

Data Submitted (UTC 11): 2/3/2023 5:00:00 AM

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Organization:

Title:

Comments: LiDAR

LiDAR at the crest of Sinking Creek Mountain ridge for measuring ground movement

Physical Evidence of Problems for the mvp project

New information not before presented to FERC, Jefferson National Forest or Bureau of Land Management

January 2023. Based on new information and observations of ground movement, water and ice, the mountain valley pipeline (mvp) project should be denied entry and operation in the Jefferson National Forest as a "No Action on mvp request to operate in JNF", and I am asking the Forest Service to deny any pipeline ROW in JNF.

Sinking Creek Mountain seeps Water which follows the rock face, under unconsolidated and consolidated material, until it puddles on manmade benches, which are currently saturated and squishy wet during this freeze-thaw cycle of Winter, indicating water penetration and retention, which gets heavy on a near vertical rockface. The water flows year-round, not just at Winter.

I have not seen reports of small ground movement, slips, scarps forming in the mvp ROW in the JNF, and not sure why this most dangerous of erosion, at the top of the Sinking Creek Mountain, at the blast cut is under-reported.

Obviously, MVP blasted the Sinking Creek Mountain ridge from Craig County into the Jefferson National Forest, irreparably damaging the Jefferson National Forest and Sinking Creek Mountain and Craig County, Virginia.

-Mindful of the 2018 blasting through the toughest Tuscarora Sandstone that has armored Sinking Creek Mountain for millennia; there is no way mvp's unpermitted blasting through JNF lands left the rest of the surrounding ground, unimpacted. Blasting that hard spine of the mountain lasted for more than two days. Blasting vibrations and gravity would have accelerated ground movement of boulder fields to migrate downhill, bit by bit. Blasting vibrations were felt two miles away and reported to FERC and DEQ. Not until much later did mvp admit to overcharging blast holes to break the mountain's hard rock.

LiDAR imagery would reveal how much ground movement has happened before any more disturbance adds to a dangerous situation. LiDAR should show displacement and possible strain of the boulder field debris flows.

LiDAR (composite) maps must be compared to measure how much ground movement has happened since 2017, after blasting in 2018 and the most current LiDAR, hopefully as recent as January 2023.

I am respectfully requesting "LiDAR" maps of these years (2017, 2019, 2023) so that the Public may study them for the debris flows to the west of the mvp ROW blast cut in Sinking Creek Mountain. I believe evidence of at least two of the boulder field debris flows are moving based on various observations of multiple indicators, on the ground, on site recorded early January 2023. Specific study area should include within 2 miles of Blast Zone along west side of ROW, on both Jefferson National Forest land and Private land sides of the Sinking Creek Mountain ridge, please. Southeast face of Sinking Creek Mountain is Jefferson National Forest and the northface of the mountain is Private land, also dangerously impacted by mvp project route.

Many potential places for stress cracks to happen on both sides of the mountain

Therefore; given the persistence of gravity, water and unstable slopes, further disturbance to the irreparable damage done to Sinking Creek Mountain by MVP will further degrade the land in the Jefferson National Forest and promote continuous erosion of disturbed ground. All pipe needs to be removed and ground repaired, and vegetated.

Current LiDAR maps would show where the ground has moved within the last five years within the area of interest of the two-mile radius of the pipeline, starting at the crest of Sinking Creek Mountain at the mvp ROW blast cut and west along the mountain ridge, showing both north face and south face slopes. Several boulder fields exist in the area of interest which could have had accelerated downslope migration initiated by 2018 blasting of the crest of the mountain. The boulder field may have become destabilized and evidence on the ground shows the debris flow is moving or has moved within the last five (5) years.

Ground movement can shear tree roots, reducing water and nutrient uptake of the tree and stunting its growth or reducing its anchor and its survival resilience. Ground movement can shear rocks. Sinking Creek Mountain lies within the Giles Seismic Zone, another area to avoid for the routing or construction of a pipeline.

LiDAR must be updated every three months and carefully reviewed and made Public because the dangers are real to people living downslope of these impacted landslide-trigger areas, that is, areas on Sinking Creek Mountain flank, close to blasting sites.

The mvp should not be allowed into the Jefferson National Forest along it's current preferred route due to dangers wrapped in the Jefferson National Forest on Sinking Creek Mountain, Craig County/Montgomery Counties, VA.

MVP has created an unstable, regrettable, and dangerous situation at the very top of Sinking Creek Mountain.

We need to know how much damage has been done, because the mountain is actively sloughing ground in unabated erosion. LiDAR can offer quantitative ground movement information for calculating soil erosion mass and qualitative LiDAR would hold mvp accountable for that mass wasting volume and LiDAR available for Public review could hopefully save lives.