



United States Department of the Interior

FISH AND WILDLIFE SERVICE



Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

March 8, 2016

Ms. Valerie Clarkston
Environmental Solutions & Innovations, Inc.
4525 Este Avenue
Cincinnati, OH 45232

Re: Mountain Valley Pipeline, Virginia
Segments, Docket Number CP16-10

Dear Ms. Clarkston:

The U.S. Fish and Wildlife Service (Service) has reviewed survey reports received as of the date of this letter for the referenced project. Mountain Valley Pipeline, LLC (MVP) is a joint venture between affiliates of EQT Midstream Partners, LP, NextEra Energy, Inc., WGL Holdings, Inc., Vega Energy Partners, Ltd., and RGC Midstream, LLC. The proposed action is construction of the Mountain Valley Pipeline (Project), a 42-inch diameter natural gas pipeline, to allow producers and end-users a direct route to transport new gas supplies to meet the growing need for natural gas in the Appalachian, Mid-Atlantic, and Southeastern United States.

The Project will extend from the existing Equitrans transmission system near Mobley in Wetzel County, WV to Transcontinental Gas Pipeline Company's Zone 5 compressor station 165 in Pittsylvania County, VA. In Virginia, the pipeline is expected to cross Craig, Franklin, Giles, Montgomery, Pittsylvania, and Roanoke Counties. The following comments address the portion of the project within Virginia and are provided under provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA), Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c, 54 Stat. 250), as amended, and Migratory Bird Treaty Act of 1940 (16 U.S.C. 703-712, 40 Stat. 755).

Our recommendations are based on the route alignment provided on December 17, 2015. Once the action area of the project is finalized, an additional review that includes the final route alignment, all attendant facilities, staging areas, etc. will be necessary. Action area refers to all areas directly or indirectly affected by the proposed action and not only the immediate area involved in the action.

Roanoke Logperch Habitat Assessments

We have reviewed the survey report entitled “Habitat assessments for Roanoke logperch (*Percina rex*) along the Proposed Mountain Valley Pipeline in Virginia,” dated and received November 13, 2015. This survey, conducted by an approved surveyor in 2015, found suitable habitat for the federally listed endangered Roanoke logperch. Based on the survey report, suitable habitat occurs at the Project site in the following streams: Bradshaw Creek¹, North Fork Blackwater River, Blackwater River², Magoddee Creek¹, Blackwater River³, and Harpen Creek¹. In addition, the Roanoke logperch is known to be present at the following Project stream crossings: North Fork Roanoke River¹, North Fork Roanoke River AR¹, Roanoke River, and Pigg River.

Several sites were not assessed due to access issues. For future assessments, we recommend a change in methodology. If desktop review indicates that suitable habitat may be present, habitat assessments are typically conducted 200 meters upstream and 800 meters downstream of each site on any stream that may be affected by the proposed Project either directly or through sedimentation and erosion. Abbreviated surveys (100 meters upstream and 400 meters downstream) can be conducted on sites where suitable habitat is not anticipated such as first and second order streams. We will review results of those assessments and provide comments upon receipt.

The Project, as proposed, is likely to adversely affect the Roanoke logperch. Therefore, formal consultation between the Federal Energy Regulatory Commission (FERC) and the Service is required pursuant to section 7 (50 CFR 402.14 [c]) of the ESA.

To enable us to further analyze effects to the Roanoke logperch, provide the following information for streams with suitable or known habitat for Roanoke logperch.

- An alternatives analysis that evaluates avoiding the proposed stream crossings.
- The analysis that supports the conclusion that open-cut/conventional lay of dry ditch crossings will have the least amount of impact.
- Details on any instream blasting or water withdrawals planned in these streams.
- An alternatives analysis that evaluates relocating any facility associated with the Project (staging areas, temporary work spaces, access roads, etc.) that is currently proposed adjacent to these streams. Any facilities near these streams should provide an adequate buffer to avoid impacts.

Freshwater Mussel Site Assessments

We have reviewed the survey report entitled “Freshwater mussel (*Unionidae*) site assessments and surveys for the Proposed Mountain Valley Pipeline in Virginia,” dated and received November 13, 2015. This survey, conducted by a surveyor approved for the Project, found suitable habitat for mussels, but no federally listed mussel species were identified. Based on that survey report, the federally listed endangered James spinymussel (*Pleurobema collina*) does not

currently occur in those areas surveyed in 2015. This survey is valid for 2 years. We support the relocation of any non-federally listed mussels and snails inhabiting the construction footprint prior to instream work using proper State protocols.

No mussels were found at the Craig Creek crossing; however, the James spinymussel occurs within this waterbody downstream of and may be adversely affected by the current Project alignment. We support the proposed time-of-year restriction from May 15 through July 31 of any year to minimize impacts to the James spinymussel. We have concerns about the proposed alignment across this creek and recommend that alternatives be evaluated to minimize impacts. The pipeline should cross the creek at a perpendicular angle, cross it once, and not parallel it. We recommend that blasting or water withdrawals from this waterbody be avoided and that any associated facilities proposed adjacent to this stream be relocated and an adequate buffer be provided to avoid impacts. Please address these concerns to enable us to determine affects to the James spinymussel.

Additional surveys are planned in areas pending access. We will review results of those surveys and provide comments upon receipt.

Rare Plants Survey

We have reviewed the survey report entitled “Surveys for rare plants along MVP’s Proposed Mountain Valley Pipeline Project in Craig, Franklin, Giles, Montgomery, Pittsylvania, and Roanoke Counties, Virginia,” dated and received November 13, 2015. In our letter dated April 3, 2015, we recommended surveys for 2 federally listed plants, Northeastern bulrush (*Scirpus ancistrochaetus*) and smooth coneflower (*Echinacea laevigata*). No federally listed plants were identified during the field survey conducted by an approved surveyor. Based on the survey report, the Northeastern bulrush does not currently occur at the Project site and therefore, the Project is not likely to adversely affect this species. The Northeastern bulrush survey is valid for 3 years and the smooth coneflower survey is valid for 2 years.

Additional surveys for smooth coneflower will be conducted in 2016. We will review results of those surveys and provide comments upon receipt.

Bat Surveys

We have reviewed the survey report entitled “Listed bat studies along MVP’s Proposed Mountain Valley Pipeline Project in Craig, Franklin, Giles, Montgomery, Pittsylvania, and Roanoke Counties, Virginia,” dated and received November 13, 2015. On January 14, 2016 the Service published the final 4(d) rule (81 Federal Register 1900-1922), effective February 16, 2016 for the federally listed threatened Northern long-eared bat (*Myotis septentrionalis*, NLEB). The Service published a programmatic biological opinion for the final 4(d) rule concurrent with the final listing.

In our letter dated April 3, 2015, we recommended surveys for federally listed bats. No federally

listed bats were captured in the sections surveyed for the proposed route. One NLEB was captured in the surveys for the alternate routes and sections of the initial proposed route that were modified or abandoned prior to completion of the 2015 summer mist net surveys. The captured NLEB was a lactating female and tracked to a single roost tree on June 20 and 21, 2015. This meets the criteria for a known maternity roost tree. Due to access limitations, the NLEB was not tracked to a roost the evenings of June 18 and 19, 2015. Per the final 4(d) rule, incidental take caused by tree removal is prohibited within a 150-foot radius of a known occupied maternity roost tree during the pup season (June 1 – July 31).

The proposed Project route intersects a NLEB hibernaculum, which was not in our database when we first consulted. A single Keen's bat (*Myotis keenii*) was documented in Canoe Cave, Giles County, VA. The Eastern North American populations of the Keen's bat were later reclassified as NLEB. The documented occurrence meets the criteria for known hibernacula per the final 4(d) rule. The rule prohibits incidental take caused by tree removal within 0.25 mile of a known hibernaculum at any time of year. The rule also prohibits incidental take that occurs within a hibernaculum that may disturb or disrupt hibernating bats when present as well as the physical or other alteration of the hibernaculum's entrance or environment when bats are not present if the results of the activity will impair essential behavioral patterns including sheltering. Based on the survey results and the additional information about the hibernaculum, we recommend the following:

- Continue coordination with the Service and with Wil Orndorff, Virginia Department of Conservation and Recreation Karst Protection Coordinator, to identify a route that will not cause incidental take in Canoe Cave.
- In addition to the avoidance measures you develop and agree to implement with Wil Orndorff around Canoe Cave, we encourage you to implement any applicable voluntary conservation measures, which can be found on our website <http://www.fws.gov/north-east-virginia-field/endangeredprojectreviews/step7b>.

The Federal action agency, FERC, will need to provide written documentation if they intend to rely upon the NLEB programmatic biological opinion for the final 4(d) rule to provide compliance with section 7 of the ESA.

The proposed Project re-route may impact Tawney's Cave, a documented Indiana bat (*Myotis sodalis*) hibernacula. Therefore, we recommend the following:

- Continue coordination with the Service and with Wil Orndorff to ensure the alternative route will not impact the hibernaculum and cause incidental take of Indiana bats.
- In addition to the conservation measures you develop and agree to implement with Wil Orndorff for Tawney's Cave, we recommend a time-of-year restriction for tree clearing within 5 miles of Tawney's Cave from April 1 – November 15 of any year.

A time-of-year restriction for tree clearing is not necessary for sections of the route that had negative survey results and will not impact either Tawney's or Canoe cave. The bat survey is valid for 3 years.

Portal, cave, and abandoned mine surveys are continuing. We will review results of those surveys and provide comments upon receipt.

Karst Resources

The proposed Project route crosses karst areas containing surface and subsurface features. The location and extent of subsurface karst features are not well known and it is difficult to determine connectivity. Therefore, we recommend the following:

- Protect recharge areas of cave streams and other karst features by following relevant environmental maintenance and construction standards for stream and wetland crossings and spill prevention containment and control.
- Avoid all construction activities, including excavating, filling, or altering the hydrology of any existing sinkholes, fissures, or cave entrances.
- If new sinkholes form use an inverted filter to bridge the karst feature above the water table rather than filling it below.
- Implement sediment and erosion control measures such as silt fence and straw bales or other control measures that will provide equivalent level of protection, or better, around all karst features. Monitor and maintain all sediment and erosion control measures periodically and after precipitation events, as identified in an approved erosion and sedimentation control plan. Clean, repair, and replace structures as necessary.
- Maintain a 100-foot buffer or greater around all surface karst features when blasting, drilling, digging, or trenching. If a subsurface karst feature is located and cannot be avoided, contact the Service for specific guidance or alternatives.

Migratory Birds and Bald and Golden Eagles

The Project's Resource Report 3 – Fisheries, Vegetation and Wildlife dated October 2015 indicates that a Migratory Bird Habitat Conservation Plan (MBHCP) is being prepared and will be submitted to the agencies for review and comment. Resource Report 3 also indicates that field surveys for eagle nests in areas of suitable habitat traversed by the Project are scheduled for October 2015. Please provide us with the results of this field survey.

The MBHCP should address the following:

- Avoid vegetation clearing during the nesting season of native birds from March 1 through July 31 of any year.
- Avoid fragmentation of large contiguous blocks of habitat and ecologically important habitat areas.
- Locate attendant facilities (access roads, staging areas, etc.) in or adjacent to already disturbed areas.
- Avoid impacts to wintering golden eagles.
- Avoid removal of raptor nests.

Ms. Clarkston

Page 6

If you have any questions, please contact Kim Smith at (804) 824-2410 or via email at kimberly_smith@fws.gov.

Sincerely,

A handwritten signature in blue ink, reading "Cynthia A. Schulz". The signature is written in a cursive style with a light blue background.

Cindy Schulz
Field Supervisor
Virginia Ecological Services

cc: FERC, Washington, D.C. (Attn: Paul Friedman)
Service, Elkins, WV (Attn: Tiernan Lennon)
VDCR-DNH, Richmond, VA (Attn: Rene Hypes)
VDGIF, Richmond, VA (Attn: Ernie Aschenbach)