com*, 27 July 2023, <https://www.wdbj7.com/2023/07/27/appeals-court-hear-arguments-mountain-valley-pipeline/>.

US EPA, OEJECR. *Environmental Justice*. 3 Nov. 2014, <https://www.epa.gov/environmentaljustice>.

US EPA, OW. *Overview of Clean Water Act Section 404*. 3 Mar. 2015, <https://www.epa.gov/cwa-404/overview-clean-water-act-section-404>.

= *Overview of Clean Water Act Section 404*. 3 Mar. 2015, <https://www.epa.gov/cwa-404/overview-clean-water-act-section-404>.

---. *Permit Program under CWA Section 404*. 17 Mar. 2015, <https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404>.

United states court of appeals for the fourth circuit. (n.d.). Ballotpedia.

https://ballotpedia.org/United_States_Court_of_Appeals_for_the_Fourth_Circuit

United States Census Bureau, *Virginia, Giles County Income & Poverty*. (2023).

<https://www.census.gov/quickfacts/fact/table/VA,gilescountyvirginia/INC110222>

United States Constitution, art. VI. <https://constitution.congress.gov/constitution/amendment-5/>

Virginia, Wild. “Mountain Valley Pipeline.” *Wild Virginia*, <https://wildvirginia.org/our-programs/water-quality/mountain-valley-pipeline/>.

Vogelsong, S., July 8, V. M., & 2021. (n.d.). Epa recommends that army corps of engineers not grant

mountain valley pipeline stream crossing permit • Virginia mercury. *Virginia Mercury*. ,

<https://virginiamercury.com/briefs/epa-recommends-that-army-corps-of-engineers-deny-mountain-valley-pipeline-stream-crossing-permit/>

Youngkin, G. (2022). *The Commonwealth of Virginia's 2022 Energy Plan*. Virginia Department of

Energy. https://energy.virginia.gov/energy-efficiency/documents/2022_Virginia_Energy_Plan.pdf