



PO Box 973, Charleston West Virginia 25324

August 27, 2026

Dillard Price, Chief of Parks
WV Division of Natural Resources
State Parks and Recreation Section
112 California Ave
Charleston, WV 25305

RE: North Bend Rail Trail Assessment

Chief Price,

Thank you for the opportunity to collaborate with the State Parks and Recreation Section on an assessment of the North Bend Rail Trail. We greatly appreciate the willingness of your team to engage in this process and to consider opportunities to strengthen the trail for the benefit of its users, adjacent communities, and the State of West Virginia.

As part of the assessment, we convened a meeting with several key stakeholders, including Steve Conolley, Commissioner of the WV DOT Division of Multimodal Transportation Facilities, members of the North Bend Rail Trail Foundation, and others. Following the meeting, we toured the trail and assessed conditions and opportunities along the corridor. Attached are an Executive Summary and the full report detailing our observations and recommendations.

My overarching conclusion is that all stakeholders along the entire corridor need a renewed understanding and appreciation for the trail's value. Additionally, there is a lack of resources needed to maintain a trail of this size. However, there are many no-cost or low-cost actions that can make significant improvements. Lastly, it is my observation that Superintendent Paul Elliott is doing an excellent job at managing the trail, especially considering the resources available to him.

Throughout the tour, I observed Superintendent Elliott interacting with trail users, adjacent landowners, staff, volunteers, and in law enforcement situations. In every instance, he excelled, demonstrating professionalism, competence, and a solutions-oriented demeanor.

Admittedly, this project was important to me on a personal level due to my involvement with the fiber conduit installation while I was Chief of Parks. I have heard many concerns about the project outcomes. Unfortunately, what we had hoped to be a national precedent setting collaboration between a private company resulting in improvements to public lands, turned out the opposite by diminishing the overall experience and trail condition.

It is my hope that the observations and recommendations emerging from this assessment will help guide future decisions and investments—ultimately improving the North Bend Rail Trail and strengthening the experience for all who use and care for it.

Sincerely,

Samuel England, Executive Director

WV TRAIL

North Bend Rail Trail Assessment
WV TRAIL
May 2026
Executive Summary

WV TRAIL convened key stakeholders for the North Bend Rail Trail and conducted a four-day corridor assessment with North Bend Rail Trail Superintendent Paul Elliott. This effort provided a comprehensive view of current conditions and valuable insight into Superintendent Elliott's operational approach, priorities, and on-the-ground strategies. The full report includes detailed observations and recommendations. This Executive Summary highlights the most significant findings.

Overarching Conclusions

- All stakeholders along the entire corridor need a renewed understanding and appreciation for the trail's value.
- There is a lack of resources needed to maintain a trail of this size.
- Superintendent Paul Elliott is doing an excellent job at managing the trail, especially considering the resources available to him. Additional budget and staff would offer him opportunity to manage even more affectively.

Key Observations:

The observations in the full report are organized by trail surface, tunnels, bridges and etc. The more important observations include the following sections:

Trail Surface - The overwhelming majority of conversations and complaints of NBRT are concerning trail surface condition; namely the finished surface stone and water management. These concerns are due to a number of factors.

- Fiber install damage
- Trail surface elevation and ditch line establishment at tunnels
- Unsanctioned Trail Use
- Water directed from DOH public highways
- Water directed from private lands
- Inability to install new culverts due to the fiber conduit
- Incorrect stone application
- Vegetation overgrowth
- Surface Maintenance

A comprehensive plan to address these concerns needs developed with priorities and funding solutions over time.

Fiber Install: The most significant current negative impacts to the trail are from the fiber installation. The contractor has damaged the trail throughout the corridor through a number of actions.

- Unsupervised methods and means used for the install
- The contractor used the trail to travel to and from worksites
- Many culverts were cut through during the fiber install and generally little done for repair
- Installing any new culverts is now nearly impossible
- The fiber was installed through the tunnels on top of the gutters or down the middle of the trail.
- Repairs to the conduit left behind 66 identified “soft spots” on the trail surface
- Damaged or removal of gate posts
- Damage to bridge decking on 2 bridges
- Conduit boxes installed are above grade.

Culverts: Water management and culverts are critically connected. There were, however, relatively few trail culvert issues that created significant water issues. Historically, the DNR considered culvert replacement issues to be a primary funding concern. However, after touring the trail, I do not believe that replacing culverts should be a priority. Even with new culverts, they must be maintained. Superintendent Elliott manages culverts well. Some culverts do continue to be a significant concern and need attention. There are 11 identified culverts described in the assessment that need attention.

Tunnels: A feature and identifier for NBRT is its tunnels. The trail actively routes through 10 tunnels. The primary issue that I observed with the tunnels is water management. To correct this:

- The tunnel approaches need to have eroded materials hauled away
- The ditch lines outside the tunnels reestablished so water can drain away from the tunnels
- The gutters re-established in the tunnel
- Then surfacing along the approaches and inside the tunnels to raise the elevation of the trail surface to further create a gutter and water channel.

Crossings: There are 135 road crossings on the trail. Fifty- seven are private crossings and 78 are public road crossings. This equates to an average crossing every ½ mile. For the most part, Superintendent Elliott manages every crossing, public and private. The agency should work with the DOH to eliminate hazards such as ditch lines along public roads that cross the trail and for renewed requirements for private road crossings. The DOH should also consider awareness signs for motorists when the trail crosses a roadway. A set of standards for signage at crossings needs developed.

Unsanctioned/Illegal Use: There is very little observable illegal use of the trail. Unsanctioned use of the trail comes mostly from the fiber installation and DOH requests. Future agreements for such use need to be fashioned so that the trail receives the benefit of improvements, such as an improved surface, when the project is complete. A mandatory payment for use should be considered to mitigate displaced users and State Park expenses.

Alternative Funding and Assistance Programs: The State Parks and Recreation has historically embraced funding sources such as the WV DOH Transportation Alternatives Grants. Often, the matching funds for these grants was provided by the NBRT Foundation. The agency needs to further identify and take advantage of other assistance opportunities. Specifically, the DOT CenForce has expertise, manpower and equipment to assist with projects in the NBRT and has a limited budget to assist with project because the trail falls under the DOT responsibility as a rail banked property. This assistance should be pursued as a priority. Another opportunity would be the military Innovative Readiness Training that brings manpower and equipment from various military branches to provide assistance which the military uses as training for equipment operators. Although the outcome of some of this work can be somewhat rough, they do provide heavy equipment and much needed assistance for projects the NBRT could benefit from.

Budget and Resources: When the NBRT was brought into the WV State Park System, no additional budget or resources were allocated to the agency. The agency simply absorbed the new facility into existing operational resources. An operational budget and equipment were squeezed from existing resources. This has likely impacted the current operational budget. The NBRT budget and resources should be reviewed.

There are 12 recommendations, many of which are low or no cost actions that can be made to make a significant improvement on the trail. Greater detail is provided in the full report.

1. A review of the fiber utility contract and subsequent responsibility for repairs by the contractor.
2. Create a set of trail standards that are the expectation of the trail surface and condition. WV TRAIL would be pleased to provide this.

3. Removal of the center crest and vegetation.
4. Create a sense of arrival at major trailheads.
5. Review of the NBRT budget - It is simply not possible for the trail to be managed at a level consistent with the expectations of rail trail users with the current staffing and resources.
6. Tunnel and Daylighted Tunnel Cut Repairs -
7. Planning, Engineering and Maintenance Review of certain larger projects described in the full report.
8. DOH coordination to assist with diverting highway water away from the trail, repair ditch lines that cross the trail and review agreements for DOH use of the trail.
9. Assistance from DOH CenForce – there are 25 sites that would be excellent CenForce projects to assist with the trail maintenance. Additionally, there is funding that could contribute to trail upgrades.
10. A review of any future private crossing and unsanctioned use requests and the associated agreements.
11. A review of water being channeled from private land onto the trail corridor.
12. Resolve the landowner conflict at Wolfe Summit, Mile Marker 1.

North Bend Rail Trail Assessment

WV TRAIL

May 2026

The North Bend Rail Trail is a 70-mile east west corridor from Wolfe Summit to Happy Valley WV. On May 4, 2026, WV TRAIL convened a meeting with key stakeholders to better understand the challenges, perspectives, values, and expectations surrounding the trail. Participants included:

- Steve Conolley, Commissioner, WV DOT Multimodal Transportation Facilities
- Ella Belling, President, WV Rails-to-Trails Council
- Brad Reed, Executive Director, WV State Parks Foundation
- Paul Elliott, Superintendent, North Bend State Park
- Ken Adams, Steve Simonton, and John Pellegrin, volunteers and Board Members, North Bend Rails to Trails Foundation
- Sam England, Executive Director, WV TRAIL

Following the meeting, Superintendent Elliott and I conducted a four-day vehicle-based tour of the trail, beginning in Happy Valley and concluding at Wolfe Summit. This provided a comprehensive view of current conditions and offered valuable insight into Superintendent Elliott's operational approach, priorities, and on-the-ground strategies.

Regional Connectivity and Importance:

The trail is just a few miles of reaching both Parkersburg and Clarksburg which would significantly increase use and support. In the past, intentionally and circumstantially, the state's rail trails ran short of major communities. Part of the idea was that a trail should be a "more remote" destination recreation facility rather than connecting larger communities. Recently the Greenbrier River Trail created a trailhead to the town of Cass. There are efforts in both Wood County and Harrison County to connect the trail to Parkersburg and Clarksburg. These efforts should be strongly supported where possible.

There are efforts for more regional and national connectedness using the NBRT. The Parkersburg to Pittsburgh Corridor (P2P) and the American Discovery Trail (ADT) are two major trail efforts hoping to close gaps like connections into Parkersburg and Clarksburg. There are existing and ongoing efforts at collecting data that support the economic and community development that comes along with long distance trails. The P2P recognizes that this development hasn't occurred and is currently working with a consultant to understand why and what steps need to be taken to see this development realized. During the time that Superintendent Elliott and I were touring the trail, we attended 2 community meetings in Ritchie and Doddridge Counties to help the consultant understand these concerns.

Economic Impact Potential:

One of the more successful eastern rail trails is the 150-mile Great Allegheny Passage (GAP) that runs from Cumberland Maryland to Pittsburgh PA. A recent economic impact study determined that the GAP generates more than \$800,000 per mile annually with a total economic impact of \$121 million. [The full report can be found here.](#) The most recent state parks economic impact study reports that the NBRT generates \$4.21 million. [The report can be found here.](#) As you can see, the NBRT has significant potential for much more additional economic development along the corridor. An even greater benefit exists for the communities where the NBRT passes, through improvements in citizen health and well-being, community pride, population retention, community improvements and other benefits proven to be brought by trails.

Priorities

In our stakeholder meeting we determined priorities for trail repairs and improvements (listed in the order discussed):

- Closeness to North Bend State Park
- High Use Areas
- Safety Concerns
 - Bridge Decking
 - Tunnel Management
- Drainage Associated with Tunnels
- Proximities to Communities
- Parking and Public Access
- Culverts
- Bridges
- Identifying Sequential Work Flow (such as fixing drainage issues before resurfacing)

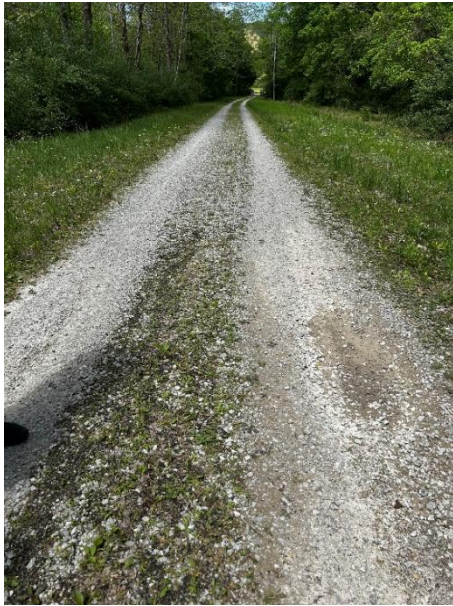
On the tour I saw very little safety concerns for the public use of the trail. I believe that Superintendent Elliott takes action to address any known safety issues.

Surface:

The overwhelming majority of conversations and complaints of NBRT are concerning trail surface condition; namely the finished surface stone and water management. These concerns are due to a number of factors.

- Fiber install damage
- Trail surface elevation and ditch line establishment at tunnels
- Unsanctioned Trail Use
- Water directed from DOH public highways

- Water directed from private lands
- Inability to install new culverts due to the fiber conduit
- Incorrect stone application
- Vegetation overgrowth
- Surface Maintenance



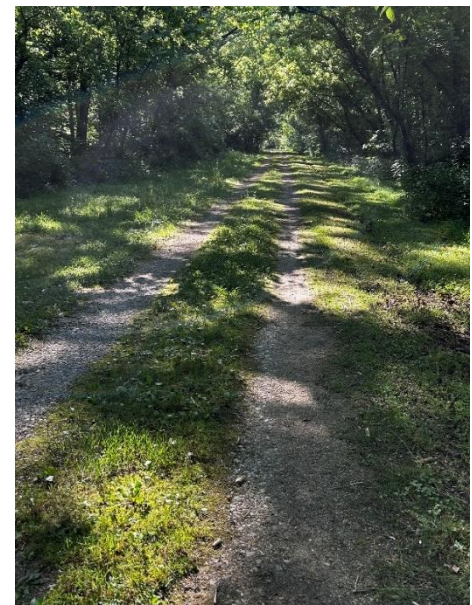
My tour of the trail was in a state vehicle and from that perspective, most of the trail seemed to be “acceptable”. It is my opinion that most visitor complaints are around expectations. The photo on the left is a general



representation of the NBRT. There are many notable exceptions especially at tunnels, crossings, culverts, damaged areas and other areas. The photograph on the right is the Harrison South Rail Trail which represents what most users expect in a government managed rail trail.

The main difference is the type of stone surface, the compaction, corridor clearing and a full width useable surface. This photograph shows the “model section” that was resurfaced from a Transportation Alternative Grant in 2017. A fabric underlayment was applied and then proper stone applied using an asphalt spreader.

This might seem acceptable to some but is not the expectation following this investment. However, in just a few short years, parallel ruts with a grass center obviously point out negative impacts resulting from excessive vehicular traffic and a lack of maintenance. The lack of maintenance is simply a lack of proper equipment, budget and staff. Additionally, the underlayment has been



damaged and not repaired by the recent fiber conduit installation (discussed further in this report).

The type of stone for the finished surface is significantly important. Many trails use compacted ASSHTO 10 stone, commonly known as stone dust or screenings, which is a fine, crushed aggregate ranging from 3/8 inches down to silt-sized particles. which is similar to limestone fines. It is easily compacted and is the preferable surface product for soft surface rail trails.



This picture represents damage by the fiber install. The contractor dug holes, placed the overburden consisting of ballast and all forms of stone onto the finished surface and then swept the material into the hole without regard to the finished surface of the trail. The only solution here is to resurface the trail with proper materials.

In one section of the trail, the incorrect size stone was purchased and placed as the finish grade, and is still in this condition. In a recent Visitor Assessment for the P2P Corridor Project, the consultant described his experience, "Given the condition of the trail surface, a stretch of this length takes longer than on a smoother trail, making the distance between services more notable." The summary of the trails surface condition was summarized as, "The trail appears

to be inconsistently managed. The poor surface condition does not meet the destination trail standard or even expectations of local users. At a 2025 community meeting, a participant referred to the trail near Happy Valley as being 'a bone crusher'". In the same P2P report the author noted, "The majority of the trail from Ellenboro east to Wolf Summit was in pretty rough shape. Our team has long been familiar with the trail's reputation as being "unimproved" in this section, however, so we were prepared for the surface conditions."

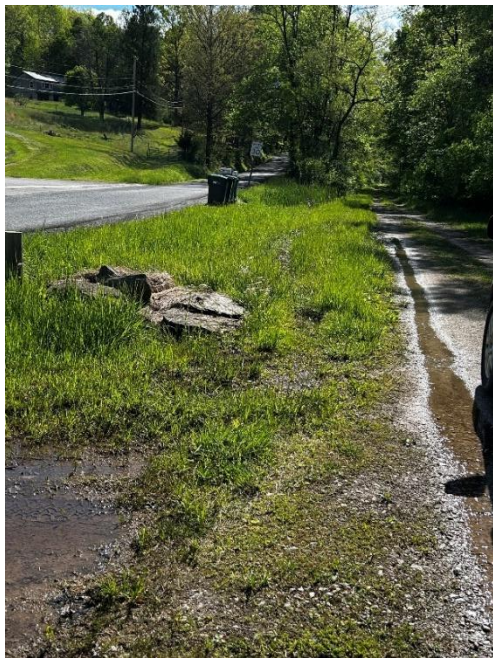
A plan to address the multitude of concerns of the surface condition needs developed. The management and removal of the crown and center vegetation will have the most immediate positive impact and likely the least expense. The purchase of a Grade Master implement for grading roads is one example of a tool for knocking down the center crest. Annual herbicidal treatment, especially where vegetative growth is most problematic is needed. This can be

applied by a contractor. The Mon River Trail Conservancy hires this task annually at a cost of approximately \$115 per mile.

The plan should be prioritized for the greatest impact by taking into consideration the closeness to towns, North Bend State Park, higher use and readiness for repair. An adequately increased maintenance budget to permit regular surface maintenance is needed. The long-term goal should be to identify sources for annual investments to resurface the entire trail over a time period

Water Management:

Another major surface concern is water management. There are 29 sites where water is an issue. the tunnel approaches, discussed in the section on tunnels, add additional critical water issues. Most of the larger water management concerns are from water from adjacent



properties. These photographs show water that's been diverted from the public road to the trail. There are 9 sites directly resulting from the DOH directing water onto the trail from the nearby public highway. These photographs, located at Duckworth, is an excellent example of how the DOH can and should assist with the condition concerns of the NBRT. Unfortunately, attempts by Superintendent Elliott to have this addressed have gone unanswered.

There are 6 sites where the private landowners divert water from adjacent development to the trail. This picture is an example in Ellenboro where the developer



created a drain that is pointed directly at the trail. The drainage should be changed or, if this is the only solution for draining the water from the site, the landowner should be required to continue the culvert and drainage system across and away from the trail.

There are 10 sites that could be repaired in-house if Superintendent Elliott had the staff and time. However, this is nearly impossible because of the inability for Superintendent Elliott to install culverts due to the conduit install. This is a serious concern. The private fiber installation company should not be permitted to simply wash their hands of any responsibility after restricting the ability to properly manage the trail.

Culverts:

Water management and culverts are critically connected. There were, however, relatively few trail culvert issues that created significant water issues. Historically, the DNR considered culvert replacement issues to be a primary funding concern. However, after touring the trail, I do not believe that replacing culverts should be a priority. Even with new culverts, they must be maintained. Superintendent Elliott manages culverts well. However, culverts do continue to be a significant concern and need attention.

There are 11 identified culverts that need attention:

- 3 sites that to avoid future damage or flooding, an access route should be constructed to the culvert inlets for maintaining the culverts. I consider this a primary funding need.
- 2 culverts that are not working that are directly related to being damaged by the fiber install. The contractor should be required to make this a priority repair.
- 6 sites that should have Planning, Engineering and Maintenance review.
 - 2 sites have sink holes on the trail. Each partially covered with road plates to help with safety.
 - 4 sites have the ponded backed up water and the trail is a dam.

Tunnels:

A feature and identifier for NBRT is its tunnels. The trail actively routes through 10 tunnels plus 2 additional ones along beside the trail that the railroad routed the corridor away from the tunnel decades ago. The 10 tunnels are a total 10,120 feet in length. Representing almost 2 miles of tunnels. This means that 2.5% of the trail is within a tunnel. According to tunnel numbering, there are 9 tunnels that are routed around or daylighted.

The primary issue that I observed with the tunnels is water management. Every tunnel appeared to have the same issues:

- The approaches to the tunnels are steep and narrow and are generally setting on bedrock. This creates significant challenges for water management.
- Since the approaches aren't drained well, this often causes water to set within the space or to back up into the tunnel and often flow through the tunnel. This then creates significant surface issue.
- Since tunnels are dark, the uneven surface and water in the tunnels is a safety concern.
- The water and surface management issue is exacerbated by the fiber install, who used the gutter on 1 side or the middle of the tunnel to install the conduit.
- Almost all tunnel entries have significant erosion from the materials above and around the tunnel entrance supports that need removed.



The photograph on the left shows inside of a tunnel. The photograph on the right shows attempts by the railroad decades ago to divert water from above the tunnel to ditches created along the cut. Water management has always been and always will be a matter at tunnels.



To correct this:

- The tunnel approaches need to have eroded materials hauled away
- The ditch lines outside the tunnels reestablished so water can drain away from the tunnels
- The gutters re-established in the tunnel
- Then surfacing along the approaches and inside the tunnels to raise the elevation of the trail surface to further create a gutter and water channel.

It is important to consider that 1 tunnel was repaired and in such good condition, the local high school used the tunnel for sprint training. When the fiber was installed, it damaged the surface so much that it is now unsuitable for use and can't be used for that purpose. In order to repair, the fiber company will need be part of the solution in order to identify the conduit in these areas. Otherwise, they may be damaged by making repairs or they need to be required to make the repair.

Lastly, there is no reasonable management action that can eliminate ice development in and around tunnels in winter. There may be times when the condition of the ice in and around tunnels requires the agency to post existing ice conditions on the trail. The GAP trail has installed doors on one of their tunnels and closes them to the public in winter.

Crossings:

There are 135 road crossings on the trail. Fifty- seven are private crossings and 78 are public road crossings. This equates to an average crossing every ½ mile. For the most part, Superintendent Elliott manages every crossing, public and private. On public crossings, most are situated along smaller country roads with limited traffic. There are no signs or other markers on most of the public roads warning motorists of the trails crossing. The DNR should consider working with the DOH for warning signs on public roads. On the trail, the optimal trail sign solution is a warning sign that faces oncoming trail walkers and bikers and then a "Stop. Unauthorized Motor Vehicles Prohibited" sign on the opposite side of the post informing motorized traffic that they are not permitted. Currently there are a total of 87 signs at public crossings. If there were a set of signs at each crossing and on both sides, there would be 312 total signs. The current inventory represents that only 28% of crossings are properly equipped.

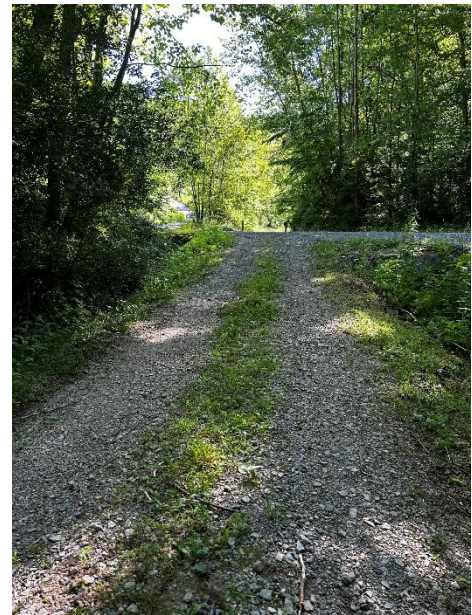
A different solution should be considered on public crossings within towns. For example, in some towns there are public crossing simply a block apart. Installing signs at each of these seems to be unnecessary. Some solution should be developed that helps long distance users become aware of approaching a town and that there are multiple crossings in town while also informing local users is needed.

This picture represents an issue found at some public crossings. A deep ditch created by the DOH to manage water for the public road, must be navigated by unknowing trail users, often requiring getting off a bike and walking over the deep ditch. These needs repaired, however, attempts to work with local DOH offices to address these have not been successful.



Of the 57 private crossings, there are a total of 18 warning and stop signs. If there were a set of signs at each of these crossings there would be a total of 228. Therefore, there are 8% of the signs necessary to fully cover all the private crossings. The main concern with private crossings is that Superintendent Elliott is expected to maintain the signs, gates and surface for each one.

This picture is of a private crossing to a gas and oil well development site. The new road was constructed at a significantly higher level than the trail (difficult to fully see in the picture). The concern is that it is so steep, many bikers must dismount and push the bike over the hump. To fully repair this site would require a significant amount of base material on each side of the trail to create a slope that can be navigated by most bikers.



The safety for each private crossing falls to the state as well. Any future private crossings granted should include language requiring the private landowner to maintain the crossing to a set of standards that include trail surface standards, water management, signage and gates. Existing private crossings should be explored to require the same.

Unsanctioned/Illegal Use:

I was surprised by the minimal illegal use of the trail by off road vehicles. I believe this is a testimony to the work and presence of Superintendent Elloitt and DNR officers who are patrolling the trail. Although not completely absent, it seemed well controlled.

The most obvious unsanctioned use of the trail is the fiber installation, which I've described in further detail below. Secondary to that is the temporary use of the trail for public roadway access. I noted 6 locations where requests are made by the DOH for the trail to be the emergency flood access or temporary road for bridge repair and inspection. One ongoing

example is the replacement of a bridge on U.S. Route 50 where the trail is being used for access by the contractor, delivery of materials, and access for large equipment and was used as a temporary road when part of the bridge was closed. Future agreements for such use need to be fashioned so that the trail receives the benefit of improvements, such as an improved surface, when the project is complete. Potentially a mandatory payment for use should be considered to mitigate displaced users and State Park expenses.

Bridges:

There are 43 Bridges on the NBRT and most of them are truly features. There are 25 wood deck surfaced bridges totaling 2,235 feet of decking. There are also 18 box concrete culvert bridges. Most of the bridges are in good condition. Only a few are needing redecked. Some of the bridges were redecked by local governments. A couple of the bridges cross over major roadways and they are inspected by DOH. Bridge #23 needs redecked but Superintendent Elliott is concerned about the potential of dropping tools or supplies onto the roadway beneath and feels they should be contracted out for redecking. I agree with his assessment.

Slips:

Slips are a regular occurrence with any rail trail in WV. I observed 5 slip sites. Most of them are uphill slips that deposit material onto the trail. Superintendent Elliott is easily able to manage these due to the size. A more major downhill slip exists on the south side of the trail that likely happened with a flash flood event. This has created a very narrow corridor as some of the trail and all of the shoulder have slipped away. The trail is very narrow and will be impassable by vehicle with much more additional erosion. Superintendent Elliott states that a gas and oil company in the area, has agreed to install a culvert and shore up the site. This site needs follow up to learn about when this repair can be expected and should be investigated once completed. It would be a good DNR Planning Engineering and Maintenance (PEM) project. Note: This damage occurred several years ago and shows little continued degradation.

Fiber Install:

I was involved with the fiber install concept from the inception. The entire idea was to meet the two priorities of expanding broadband and improving the NBRT. Unfortunately, what could have been a nationally recognized precedent setting public private collaboration, has resulted in worsening conditions of this public resource. The contractor has damaged the trail throughout the corridor through a number of actions.

- Many unsupervised methods and means used for the install have left damage in many ways including the loss of ditch lines, which have created water damage, and damage to trail surface when the fiber was installed within the trail proper. This picture shows the underlayment fabric from the 2017 TA Grant that was brought to surface with installation equipment and not repaired. This is doubly concerning as the fiber install was to be off of the trail corridor in the shoulder area to reduce any damage.
- The contractor often used the trail to travel to and from worksites rather than using public roads for access. This created rutting of the trail due to the number of vehicles passes and the time of year traveling.
- Superintendent Elliott states that many culverts were cut through during the fiber install and generally little done for repair. The conduit was installed at 40" below the surface and many culverts were unseen and above the 40" limit. This has resulted in water damage to multiple places on the trail, many still yet to be identified, as water is restricted or unable to pass through the culvert and backs up on to adjacent land or over the trail.
- The 40" depth of the conduit installation is even more concerning since installing any new culverts is now nearly impossible because of the risk of damaging the fiber line or the line being in the way. The fiber company needs engaged to be a partner in the repairs or installation of culverts at no charge to the agency.
- The fiber was installed through the tunnels on top of the gutters or down the middle of the trail. This either left damage to the surface inside the tunnels or exacerbated the tunnel drainage issues. Conduit installed in the gutters has concrete poured on top which is actually higher than the trail surface and prohibits proper drainage.
- There are 66 identified "soft spots" on the trail surface where repairs to the conduit were made. The contractor installed the conduit in the trail surface because of the narrow ROW. They dug out the materials, laid the overburden on top of the trail surface (which were sometimes limestone fines) and then swept the materials into the hole without regard for the surface. This left a surface patch that is a mix of materials including the fines, the ballast and large stone.
- Much of the equipment used for installation was too wide for the trail gate barriers. In order to pass through gate openings, the posts were either pushed outward by equipment or simply removed and not reinstalled. This made many of the gated



crossings now unable to be secured. The superintendent also reports that many of the locks for the gates were lost by the contractor.

- There is damage to bridge decking on 2 bridges due to the size of equipment being wider than the normal support on the bridges.
- There are places where conduit boxes are above grade and have caused issues with mowing and maintenance. Also, there are boxes partially located within the trail surface which is unacceptable.

Many of these issues have been reported to the fiber company and have gone unaddressed. Superintendent Elliott feels he's been chasing repairs to the trail following the conduit unaddressed damages for 6 years.

Since our assessment, however, Superintendent Elliott met with conduit contractors on site, touring from Wolfe Summit west to Long Run. He reports, "The new contractor seemed genuinely shocked at the trail's condition resulting from the previous contractor's work. I think that is a good sign for repairs, but they seemed to want to redress the surface rather than replace the lost material except in the areas of excavation." It is my recommendation that the DNR become involved in an official capacity, communicating expectations on addressing outstanding punch list items, communication on installation methods and means and providing detail on the final trail surface expectations.

In the recent P2P Corridor Visitor Assessment, the biker summarized the fiber install, "Recently, the trail corridor was used as a utility corridor..... Unfortunately, the surfacing stone was not an ideal size, leaving behind marble-sized gravel. This is acceptable for larger-tired bikes, but would be discouraging for road bikes and generally made for slow going."

Volunteers:

The North Bend Rail Trail Foundation has been actively involved with the NBRT almost since its inception. Three foundation volunteers attended the stakeholder meeting. Three of the four days we toured the trail; we encountered 1 specific volunteer clearing fallen trees and brush from the trail using his own vehicle and equipment. The foundation is to be commended for volunteering labor and for applying for and raising matching funds for TA grants.

I also found it encouraging that many adjacent landowners take great pride in the trail and show this by mowing a section of the trail, removing litter and managing vehicle barricades. In some areas, the local volunteers maintain kiosks, shelters, pit toilets and a library box.

I'm unsure what the condition of the trail would be without these volunteer efforts. I am quite sure, however, that there is significantly more unseen volunteer support of the NBRT.

Other Inventory:

There are 37 designated camping and resting areas. The resting areas are simply a picnic table with a mowed area. Five camping sites are fee based. There are 5 shelters, 4 pit toilets, 8 fire rings. There are 2 bike repair sites. Many areas have trash cans available. All of these inventory items require additional management time and are likely different than the other 2 DNR managed rail trails.

Recommendations

Recommendation #1 – A review of the fiber utility contract: I was Parks Chief when the idea of using the rail trail corridor for the right of way (ROW) for a fiber line. The original idea was that this could be a national precedent setting project for private improvements on public resources. In return for using the ROW, the company was to leave behind a renewed and pleasing trail product. My observations and the reports of Superintendent Elliott proved to be just the opposite. There remains a punch list of items that have never been addressed and it is my understanding that there is a renewed contract with the company.

We recommend a review of the contract with the fiber company and to assure that existing repairs are made for the trail prior to any further work or contract extensions. The contractor should be required to be held responsible for repairs and likely a more formal engagement on the punch list, expectations and outcomes.

Recommendation #2 – Create trail standards expectation: I would characterize the trail surface as a gravel road. A trail surface standard that meets the expectations of rail trail users should be established that incorporates the use of ASSHTO 10 stone, bridge decking, culvert management, tunnel management and water management. This standard should be used as the standard expectation of the DNR for:

- Contractors and agencies using the trail for unsanctioned uses
- Private and public crossings agreements
- Creation of a long-term improvement and investment plan using the standards as the expected future trail condition.

If acceptable, WV TRAIL would be pleased to create these trail standards.

Recommendation #3 – Removal of the Center Crest and Vegetation

A cost effective and impactful management action would be the removal and spraying of herbicide on the vegetative crest on the center of the trail.

- The purchase of a Grade Master implement for grading roads is one example of a tool for knocking down the center crest. This product would be approximately \$4,000.
- This would also require rolling the section after leveling the surface.

- Annual herbicidal treatment, especially where vegetative growth is most problematic is needed. The Mon River Trail Conservancy hires this task annually at a cost of approximately \$115 per mile.

All of these are within the Superintendent ability if given the budget and staff for accomplishing.

Recommendation #4 – A Sense of Arrival: Entrance signs should be installed at both trail terminuses and at major trailheads. The trail currently has a kiosk in some locations and a standard sign with the mileage to trailheads. Formal parking locations with signage should be established where possible.

Signage should also be developed to alert trail users that they have reached the end of the managed trail. We encountered a through biker who in fact had traveled west from Happy Valley, completely confused that the trail simply turned into high weeds, downed trees and brush. In one report I saw this summary of the trailheads, “The east and west trail terminuses seem to be temporary starting points, waiting to be extended to the nearby larger communities of Parkersburg and Clarksburg.” More formal trailheads with adequate signage and parking will greatly improve the trail user experience.



NORTH BEND RAIL TRAIL	
TOWNS	MILES
WALKER.....	10.0
PETROLEUM.....	17.0
CAIRO.....	24.0
CORNWALLIS.....	26.5
NORTH BEND	
STATE PARK.....	27.0
ELLENBORO.....	32.0
PENNSBORO.....	37.0
GREENWOOD.....	42.0
WEST UNION.....	50.0
SMITHBURG.....	53.0
SALEM.....	63.5
WOLF SUMMIT.....	70.0

Recommendation #5 – Review of NBRT Budget

Superintendent Elliott and I spent 4 full days driving the trail, stopping periodically to review concerns or discuss the trail. He engaged with users, adjacent landowners and law enforcement situations throughout. I’m sure that this is normal in his patrolling the trail. It occurred to me that the NBRT is 70 miles long but it’s also 140 miles of adjacent landowners. He has 2 hourly staff to maintain its entire length. **It is simply not possible for the trail to be managed at a level consistent with the expectations of rail trail users with the current staffing and resources.**

When the NBRT was brought into the WV State Park System, no additional budget or resources were allocated to the agency. The agency simply absorbed the new facility into existing operational resources. An operational budget and equipment were squeezed from existing resources. This has likely impacted the current operational budget. We recommend a review of the personnel and budget for the NBRT. With additional staff, equipment and funding, the trail could be managed more to user expectations.

Recommendation #6 – Tunnel and Daylighted Tunnel Cut Management:

There are 10 tunnels that the trail passes through and a number of other locations where tunnels have been daylighted that have steep slopes. Water management is a problem at all these sites. The solution doesn't seem complicated but does seem to require equipment larger than the NBRT current fleet. A plan to address every location should be established. The solution would be:

- Removal of eroded materials from the steep slopes and tunnel faces
- Establish ditch lines along cuts to divert water away from the area
- Establish gutters within tunnels
- Elevate the trail surface with stone and finished surface stone through the cut and the tunnel. This improves the surface and creates a drainage gutter.

Recommendation #7 – Planning, Engineering and Maintenance Review

There doesn't seem to be any critical safety concerns on the trail. However, the following projects should have PEM involved in the solution due to the likely need for engineering solutions or input.

- Three culverts need an access road to the inlet for maintenance. I consider this a priority to assure the culverts aren't blocked creating flooding behind or overtopping.
- Six culvert sites that should have engineering review due to ponding or sink holes to determine a solution and for safety.
- The redecking of bridge #23 which crosses over the main highway should be a contracted job when the need is determined and funding available.
- The slip at 60.9 may actually get repaired by a local gas and oil company, however, PEM should be included in the communication on this repair.

Recommendation #8 – DOH coordination:

Many of Superintendent Elliott's requests to the DOH have not been addressed. I believe that this relationship likely varies across 2 different DOH Districts and 4 Counties. A more official approach may be needed by the DNR to request assistance in addressing issues created by the DOH.

- Managing water from public highways away from the trail. If no solution exists other than directing water onto the trail corridor, then assist with the installation and maintenance of ditches and culverts for those sites.
- Repair to ditches at public road crossings to remove the hazard for trail users.
- Formal agreements with the DOH for the unsanctioned use of the trail and expectations of the trail standards and maintenance following the project.

Recommendation #9 – Assistance from DOH CenForce

A potential solution for a number of the issues on the trail would be the WVDOH CenForce. We identified 25 sites that are potential CenForce project areas. Many of these sites are DOH related issues where water from the public road is being channeled onto the trail. CenForce crews have the expertise, equipment, materials and the local DOH coordination to find solutions. Other sites that make sense for CenForce assistance are where repairs require large equipment and expertise in ditching and draining. Good examples of this would be the tunnels, tunnel approaches and steep cuts.

There is potential funding for CenForce projects on the North Bend Rail Trail due to the status as a rail banked property, actually under the jurisdiction of the WV Department of Transportation. A meeting on site with the prioritized repairs should be coordinated with the DOT.

Recommendation #10 – A review of any future private crossing and unsanctioned use

requests: The DNR should take a strong stand in the process for permitting use of the trail or installation of crossings. Currently, the responsibility for maintaining these crossings falls back on the DNR. I don't know of any requirements of the property owners to maintain a standard at the crossings. It is my recommendation that any future requests be heavily scrutinized for actual need and that standards for maintaining that crossing, or section used, to be the responsibility of the private landowner. Those responsibilities should include gates, signs, erosion, water management and surface standards established by the DNR.

Recommendation #11 – A review of water being channeled from private land onto the trail corridor:

There are 6 sites where the private adjacent landowner is diverting water from development to the trail. Landowners should be required to find other water management solutions that do not negatively impact the trail. If this is the only method for draining the water from the site, the DNR should take a more formal review of requiring the landowner to continue the culvert and drainage system across and away from the trail.

Recommendation #12 – Landowner conflict at Wolfe Summit MM1

At Mile Marker 1 a landowner conflict exists where the adjacent landowner insists that the former parking area for the trail is on his property. To steer clear of any conflicts, the parking area was moved to the trail corridor and the trail shortened. A surveyor should be hired to resolve the boundary dispute. This will allow the trail to connect with the Harrison South Trail, continue into Clarksburg, and provide a better parking area for trail access.