



Mountain Valley Pipeline Project

Docket No. CP16-10-000

Temporary Stabilization Plan

(Public)

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INTRODUCTION

Mountain Valley Pipeline, LLC is providing the Federal Energy Regulatory Commission (FERC) with this *Temporary Stabilization Plan* (Plan). This is in response to the FERC's August 3, 2018 *Notification of Stop Work Order* calling for the immediate cessation of construction of the Mountain Valley Pipeline Project (Project) located in 17 counties in West Virginia and Virginia. The Project involves the construction of an approximately 303-mile, 42-inch-diameter natural gas pipeline, three compressor stations, and other appurtenant facilities to provide timely, cost-effective access to the growing demand for natural gas for use by local distribution companies, industrial users, and power generation in the Mid-Atlantic and southeastern markets, as well as potential markets in the Appalachian region. Construction began in February 2018. Construction on National Forest System lands began in February 2018. Per the Stop Work Order, "MVP is hereby notified that construction activity along all portions of the Project and in all work areas must cease immediately, with the exception of any measures deemed necessary by those land managing agencies or FERC staff to ensure the stabilization of the right of way and work areas." The Stop Work Order required that "within 5 days, MVP must provide an interim right-of-way and work area stabilization plan for review and written approval by the Director of the Office of Energy Projects."

The goal of this Plan is to provide a structure for implementing the Project's temporary stabilization process, which is designed to meet the following objectives:

- Stabilize the Project right of way (ROW) and workspaces to minimize potential erosion and sedimentation;
- Protect sensitive resources and conserve segregated topsoil;
- Assess, maintain, and reinforce temporary erosion control measures to avoid off-ROW impacts;
- Address safety concerns, including those associated with open trenches;
- Secure fuels and equipment to prevent spills; and
- Suspend activities, leaving the ROW free of construction debris.

Temporarily stopping work on the Project has the potential to cause impacts to sensitive environmental resources that would not have been caused with continued work. Protective measures have been developed to minimize potential environmental impacts on these resources and will be applied, as applicable, to the Project. In general, Mountain Valley will utilize FERC's Plan and Procedures as well as measures outlined in Mountain Valley's Winter Construction Plan, Erosion and Sediment Control Plans (West Virginia and Virginia), and Restoration Plan. This Plan details the protective measures.

SHORT TERM STABILIZATION PLAN: TREE FELLED, CLEARED AND GRADED ONLY

The following immediate actions are necessary to temporarily stabilize the ROW and work areas in sections of the project area that have been tree felled, cleared, and graded but not yet trenched or not yet having pipe strung along the ROW. The focus for this portion of the Project is on safety, resource and topsoil protection, basic housekeeping, and avoidance of off-ROW impacts by completing the activities described in this section.

Stage of Construction	Approximate Mileage	Action
Not Felled	3 miles	Continue to monitor and inspect per WVDEP and VADEQ requirements.
Tree Felled Only	102 miles	Continue to monitor and inspect per WVDEP and VADEQ requirements.
Trees Felled / ROW Cleared and/or Graded / No Pipe Strung / Not Trenched	103 miles	Temporary stabilization in accordance with the approved WVDEP and VADEP Erosion and Sediment Control Plans.

Each of the Mountain Valley Environmental Inspectors (EIs) are responsible for inspecting a portion of their dedicated Spread. The EI's primary responsibility is conducting periodic site inspections to verify compliance with the state specific stormwater discharge permits and the FERC's Plan and Procedures.

The Environmental Inspection and Construction teams will be focused on the following inspection/maintenance and stabilization activities.

INSPECTION/MAINTENANCE ACTIVITIES

In VA, inspect all erosion and sedimentation controls within disturbed areas at least once every four business days. In WV, inspect all erosion and sedimentation controls within disturbed areas, at a minimum, once every seven calendar days and within 24 hours after any storm event equal to or greater than 0.25 inch per 24-hour period. Repairs or maintenance shall be performed immediately to Best Management Practices (BMPs). If weather or site conditions prevent immediate repair, the repairs will be completed when site conditions allow. The inspection and maintenance activities will include the following:

- Assess the ROW at vulnerable/sensitive resource areas.
- Recommend installation of supplemental Erosion Control Devices (ECDs).
- Confirm all bridges/equipment mats are thoroughly cleaned and secured to prevent sediment impacts and displacement by storm flows.

- Ensure all installed waterbars and end treatments (sumps, compost filter sock, rip rap lined channels, slope drains, etc.) are properly maintained and in place.
- Determine the effectiveness of project area ECDs and prescribe the appropriate maintenance, repair, or replacement requirements.
- Remove all construction debris.
- Create and prioritize a punchlist of all ECD maintenance, repair, and/or replacement activity.
 - Equipment would be necessary for reestablishing/grading waterbars; cleaning, stabilizing, and installing sumps and waterbar end treatments; replacing/repairing equipment bridges; regrading/stabilizing temporary diversion berms; tracking slopes for appropriate drainage; compacting and stabilizing spoil piles; moving pipe/materials to safe locations; and hauling ECDs and fuel throughout the project area.

STABILIZATION ACTIVITIES

- For all graded sections of ROW, temporary seed and mulch, hydroseed, or hydromulch per the guidelines in the WVDEP and VADEQ approved Erosion and Sediment Control Plans
- Maintain perimeter controls and enhance downslope ECDs as necessary.
- Maintain all segregated topsoil piles – re-apply temporary seed mix and mulch to the piles, as necessary, and maintain ECDs around the bases of all topsoil piles.
- Anywhere that brush piles are impeding the ability to stabilize the ROW, burn the brush piles in accordance with local permits.
- Retrieve all off-ROW sediment after obtaining the necessary landowner approvals.

SHORT TERM STABILIZATION PLAN: PIPE STRUNG, WELDED AND TRENCHED

In addition to the stabilization plan outlined above, the following actions are necessary to stabilize the ROW and work areas in sections of the project that have been either trenched or have pipe strung along the ROW.

INSTALLATION OF PIPE STRUNG ALONG THE ROW

It is important that Mountain Valley install the pipe in all currently trenched areas. This is critical to ensure that the ROW can be properly restored and sensitive environmental resources protected. In many areas along the pipeline alignment, the ROW has been graded and exposed to the elements. ROW grading is intended to be short-term and the ground exposed to weathering only for a limited amount of time. Consequently, it must be stabilized prior to any long-term shutdown of construction activity. If there is pipe strung in an acidic soil area, installing the pipe, backfilling and completing final restoration is the proper action. In potential acid soil areas where pipe has not yet been strung then Mountain Valley will restore per the Acid Forming Materials Plan.

The most effective way to stabilize the ROW and ensure adequate access for environmental maintenance is to install the pipe in the trenched, strung, and/or welded areas. Once the pipe is installed, these areas can be reclaimed to original grade, if appropriate, and drainage patterns and allowed to revegetate to post-construction conditions. It is advantageous to begin reclamation as soon as possible to establish vegetation prior to the winter freeze/thaw cycle. Seed and mulch placed at this time will generally be placed on compacted subsoil, which will hinder growth. While it is possible to attain short term growth in subsoil, long term growth that is resilient in winter conditions is not likely. Temporarily stabilized soils are more susceptible to erosion and sediment loss than final restored conditions. By not installing the permanent ECDs and establishing permanent vegetation in as many areas as possible, the potential for sedimentation and erosion events increases. A temporarily stabilized ROW will require significantly more maintenance than a fully restored ROW. Each time Mountain Valley must revisit the ROW to address an environmental concern, additional environmental concerns may be created. For example, accessing the ROW with equipment to clean sumps will require waterbars to be removed, and will likely damage previously seeded and mulched areas. Under winter conditions, waterbars will be difficult to replace and compact to withstand future rain and snow events.

Temporary restoration also is challenging in areas where pipe is already strung or anchored. Erosion and sediment control is generally performed by hand in these areas, to the extent possible. For the relatively short timeframe that pipe is typically strung along the ROW, hand maintenance of ECDs is a manageable approach to maintaining environmental controls. Over an extended period, it is difficult to properly maintain these ECDs without the use of equipment. Equipment access to the non-working side for environmental maintenance is limited. In addition, topsoil is generally segregated and stockpiled on the non-working side of the ROW. Due to pipe strung along the ROW, topsoil is not currently accessible in most locations. The ROW cannot be properly restored in areas where pipe is strung or anchored.

Pipe segments staged on cribbing should be lowered into the trench and backfilled. Storing pipe on cribbing is intended to be temporary in nature for welding and staging pipe prior to lowering into the trench. Over time, the ground the cribbing rests on may be compromised via soil settlement and erosion. Without continuous monitoring and maintenance via the use of heavy equipment, cribbing could fail

causing pipe segments to roll down a slope or off ROW. Pipe segments strung along the ROW for an extended period are also subject to UV damage to the coating. Pipe staged in a storage yard is typically stacked and can be systematically rotated to minimize the UV exposure to any given joint of pipe. Pipe strung along the ROW cannot be moved “to the bottom of the pile” to remove it from UV exposure and subsequent damage. Therefore, the coating will continuously degrade while staged on the ROW. Pipe left above the ground is subject to other point source damage due to vehicle traffic and tools during maintenance of erosion and sediment control devices and cribbing. In addition, each uncoated weld has approximately one foot of bare metal exposed for the circumference of the pipe. These uncoated welds should not be left exposed to the elements as they are subject to corrosion. Also, pipe staged on the ROW for an extended timeframe increases the likelihood of vandalism to the pipe itself but also to the supports for the pipe, which could cause the pipe to roll and lead to bodily or property injury.

Pipe staged on skids should be lowered into the trench and backfilled. Removal of pipe from the site is not practical, as removal presents additional environmental and safety risks, as well as logistical hurdles. The pipe would need to be held on the slope while being cut, individually moved to a loading area, loaded onto a pipe truck, and then trucked back to a yard where it would be stockpiled. The majority of the pipe on the ROW has been bent, in which case only one joint may be able to be loaded onto a truck, instead of three joints per truck that were used to bring the pipe onto the right of way. This would result in nearly three times the number of pipe truck loads in order to get the pipe off of the ROW than was required to bring the pipe in. The equipment crossings at numerous waterbodies will be crossed with heavy loads additional times by pipe hauling trucks alone, plus added crossings for equipment required to handle and load the pipe. In addition, waterbars and other erosion and sediment control devices along the ROW will be compromised by the continuous hauling traffic, which will be more traffic than it has been exposed to thus far. Handling the pipe on the ROW creates undue safety and environmental risks, and potentially results in damage to the coating and pipe itself. Best construction practices include minimizing the handling of pipe. Also, because the bent pipe cannot be stacked, Mountain Valley will have insufficient space to store the pipe off the ROW, as pipe in Mountain Valley laydown yards was typically stacked four joints high. The best course of action to minimize safety and environmental risk, and allow for stabilization and maintenance of the right of way, is to lower pipe strung on the ROW into the trench and backfill it.

FINAL RESTORATION WHERE POSSIBLE

A single restoration phase is preferable to restoring, regrading, and final reclamation. The ROW must be stabilized prior to any long-term work cessation. Leaving the temporary ROW and trench open may degrade exposed soil and rocks as they are exposed to precipitation events and potentially freeze/thaw cycles. In areas restored without pipe installation, the soils will be worked multiple times to facilitate final pipe installation. This can result in mixing and loss of topsoil which can have impacts to the sustainability of native seed mixes. Also, if rework occurs in unfavorable moisture conditions, soils tend to lose strength with excessive disturbance. Completion of activities to allow for final restoration in areas where possible is best for the environment and hence the best for this circumstance.

The mitigation measures identified in the Landslide Mitigation Plan (LMP) include installing surface water control measures, subsurface drainage measures, and implementing field-identified solutions by geotechnical engineers during construction. These measures cannot be installed until the pipeline is installed and backfilled.

The basis of the LMP is to minimize water intrusion into the reclaimed areas, mostly by means of drains. It is impractical to install, remove, and replace these drains during temporary stabilization. This increases the risk of slope movements due to saturated soils. The ROW is currently lined with temporary soil

stockpiles from both grading and trenching. These materials, intended as a short-term stockpile, will deteriorate if left exposed for a long period of time leading to potential slope failures and associated sedimentation issues. Constructing in a timely fashion will reduce the amount of time the ROW is exposed to the elements and not under final grade. Temporary stabilization without returning the ROW to final grade puts these high-hazard, steep slope areas at an elevated risk of geotechnical failures.

Mountain Valley's landslide mitigation team is developing remediation plans to stabilize areas exhibiting signs of slope instability. In many cases, stabilization of these areas is intended to be concurrent with permanent reclamation/stabilization of the ROW. Re-exposing these areas during pipe installation, following temporary stabilization, may be detrimental to the remediation plan's efficacy. In cases where the instability is limited to the trench or ROW edge, backfilling to create a buttress is the best solution to arresting the instability; re-exposing this instability for pipe installation could reactivate the movement and depending on moisture conditions could exacerbate the movement.

PIGG RIVER HDD

Mountain Valley will complete HDD operations at the Pigg River. The Certificate Order for the Project required an HDD in this area. To date, the pilot hole under the Pigg River has been completed and half of the crossing has been reamed to 27". By not continuing the drilling and reaming operations, the HDD is at an increased risk for a downhole failure. The longer the drill pipe and tooling remain in the hole without proper circulation, the greater the chance of that equipment becoming seized downhole. In addition, the drill cuttings and fluid that are in the hole are at risk of solidifying and increasing downhole pressures that could create an inadvertent release of drilling fluid once the drilling resumes. Completing the HDD immediately is paramount to ensure environmental compliance with Environmental Condition 23 of the Certificate Order, protect the resources, and avoid adverse environmental impacts.

BLUE RIDGE PARKWAY

Mountain Valley has consulted with the National Park Service and they have recommended the following restoration measures. Mountain Valley will complete the road bore by grouting around the bored pipe under the Blue Ridge Parkway to ensure road stability. The open pipe trench on the north side will be back filled and both the north and south side of the Blue Ridge Parkway will be rough graded. All disturbed areas and soil stockpiles will be temporarily seeded and mulched. During the temporary stop work order, Mountain Valley will monitor and maintain the temporary sediment and erosion control devices on site and assure that the cattle have access to the existing spring. The work area will also be fenced off to exclude and protect the cattle. In addition, Mountain Valley will repair and stabilize the private road on the south side of the Blue Ridge Parkway to ensure accessibility and proper function. Once this is complete, all equipment and pipe that is stacked will be removed from National Park Service property.

JEFFERSON NATIONAL FOREST

Mountain Valley continues to consult with the United States Forest Service to address the graded portions of the ROW on Sinking Creek and Brush Mountains.

Summary of Stabilization and Restoration Actions

Stage of Construction	Approximate Mileage	Approximate Portion of mileage with Steep Slope	Action
Trench Open Only	4 miles	11%	Stabilize the trench by installing / maintaining trench breakers or trench plugs. Monitor daily, continue to dewater open excavations / trenches to avoid saturation and potential for cave-in / slip. Backfill any open trench that poses a safety concern. Secure all remaining open trench with orange safety fencing.
Pipe Strung / Welded, Trench Open	26 miles	14%	Lower in, backfill, restore to final grade, if appropriate, and permanently stabilize per approved WVDEP or VADEQ plans.
Pipe Strung / Welded, Not Trenched	15 miles	0 %	In non-steep slope areas Mountain Valley will stabilize the pipe as appropriate. Mountain Valley will use seed and mulch to temporarily stabilize the ROW per the WVDEP and VADEQ requirements.
	6 miles	100%	In steep slope areas, trenching, lowering in, backfilling, restoring to final grade, if appropriate, and permanently stabilizing ROW.
Pipe Strung / Not Welded, Trench Open	7 miles	13%	Weld, lower in, backfill, restore to final grade, if appropriate, and permanently seed per approved WVDEP or VADEQ plans.
Pipe Strung / Not Welded, Not Trenched	20 miles	0%	In non-steep slope areas Mountain Valley will stabilize the pipe as appropriate. Mountain Valley will use seed and mulch to temporarily stabilize the ROW per the WVDEP and VADEQ requirements.
	6 miles	100%	In steep slope areas, trenching, lowering in, backfilling, restoring to final grade, if appropriate, and permanently stabilizing the ROW.

Stage of Construction	Approximate Mileage	Approximate Portion of mileage with Steep Slope	Action
Pipe Installed / Backfilled	11 miles	12%	Restore to final grade, if appropriate, and permanently seed per approved WVDEP or VADEQ plans.
Pigg River HDD	N/A	N/A	Fully complete the HDD by finishing reaming and pull back operations. Temporarily seed and mulch adjacent temporary workspace areas.
Blue Ridge Parkway	N/A	N/A	In consultation with National Park Service, install grouting around the bored pipe under the Blue Ridge Parkway, back fill the open trench, rough grade, temporarily seed and mulch, monitor and maintain the temporary ECDs, assure that the cattle have access to the existing spring and the work area is fenced off, repair and stabilize the private road on the south side of the Blue Ridge Parkway, and remove all equipment and pipe that is stacked from National Park Service property.

**** Note: Steep slope is defined as slopes greater than 18%.**

SHORT TERM STABILIZATION PLAN: COMPRESSOR STATIONS & INTERCONNECTS

In addition to the stabilization plans outlined above, the following immediate actions are necessary to temporarily stabilize the facilities and their associated work areas.

ALL COMPRESSOR AND INTERCONNECT FACILITIES

- Perform any necessary ECD maintenance. Also assess the site for vulnerable/sensitive resource areas and install supplemental ECDs.
- For all segregated topsoil piles, apply temporary seed mix and mulch, hydroseed or hydromulch to the piles and install ECDs around the bases of all topsoil piles per the guidelines in the WVDEP and VADEQ approved Erosion and Sediment Control Plans.
- For all graded sections of the site, apply temporary seed and mulch, hydroseed or hydromulch per the guidelines in the WVDEP and VADEQ approved Erosion and Sediment Control Plans, to any areas that are vulnerable to storm flow/erosion. Permanent seed can be applied to steep slope areas that are at final grade according to the approved WVDEP and VADEQ Erosion and Sediment Control Plans.
 - For all graded sections of site, backfill any open trench that poses a safety concern. Secure all remaining open excavations / trenches with orange safety fencing and continue to dewater to avoid saturation and potential for cave-in / slip.
- Maintain rock construction entrances, maintain and sweep any county roads and monitor and maintain all secondary containments as required.

MOBLEY

- Return Pad to grade for proper drainage
- Install permanent safety fence along stream S-ST10 and the top of the retaining wall.
- Clean up and maintain roadway to allow continued access to property owner.

BRADSHAW

- Return Pad to grade for proper drainage.
- Seed and mulch the existing slip area.
- Install permanent road barriers along the edge of the county road (RSS2) at the pad for safety purposes. Place final stone on the county road along edge of pad.
- Install permanent 4' safety fence along the reinforced soil slope walls (RSS1, RSS3 and RSS4).

HARRIS

- Return Pad to grade for proper drainage.

WB

- Return Pad to grade for proper drainage

STALLWORTH

- Complete the soil nail wall. The wall is designed to prevent slope slips; completing the installation as soon as possible is vital to enhancing the safety of MVP-GB-190.01 and to prevent major sloughing of slope material and potential slip of a major portion of the access road slope. Continued exposure could result in slope / wall failure. Wall completion will eliminate potential for slope failure and remove the risk of sediment laden water to discharge off LOD. Also, wall completion will allow for road side ditch installation and reduce velocity of runoff to stabilized slopes.
- Install Cross Culvert 3 along with Channel C per the approved WVDEP plans – As the excess materials are removed from the soil nail slopes, Mountain Valley will be able to complete the lower spoil pile and install Cross Culvert #3 and the associated rock outfall. This is one of the main permanent outlets. Installing this culvert and channel will drastically reduce the volume and velocity of storm water that is currently concentrated to one discharge point, Cross Culvert 2. At present, the water discharged from Cross Culvert 2 has the increased potential to impact W-QR1 and S-QR3. Cross Culvert 2 would be at maximum capacity during large storm events unless cross culvert 3 is installed. Once these controls are completed, restoration and stabilization of the temporary Haul Road and installation of the permanent Diversion Berm can occur. The temporary haul road increases sediment laden runoff. By completing the soil nail wall, Mountain Valley will have a reliable road, open at all times, and will have no further need for the temporary haul road. Returning it to original grade will stabilize slopes and allow the final installation of the upper diversion berm system. Installing the diversion berm will allow storm water to be diverted away from unstable slopes and further reduce the risk of slope failure.
- 90% of the site slopes are at final grade just lacking topsoil. Mountain Valley is requesting permission to place topsoil on these slopes and add permanent seed and mulch. This will greatly increase site stabilization and vegetation success prior to winter.
- Fuel tank relocation and containment removal - At the time of the FERC Stop Work Order, a contractor was in process of moving a fuel storage tank from an inadequate secondary containment to a new containment. Moving this tank and removing the old containment is vital to reducing the risk of an accidental release.

TRANSCO

- Surface roughening of all exposed soil per VADEQ specification.
- Complete Sediment Basin-1 in order to better contain site runoff.
- Finish grade banks and final seed to prevent further erosion.
- Install outlet protection and level spreader to properly filter storm water.
- Complete Sediment Trap-2 and finish grade exterior banks and final seed to prevent further erosion.
- Install planned channels / water diversion berms to control storm water runoff.
- Complete Sediment Trap-1 to control runoff.

LONGER TERM STABILIZATION PLAN: PIPELINE ROW AND FACILITIES

In addition to the stabilization plan outlined above, the following actions are necessary to temporarily stabilize the ROW and work areas if the FERC Stop Work Order is not resolved by September 1, 2018.

PIPELINE ROW

Stage of Construction	Approximate Mileage	Approximate Portion of mileage with Steep Slope	Action
Pipe Strung / Welded, Not Trenched	15 miles	0 %	In non-steep slope areas, trenching, lowering in, backfilling, restoring to final grade and permanently stabilizing the ROW.
Pipe Strung / Not Welded, Not Trenched	20 miles	0%	In non-steep slope areas, trenching, welding, lowering in, backfilling, restoring to final grade and permanently stabilizing the ROW.

*** Note: Steep slope is defined as slopes greater than 18%.*

COMPRESSOR STATION & INTERCONNECTS

- Install security fencing at the Compressor Station and Interconnect sites.
- Complete any work in open excavations, including welding, coating, x-ray of pipe, finishing concrete pours already prepared and backfilling as appropriate (already in ditch).
- Complete MLV-9 installation at Harris – this is currently ready for final coating test and backfill. It would be beneficial to complete to protect the pipe and leave one less open excavation to monitor and dewater.
- Complete MLV-19 installation at Stallworth – this work is currently in progress. It would be beneficial to complete to protect the pipe and leave one less open excavation to monitor and dewater.
- Complete compressor foundation #4 at Bradshaw - Currently an open excavation that can't be backfilled due to forms, exposed rebar, bolts, etc.
- Compressor building walls at Harris - Currently an open excavation that can't be backfilled due to forms, exposed rebar, bolts, etc.
- Complete 42" header piping that is already in the ditch at all facilities - Currently exposed pipe, open excavations.
- Protect any installed anchor bolts from the elements.
- Preserve, protect and maintain all equipment per best practices / manufacturer's recommendations at all Compressor Station and Interconnect Facilities.

SPECIFIC AREAS OF SENSITIVE ENVIRONMENTAL CONCERN

In addition to the stabilization plan outlined above, the following actions as outlined below are necessary to protect sensitive environmental resources.

Due to the locations of sensitive resources, steep slopes, existing problem areas, and difficult drainage conditions, the following areas must be completed to prevent additional environmental impacts.

Spread	MP Start	MP End	Area	Status	Stabilization Measure
A	0.0	0.1	Mobley	Slip Area	There are two slips in the area that need stabilized to prevent further migration and sediment impacts. This will require a variance.
A	0.6	0.6	North Fork Road	Slip Area	Area needs to be permanently stabilized and evaluated under the Slip Mitigation Plan. Temporary stabilization measures will not prevent the existing slip from worsening.
A	2.1	2.2	Shortview Road	Slip Area	A slip that needs to be put back before restoration can take place. This will also require a variance
A	6.45	6.55	MVP-AR-014.01	Slip Area	A slip that needs to be put back before restoration can take place. Temporary stabilization measures will not prevent the existing slip from worsening.
A	7.8	8.0	Sam's Run Road	Slip Area	A slip that needs to be put back before restoration can take place. This will also require a variance
A	15.35	15.35	MVP-HA-022	Main Line Valve pipe exposed	MLV-4 needs to be set, tied in, coated and backfilled

Spread	MP Start	MP End	Area	Status	Stabilization Measure
B	34.4	34.85	Meathouse Fork	Steep Slopes	The steep slope in this area creates a high potential for continued failure of ECDs. Installing the pipe, restoring the original grade, and applying permanent stabilization will greatly reduce the potential impact to the wetlands and streams at the bottom of the slope.
E	128.3	128.5	Wahoo Road	Steep Slopes	The steep slopes and heavy rains in this area have resulted in continued failure and maintenance of ECDs. Installing the pipe, restoring the original grade, and applying permanent stabilization will greatly reduce the potential impact the streams and wetlands at the bottom of the slope.
E	143.4	144.7	Meadow River	Steep Slopes	The steep slopes and heavy rains in this area have resulted in continued failure and maintenance of ECDs. Installing the pipe, restoring the original grade, and applying permanent stabilization will greatly reduce the potential impact the streams and wetlands at the bottom of the slope.
E	146.6	147.6	James River-Kanawha Turnpike	Steep Slopes	The steep slopes and heavy rains in this area have resulted in continued failure and maintenance of ECDs. Installing the pipe, restoring the original grade, and applying permanent stabilization will greatly reduce the potential impact the streams and wetlands at the bottom of the slope.
F	194.45	194.65	Painters Run Road	Steep Slopes	The steep slopes and heavy rains in this area have resulted in continued failure and maintenance of ECDs. Installing the pipe, restoring the original grade, and applying permanent stabilization will greatly reduce the potential impact the streams and wetlands at the bottom of the slope.
H	227.65; 228.45	228.25; 229.1	Paris Mountain	Steep Slopes	The steep slopes and heavy rains in this area have resulted in continued failure and maintenance of ECDs. Installing the pipe,

Spread	MP Start	MP End	Area	Status	Stabilization Measure
					restoring the original grade, and applying permanent stabilization will greatly reduce the potential impact the streams and wetlands at the bottom of the slopes.