I am going to use published MVP pipeline miles to reference the crossings. These miles are shown in <u>http://gisweb.roanokecountyva.gov/pipeline/</u>

My photos show that MVP's erosion controls are totally inadequate. The mud that I encountered while wading in Teels Creek between MVP-mi 260.9 and 262.8 proved that the siltation of Teels Creek was worse than anything we had feared, and digging for the pipeline has not even begun. In addition, the area involved in the Teels Creek crossing at MVP-mi 261.8 is approximately 18 acres, far more than the 1/2 acre limit of NWP-12 permitting.

We were advised to refer to the crossings that are directly important to us. I am directly affected by all the crossings of water that feeds the Roanoke County water supply. That is in the order of 100 crossings, but the crossings are not accessible to us citizens. Citizens are currently being stopped by security guards from getting close enough to observe. If we are not permitted to look, then DEQ should take charge and control the situation instead of relinquishing control to MVP and ACP. All of the 241 MVP crossings as well as the ACP crossings affect water quality somewhere in Virginia, and the economy and property values of Virginia depend on that water quality, so all of the 241 crossings affect all Virginians.

Please note that only grading has begun and already a rainstorm caused thick mud to close Cahas Mountain Road near MVP-mile 253.8. More mud than that has flowed into Teels Creek. There are no erosion dams that can be built high enough to hold back the water that flows all the way down the mountains towards the streams. Requiring MVP and ACP to take mitigation measures that are totally inadequate to handle the situations they generate, but that meet all the legal requirements, is a game that we citizens cannot afford to play.

I have searched for a definition or list of requirements for the granting of a Corps of Engineers Nationwide 12 (NWP-12) permit and have found none. I have found many examples, but no clear definition about what protections it affords or the limitations for it to apply. Without such a definition, I don't see how Virginia can rely on it to protect our water supply as well as endangered species, and the natural beauty of Virginia. I have read that NWPs are reserved for projects disturbing a maximum of 1/2 acre of waterway per complete project. The Roanoke County MVP map shows 241 stream crossings in Virginia, not counting access-road crossings, which would make NWP-12 totally inappropriate for this complete project. Then again there is wording that implies that an NWP-12 permit could be granted for 241 parts of a complete project. That would be like considering the loss of a beach to be only the inconsequential losses of many grains of sand. While

each of the 241 crossings may be small, the damage from the complete project may still be very large. The small stream that enters Teels Creek next to the Teels-Creek crossing at 261.8 has 10-inch deep mud at its mouth so the damage from this little crossing is not small. NWP-12 is not appropriate to protect the waters of Virginia, and DEQ should regulate all of the crossings. 241 unsupervised NWP-12 permits is the same thing as not requiring any permits at all. And the crossing at MVP-mi 261.8 disrupts 18 acres.

I have been able to photograph only two locations. To get to the stream crossing near MVP-mile 246.4, I left my car on the Blue Ridge Parkway near Rocky Rd and crawled under a cattle fence. I stayed outside the blue and white flagging tape, which limited my ability to photograph. I noticed an easier exit path, crossing a field to Callaway Rd, but ended the day with significant poison ivy.

The tree-cleared path down to the waterway had erosion dams on its borders, but substantial bare earth has been created outside the dams bordering the cleared pathway. I did not have access to evaluate how well erosion control was functioning at this location. The slope was greater than 45% and there is no way that the erosion controls could stop the flow from a heavy rain.



Erosion protection on north side of MVP-mi 246.5 is inadequate, 5/24/18 Bob Peckman



Erosion protection on south side of MVP-mi 246.5 is inadequate, 5/24/18 Bob Peckman

For my second observation I started from Ferguson Farm on Teels Creek on a Sunday when I would not be interfering with the work. I waded up Teels Creek from MVP-mi 262 to Brick Church Rd, observing the crossing at MVP-mi 261.8 and also the quality of the creek bottom for the whole way. From the Brick-Church-Rd bridge, I walked back to Ferguson Farm by road and headed downstream. I left the creek not far below the MVP-mi 262.8 crossing because the mud was making wading too difficult. My photos report my observations in downstream order.

I have many photos of the banks of Teels Creek, but the best measure of erosion control may be the mud on the creek bottom. I am familiar with the creek bottom having done SOS water quality measurements in the past. Teels Creek used to have a mostly rocky/stony bottom. The primary species was mayflies giving it an ultra-high score. Now it is no longer habitat for mayflies as the bottom is quite muddy.

The mud was significant all the way up to Brick Church Rd, which is below the crossing at MVP-mi 261.0, and became deeper and deeper downstream from there. The thickness of the mud was not uniform depending on the local currents, but in places it was difficult to pull my feet out. Below MVP-mile 262.5, I thought I was stepping onto firm footing when my foot sank into mud over a foot deep. The wading had become too difficult to continue.

To evaluate the effectiveness of erosion control, it is not important to see erosion fencing. The true measure is the amount of silt that runs into the stream. We have teams measuring things like turbidity above and below crossings. We had not expected to measure the thickness of the silt layer in feet, or even inches. The damage to Teels Creek is far worse than anyone had feared and MVP hasn't even started digging to lay the pipe. The MVP has been given unusual latitude and they have chosen to disregard what they have promised. If they have done this in view of Ferguson Farm, what are they doing in the places accessible only to them?



Looking east at the MVP-mi 261.8 crossing of Teels Creek, 5/27/18 - Bob Peckman



Looking up small stream to the right of MVP-mi 261.8 crossing.



The mud at the mouth of this little side stream is ten inches deep.



Looking west across Teels Creek very close to MVP-mi 261.8, 5/27/18 Bob Peckman



Erosion protection ends 500 feet below the 261.8 crossing, 5/27/18 Bob Peckman



Looking west, continuing downstream from MVP-mi 261.8, 5/27/18 - Bob Peckman



Looking west, continuing downstream from MVP-mi 261.8, 5/27/18 - Bob Peckman



Looking west, continuing downstream from MVP-mi 261.8, 5/27/18 - Bob Peckman



Looking west, continuing downstream from MVP-mi 261.8, 5/27/18 - Bob Peckman



Unprotected close proximity continues for 1/3 mile below 261.8 crossing, 5/27/18, BP



Looking west from the Ferguson Farm near mvp-mi 262.1, 5/27/18 Bob Peckman



Looking west from the Ferguson Farm near mvp-mi 262.1, 5/27/18 Bob Peckman



Looking west from the Ferguson Farm near mvp-mi 262.1, 5/27/18 Bob Peckman



Looking west from the Ferguson Farm near mvp-mi 262.1, 5/27/18 Bob Peckman



Looking south on Teels Creek near MVP-mi 262.3, 5/27/18 - Bob Peckman



Looking south on Teels Creek near MVP-mi 262.3, 5/27/18 - Bob Peckman



Looking south near MVP-mi 262.3, 5/27/18 Bob Peckman



Looking south near MVP-mi 262.6, 5/27/18 Bob Peckman



Looking south on Little Creek near MVP-mi 262.7 on 5/27/18 by Bob Peckman

Photos show that the MVP land disturbance is very close to Teels Creek for 1/3 mile downstream from MVP-mile 261.8 with serious silt flow into Teels Creek along that 1/3 mile. If the stream crossings are considered to be 50 feet wide, then that crossing occupies about 18 acres, which is far more than the 1/2-acre limit for NWP-12 requirements.

Also note that most of that 1/3 mile has no erosion control at all, as is also the case near MVP-mile 262.3. This demonstrates a blatant disregard for the spirit of erosion control. I took my Teels Creek pictures by wading in Teels Creek on Sunday, May 27, 2018.

## Addendum:

MVP is investing as much as they can as fast as they can before meeting every requirement to finish. In that way they put maximum pressure on us to allow them to finish the project rather than losing that investment. Be mindful that it is they who are taking that gamble and we have no obligation to make their gamble pay off. DEQ decisions should not be influenced by the amount that MVP has gambled that the permits would be issued. If they finish it, their profits are guaranteed and their liabilities are limited. We will be left holding the bag for damages beyond that limit. So the permitting process should guarantee that our likelihood of holding any bag is small. What we have observed so far is that permanent damage to our water supply is inevitable the way they are going. And if they gambled that you would have to issue the permits because they have already invested so much, the gamble was theirs and we have much more assets in this gamble than they will ever have. If any agreement is implied by their being allowed to proceed, it has been violated by their noncompliance in many places. I have documented only two, but the one where I could get close enough to gather the data is quite egregious.

If the permitting process might deny MVP the possibility to complete the project, then all work should cease until that is resolved.

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