

From: (b) (6)
To: jennifer_stanhope@fws.gov; david_paylor@deq.virginia.gov
Cc: brian_evans@fws.gov
Subject: Comments on the Biological Assessment by FERC on the Roanoke logperch
Date: Wednesday, July 12, 2017 3:29:32 PM
Attachments: [20170712-5097\(32263136\).pdf](#)

Dear Ms. Stanhope and Director Paylor,

Please find enclosed a letter that I addressed to both of you as agencies required to review FERC's Biological Assessment for the MVP, specifically a threatened & endangered species.

I will provide by US mail a copy as well. I have posted this letter to the fREC website.

Best regards,

(b) (6)
Blacksburg, VA

July 12, 2017

Jennifer Stanhope
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service; Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

Mr. David Paylor, Director
Virginia Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

Dear Ms. Stanhope and Director Paylor,

Statement

As you are aware, FERC submitted their Biological Assessment (BA) on July 7, 2017,¹ and I anxiously awaited its release after reading the FEIS,² primarily because of my concern for the Roanoke logperch (RLP). FERC concluded that the project is **likely to adversely affect** this threatened and endangered species (TES). This was welcome news for me. The environmental contractor, Environmental Solution & Innovations (ESI) had previously determined the same, that the project *may affect* and is “*likely to adversely affect*”³ the species. The final decision on whether to permit the applicant to cross 13 streams considered RLP habitat in Virginia, remains the responsibility of both the U.S. Fish and Wildlife Service (FWS) and the Virginia Department of Environmental Quality (VDEQ). I am hopeful that your agencies will study the FERC-BA, the ESI-BA, and the USFS Sedimentation Analysis (ESI), and find that the threat to this darter’s habitat is too great.

Man-made activities have largely extirpated this species from its historical range, which was likely wide spread throughout both Virginia and North Carolina many years ago. The RLP was first documented in 1889 by Jordan.⁴ Urbanization has had a regrettable effect on many species; however, we do have agencies like yours, whose duty it is to protect TES.

As anticipated both ESI and FERC staff adhered to the U.S. Fisheries & Wildlife Service (FWS) Habitat Conservation Planning (HCP). They determined that construction and operation activities would in fact cause “harm” to the RLP and its habitat (the incidental

¹ FERC Submittal 20170707 4008(3225229)

² FERC Submittal 20170623 4000(32228865)

³ ESI Submittal #20170314 5145(32030563)

⁴ Jordan, D.S. 1889. Descriptions of fourteen species of freshwater fishes collected by the United States Fish Commission in the summer of 1888. Proceedings of United States National Museum 11:351 362.

take permit issuance criteria). Nevertheless, large construction projects are frequently approved following re-structuring of mitigation plans to protect the species. I have grave concerns on the efficacy of proposed mitigations by the applicant and I will use the words of FERC and the applicant to reinforce my concerns.

First, I would like to preface my discussion with noting that the “record of Mountain Valley’s correspondence and coordination with the FWS and other agencies is included as appendix A,”⁵ is considered “privileged and confidential;”⁶ therefore, Intervenor and stakeholders have no access to the record. ESI managed to use a system that provided the reader with the necessary information, while blacking out mileposts (MP’s) or specific identifying information; **that was greatly appreciated**. Furthermore, many MVP documents initially labelled as “privileged and confidential,” for the USFS **were later released at the USFS request**. Not having access to correspondence with the FWS is troubling, because it should be part of the record.

FERC’s BA states:

Increased sedimentation and turbidity resulting from instream and adjacent construction activities would displace and impact fisheries and aquatic resources. Sedimentation could smother fish eggs, mussels, and other benthic biota and alter stream bottom characteristics, such as converting sand, gravel, or rock substrate to silt or mud. **These habitat alterations could reduce juvenile fish survival, spawning habitat, mussel habitat, and benthic community diversity and health**. Increased turbidity could also temporarily reduce dissolved oxygen levels in the water column and reduce respiratory functions in stream biota. Turbid conditions could also reduce the ability for biota to find food sources or avoid prey. The **extent of impacts** from sedimentation and turbidity would **depend on** sediment loads, stream flows, stream bank and stream bed composition, sediment particle size, and the duration of the disturbances.⁷

FERC’s words, the “**extent of impacts**,” is noteworthy. It is potentially ominous because many factors are beyond the applicants control. The mitigation measures and plans listed by the applicant are numerous and estimable in many cases but **will they be enough?**

Even though the FWS has engaged the public in conservation activities along the North Fork Roanoke River for many years, the RLP recovery is still questionable. The Catawba LandCare group is one conservation partner with the FWS that have been promoting and educating landowners for years (see the following document: https://www.fws.gov/chesapeakebay/masrc/MASRC%20PDFs/E.../2_E_Laughlin.pdf). They advocate protection of the riparian buffer, by planting vegetation, limiting vehicle crossings, and not building in the flood plain. Many landowners have also converted

⁵ Submittal # 20170707 4008(32255229); p. 20 of 308

⁶ *ibid.*

⁷ *Ibid.*

their *lowlands* into hay fields instead of livestock fields to prevent damage to the stream banks and prevent fecal coliform contamination. Very few landowners use herbicides, preferring to mow.

FERC indicates the applicant “would provide funds to continue and expand these restoration activities in the watershed, and expand on an existing, successful, landscape approach that tangibly benefits the federally listed Roanoke logperch with its known, occupied, range.”⁸ And that “funding for logperch mitigation would be derived directly from the number of linear stream feet of Roanoke logperch habitat impacts, as identified with the BA.”⁹ The applicant offers payment as “mitigation,” for the destruction of the habitat, harassment, and killed RLP. Furthermore, the applicants reply to the VDEQ Comment No 4 states: “Permanent impacts to aquatic resources will be mitigated through either existing mitigation banks or state approved In-Lieu Fee programs.”¹⁰ FERC in the final hour has *passed the buck*, instead of insisting on an **alternative route** that would avoid crossing the habitat of a TES 13 times.

The record from the U.S. Fish & Wildlife Service on the Roanoke logperch Recovery program has been consistent for years, and I quote from the *Recovery Tasks* (1992 and 2007):

1.1 Continue to utilize existing legislation and regulations to protect the fish and its habitat. Protection of the Roanoke logperch and its habitat will require the full enforcement of existing laws and regulations (Federal and State Endangered Species Acts, Federal and State Water quality regulations, stream alteration regulations, sediment and erosion control regulations, Federal Energy Regulatory Commission licensing, etc.).¹¹

My greatest fear is that this fish will not receive adequate protection from **any** Federal or State agency.

Mitigation and Construction Practice Concerns

1. The applicant states, “the hydrostatic test water would be discharged through sediment filters in vegetated uplands away from waterbodies and wetlands.”¹² I live near this MP, 227.3 and I assure you it is in very close proximity to the North Fork of the Roanoke River in the Catawba Valley. It may not be “in” the waterbody itself but it is certainly not “away from” the waterbody. Refer to this screen shot from page 259 of 308:

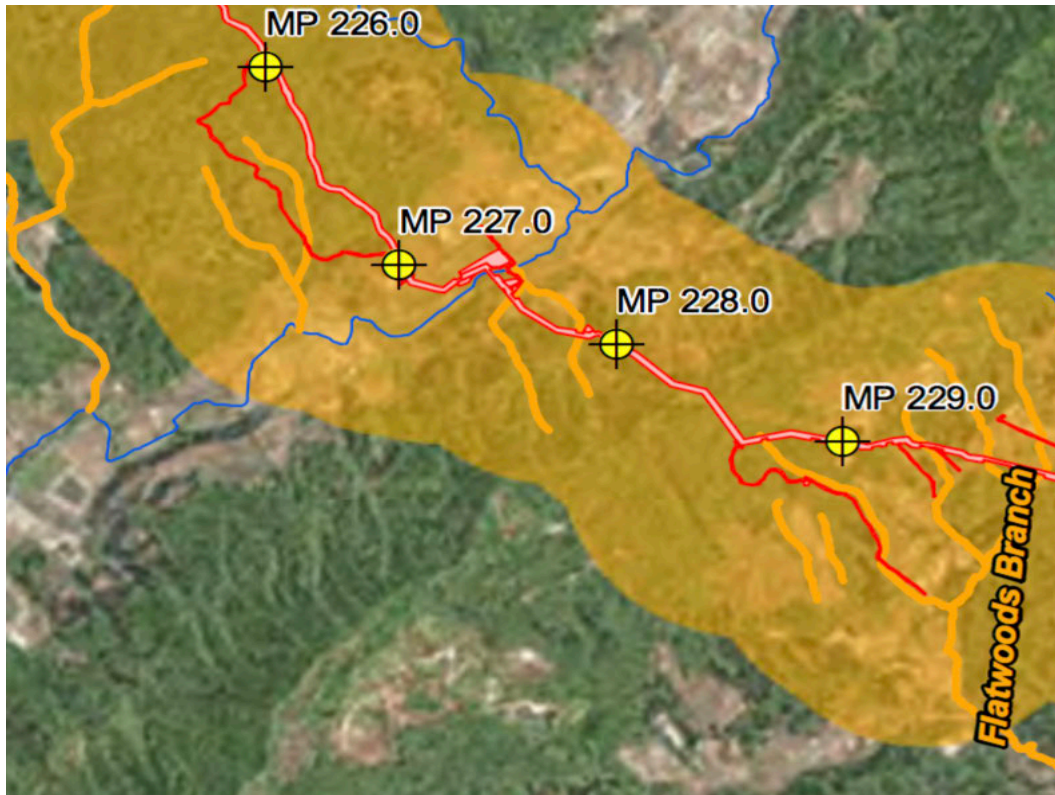
⁸ Submittal # 20170707 4008(32255229); p. 217 of 308

⁹ Ibid., p. 218

¹⁰ Submittal #20170224 5038(31988464); p. 5 of 38

¹¹ U.S. Fish & Wildlife Service Roanoke logperch Recovery Plan; G. Andrew Moser, p 19 Of 35

¹² Submittal # 20170707 4008(32255229); p. 35 of 308



The hydrostatic water discharge at MP 227.3 is almost on top of the *little blue line* known as the North Fork of the Roanoke River. This tributary of the Roanoke River is a known habitat for the RLP. In Montgomery County, water flows downhill. The green areas are mature trees in the uplands and the tan/brown area is the valley floor, where the water flows.

2. FERC notes:

The introduction of excess sediment into waterways may result in temporary changes to water quality. While conservation measures enacted for the Project would limit impacts on waterways, these measures are unlikely to prevent all excess sediment inputs. Although sedimentation of streams by erosion is a natural event, land development and disturbance may accelerate this process. Increased erodibility, due to loosening and exposure of fine particles, would increase the likelihood of sediment-laden runoff in the Project Area. Exposure of bare soils during land development increases the potential for detachment of soil particles, thus increasing the likelihood of deposition within adjacent and nearby waters. The biological effects of sediment and methods to quantify sedimentation created by the Project are discussed below; however, effects and biological thresholds are likely species specific.”¹³

¹³ Submittal # 20170707 4008(32255229); p. 47 of 308

Yet, in the *Hydrologic Analysis of Sedimentation* for the USFS conducted by ESI, we see that first order streams, due to their upland location, have *sediment yields* that **“continue to be in excess of 50 percent over baseline after the landscape has transitioned into a steady equilibrium (i.e., year 5; Table 3).”**¹⁴ The subwatershed Dry Run-North Fork Roanoke River (HUC 030101010201),¹⁵ is “a headwater system of the Upper Roanoke that drains to the North Fork Roanoke River.”¹⁶

Increased erodibility, and the likelihood of sediment-laden runoff is of great concern in the steep terrain located on Brush Mountain in Montgomery County and on Poor and Bent Mountain in Roanoke County. Both the Poor and Bent Mountain watersheds include the South Fork Roanoke River, a significant tributary to the RLP habitat, and confusingly **this entire watershed has been ignored** (Bottom Creek and Mill Creek). I recommend that you to read the submittal of Dr. Steven Powers (# 20161220-5120(31850793)). He notes:

Elimination of riparian buffers along the MVP route will further reduce the already insufficient riparian filtration of sediments increasing sediment loads in the Roanoke River. The previous analysis [sedimentation] does not include increases from the South Fork Roanoke River and its tributaries. As the currently proposed route for the pipeline crosses South Fork Roanoke tributaries more times than tributaries to the North Fork Roanoke River, a comparable increase in sediment load will likely occur in the South Fork Roanoke above its confluence with the North Fork Roanoke where the Roanoke River proper begins. This section of the Roanoke River holds the largest known populations of Percina rex, Roanoke Logperch, and its protection from specific threats to the species is essential for its recovery and delisting.¹⁷

Those living in upland areas understand all too well, that a microburst of punishing precipitation on very steep slopes (50 to 70%) with poor, rocky soils, results in a fulminant torrent. Add to that a denuded 150' wide right-of-way (ROW) with recent construction activity and you have the ingredients for a landslide that could have catastrophic results for waterbodies within the RLP habitat.

3. FERC's BA states: “Mountain Valley adjusted the MVP route to the north to eliminate two crossings of the Blackwater River in Franklin County, Virginia and thereby avoid suitable habitats for Roanoke logperch;”¹⁸ yet they do admit later in the statement that, “the majority (74.7 percent) of these impacts are within tributaries to the North Fork Roanoke, Roanoke, Blackwater, and Pigg Rivers; however, **5.7 miles of the North Fork Blackwater River are predicted to be affected directly.**”¹⁹ Even though the applicant did

¹⁴ Ibid., p. 23 of 33

¹⁵ Submittal # 20170303 5014(32002950); p. 9 of 33

¹⁶ Ibid., p. 10 of 33

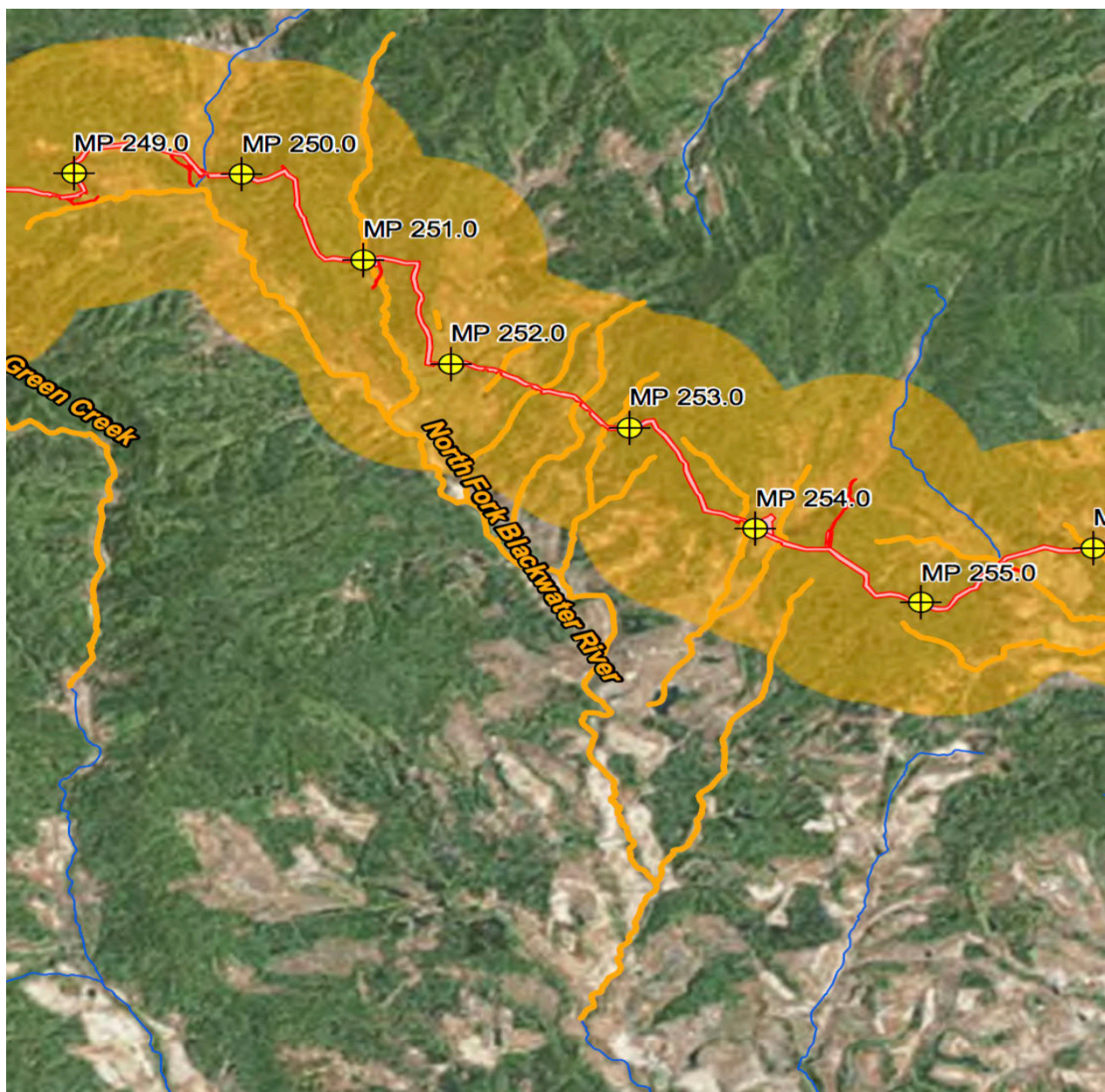
¹⁷ Submittal # 20161220 5120(31850793)

¹⁸ Submittal # 20170707 4008(32255229); p. 62 of 308

¹⁹ Ibid., p. 191 of 308

in fact modify their number of crossings of the Blackwater River, they now **parallel** the North Fork Blackwater River. Paralleling a waterbody can have significant adverse effects that exacerbate erosion and sedimentation. The North Fork Blackwater River is a tributary of the Blackwater River and it is also considered suitable habitat for the RLP. Please view the screen shot attached from page 261 below.

I have also found it useful to use the Roanoke County GIS map for MVP. It is located at: <http://www.roanokecountyva.gov/pipeline>. Use of the magnification button will populate the MP's for the viewer, making the topography clearly understood. One can see the MP section 249.8 to 252 where the North Fork Blackwater River is paralleled by the ROW and the section from MP 249.8 to 250.9 is clearly the ridgetop. I do believe in Roanoke County water also flows downhill.



4. The FERC BA discusses the applicants use of:

- established roadways and bridges to ford waterbodies lessening the need for additional crossings
- electrofishing and translocations, which can have associated potential deaths, which is preferable to no attempt being made to remove and relocate
- blasting and potential deaths (blasting has yet to be determined)
- artificial light and noise affects (unknown)

And then inexplicably for *Impacts from Leaks and Spills*, they indicate MVP has developed a Spill Prevention, Control, and Countermeasures Plan (SPCC), so “potential impacts associated with spills and leaks would be insignificant and discountable.”²⁰ They admit accidental spills are “omnipresent;” however, if a tractor trailer tanker carrying 8,000-gallons of diesel, used to refuel the equipment leaks unobserved overnight in an area that drains into a waterbody it should not be considered discountable. In fact, by definition in the applicants SPCC, they are required to report all spills to the proper agencies; therefore, any sizeable spill is not discountable. If this type of incident were to occur near the Spring Hollow Reservoir, which provides drinking water to the city of Salem and Roanoke County, the effect could be very troublesome indeed.

Summary

I reiterate my earlier statements:

- My greatest fear is that the Roanoke logperch will not receive adequate protection from any Federal or State agency.
- I am hopeful that your agencies will study the FERC-BA, the ESI-BA, and the USFS Sedimentation Analysis (ESI), and find that the threat to this darter’s habitat is too great and deny permitting.

I implore both agencies to carefully consider the “likely to adversely affect” finding. The route the applicant chose is regrettable and its approval could result in the possible extirpation of the species.

Respectfully Submitted,

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²⁰ Submittal # 20170707 4008(32255229); p. 188 of 308

Habitat Affects on the TES, the Roanoke loggerperch



Action

1. Upland Construction
Clearing & grading ;
trenching & stringing
150'ROW; at times
crossing Karst terrain

2. Action Area and
Waterbody Crossing
75' ROW; Paralleling
waterbody, Open cut
dry ditch and HDD of
Pigg River

3. Operations &
Maintenance



Activity

Erosion from clearing
vegetation and trenching;
Significant Rain events on
steep denuded slopes
increases sedimentation and
landslide potential

Riparian vegetation clearing;
access roads and ATWS;
Trenching and blasting;
potential operations spills

Potential drilling fluid spill
(HDD of Pigg River)
Hydrostatic Water Discharge;
potential leaks, displacement
due to scour from extreme
flooding events



Sub Activity

Significant upland erosion
potential increases siltation in
the waterbody.

River bank erosion /
instability due to loss of
riparian vegetation: increased
siltation, damage from
flooding, and increased light
penetration

Toxic effects due to Cl⁻ and
possible natural gas leaks
with other associated
hydrocarbons



Response

Decline in population due to
Habitat degradation primarily
from increased siltation :

Harassment & crushing
Foraging difficulties
Spawning interference
Increased Predation
Disease susceptibility
Displacement